“Pogue, the New York Times computer columnist, is among the world’s best explainers.”
—KEVIN KELLY, CO-FOUNDER OF WIRED

iPad

the missing manual®
The book that should have been in the box®

7th Edition
Covers all iPad models with iOS 8.1 software, including iPad Air 2 and iPad mini 3

David Pogue
With the iOS 8.1 software and new iPads—the Air 2 and mini 3—Apple has taken its flagship tablets into new realms of power, speed, and good looks. The modern iPad comes with everything—touchscreen, cameras, stereo speakers, faster WiFi and cellular Internet—except a printed manual. Fortunately, David Pogue is back with this witty, full-color guide to the world’s most popular tablet.

Why I started the Missing Manual series.

People learn best when information is engaging, clearly written, and funny. Unfortunately, most computer books read like dry catalogs. That’s why I created the Missing Manuals. They’re entertaining, unafraid to state when a feature is useless or doesn’t work right, and—oh, by the way—written by actual writers. And on every page, we answer the simple question: “What’s this feature for?”


The important stuff you need to know

- The iPad Air 2 and mini 3. This book unearths all the secrets of the crazy-thin new iPads: better screens, faster chips, responsive fingerprint readers, Apple Pay.

- The iOS 8.1 software. Even older iPad models gain predictive typing, iCloud Drive, Family Sharing, “Hey Siri,” and about 195 more new features. It’s all here, in these pages.

- The apps. That catalog of 700,000 add-on programs takes the iPad into new realms of usefulness and fun. Now you’ll know how to find, exploit, and troubleshoot those apps.

- The iPad may be the world’s best-selling tablet computer, but it’s still a computer, with all of a computer’s complexities. iPad: The Missing Manual is a funny, gorgeously illustrated guide to the tips, shortcuts, and workarounds that will turn you, too, into an iPad master.

APPLE/MOBILE DEVICES/IPAD

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Contents

The Missing Credits .................................................. xi
Introduction ......................................................... 1
   The iPad Defined......................................................1
   About This Book....................................................3
iPad Air 2: What’s New.............................................5
iPad Mini 3: What’s New...........................................7
What’s New in iOS 8..................................................7

Part 1: The iPad Basics
Chapter 1: The Guided Tour .................................. 11
   Sleep Switch (On/Off) ...........................................12
   The Lock Screen....................................................13
   Home Button.........................................................17
   Mute Switch, Volume Keys.................................20
   Screen.....................................................................20
   Cameras.................................................................23
   Sensors.................................................................24
   SIM Card Slot.........................................................24
   Headphone Jack......................................................25
   Speakers...............................................................26
   The Charge/Sync Connector.................................26
   In the Box..............................................................27
   Seven Basic Finger Techniques..........................27
   Charging the iPad...................................................30
   Battery Life Tips....................................................31
   The Home Screen..................................................35
   Control Center.......................................................37
   Notifications........................................................41
   Password (or Fingerprint) Protection..................48

Chapter 2: Typing, Editing & Searching ....................... 55
   The Keyboard.........................................................55
   Dictation...............................................................70
   Cut, Copy, Paste....................................................77
   The Definitions Dictionary..................................79
   Speak!.................................................................80
   Spotlight: Global Search....................................81
Chapter 3: Siri & Speech ............................... 85
  Siri Voice Command................................................................. 86
  How to Use Siri................................................................. 87
  How to Use “Hey, Siri”.............................................................. 88
  What to Say to Siri............................................................. 88
  Advanced Siri........................................................................ 108

Chapter 4: Calling & FaceTime. ....................... 111
  FaceTime Audio Calls.............................................................. 111
  Fun with FaceTime Audio Calls............................................ 115
  FaceTime Video Calls............................................................ 117
  Do Not Disturb........................................................................ 121
  Making Actual Phone Calls................................................. 122
  Contacts................................................................................ 123
  Bluetooth Accessories........................................................ 131

Chapter 5: Texting & iMessages ....................... 135
  Text Messages (SMS)............................................................ 135
  iMessages........................................................................ 136
  Instant Audio, Video, and Photos................................. 146
  iMessage Settings.............................................................. 149
  Regular Text Messages...................................................... 151
  Text Messages Using Apps................................................ 152

Chapter 6: Accessibility ............................... 153
  VoiceOver........................................................................ 154
  Zooming.............................................................................. 157
  Invert Colors and Grayscale................................................ 160
  Speech................................................................................ 161
  How to De-Sparsify iOS 8’s Design...................................... 162
  Hearing Assistance.............................................................. 165
  Media (Subtitle Options)..................................................... 166
  Guided Access (Kiosk Mode)................................................ 166
  Switch Control.................................................................... 168
  AssistiveTouch............................................................. 169
  Home-Click Speed............................................................ 172
  Accessibility Shortcut........................................................ 172
Part 2: Pix, Flix, & Apps

Chapter 7: Music ................................................................. 173
- iTunes Radio.................................................................173
- Playlists........................................................................180
- Genius Playlists............................................................181
- Artists, Songs.................................................................183
- Playback Control: Now Playing.................................184
- Multi(music)tasking......................................................188
- Speakers and Headphones...........................................188
- Familiar iPod Features..................................................190
- The iTunes Store.........................................................192
- The Videos App.............................................................195

Chapter 8: Taking Photos, Shooting Videos ..................... 201
- The Camera App...........................................................201
- Photo Mode.................................................................204
- Square Mode................................................................213
- Pano Mode...................................................................214
- Video Mode..................................................................216
- Slo-Mo Mode...............................................................217
- Time-Lapse Mode........................................................218
- Trimming a Video.........................................................219
- The Photos App............................................................220
- Editing Photos..............................................................228
- 753 Ways to Use Photos and Videos.............................236
- My Photo Stream........................................................246
- iCloud Photo Sharing...................................................250
- iCloud Photo Library....................................................255
- Capturing the Screen....................................................257

Chapter 9: All About Apps .................................................. 259
- Two Ways to the App Store...........................................259
- Organizing Your Apps..................................................266
- Folders.........................................................................270
- App Preferences...........................................................272
- App Updates...............................................................272
- How to Find Good Apps..............................................273
- The App Switcher........................................................275
- AirPrint: Printing from the iPad....................................278
- The Share Sheet...........................................................279
- AirDrop.......................................................................281
- iCloud Drive..............................................................283
Chapter 10: The Built-In Apps .......................... 287
Calendar.................................................................................................................................287
Clock .......................................................................................................................................296
Game Center .......................................................................................................................301
iBooks .....................................................................................................................................304
Maps ..........................................................................................................................................315
Newsstand ............................................................................................................................328
Notes ......................................................................................................................................330
Photo Booth ........................................................................................................................332
Podcasts ................................................................................................................................333
Reminders ............................................................................................................................336
Tips ............................................................................................................................................341
More Standard Apps ......................................................................................................342

Part 3: The iPad Online
Chapter 11: Getting Online ............................. 343
WiFi Hotspots ....................................................................................................................343
Airplane Mode and WiFi Off Mode ..............................................................................346
Personal Hotspot (Tethering) .....................................................................................346
The Cellular iPad ............................................................................................................349
Twitter and Facebook .................................................................................................352

Chapter 12: The Web ................................ 353
Safari Tour .............................................................................................................................353
Zooming and Scrolling .................................................................................................355
Full-Screen Mode .............................................................................................................356
Typing a Web Address ...................................................................................................357
Searching in Safari ...........................................................................................................358
Bookmarks .............................................................................................................................361
The Reading List ..................................................................................................................364
Shared Links (@) ................................................................................................................365
Web Clips .............................................................................................................................366
The History List ..................................................................................................................367
Tapping Links ......................................................................................................................367
Saving Graphics ................................................................................................................368
Saved Passwords and Credit Cards ..............................................................................369
Manipulating Multiple Pages ........................................................................................371
The Favorites Page .........................................................................................................373
Reader View .......................................................................................................................374
Open the Full Site .............................................................................................................375
Web Security ......................................................................................................................375
Chapter 13: Email ................................... 379
  Setting Up Your Account.................................................................379
  Downloading Mail ...........................................................................382
  VIPs and Flagged Messages .............................................................387
  What to Do with a Message .............................................................390
  Writing Messages ...............................................................................400
  Surviving Email Overload ...............................................................405

Part 4: Connections
Chapter 14: Syncing with iTunes .................. 407
  The Three Faces of iTunes ..............................................................408
  Your Stuff .........................................................................................409
  iTunes Store ......................................................................................412
  Syncing the iPad ..............................................................................416
  iTunes Tabs .......................................................................................420
  Summary Tab ....................................................................................421
  Apps Tab ..........................................................................................422
  Music Tab ........................................................................................422
  Movies and TV Shows Tabs ...............................................................424
  Podcasts Tab ....................................................................................425
  Books Tab ........................................................................................425
  Tones Tab .........................................................................................425
  Photos Tab (Computer → iPad) .........................................................426
  Info Tab ............................................................................................429
  On My Device ..................................................................................429
  One iPad, Multiple Computers .........................................................429
  One Computer, Multiple iPads ........................................................430
  Backing Up the iPad .........................................................................430

Chapter 15: iCloud & Continuity ..................... 433
  What iCloud Giveth ..........................................................................433
  iCloud Sync ......................................................................................435
  Photo Stream, Photo Sharing ............................................................438
  Find My iPad ....................................................................................438
  Email .................................................................................................441
  Video, Music, Apps: Locker in the Sky ............................................442
  iTunes Match ...................................................................................443
  The Price of Free ............................................................................444
  Apple Pay (iPad Air 2, Mini 3) ........................................................445
  Family Sharing ................................................................................447
  Continuity .........................................................................................452
Chapter 16: The Corporate iPad .......................... 457
The Perks ............................................................................................................................... 457
Setup ..................................................................................................................................... 459
Exchange + Your Stuff ........................................................................................................ 461
A Word on Troubleshooting .............................................................................................. 463
Virtual Private Networking (VPN) ................................................................................... 464

Chapter 17: Settings ........................................ 467
Two Settings Tricks ............................................................................................................. 468
Airplane Mode ..................................................................................................................... 468
WiFi ....................................................................................................................................... 469
Carrier ................................................................................................................................... 470
Bluetooth .............................................................................................................................. 470
Cellular Data (Cellular iPads) ......................................................................................... 470
VPN ..................................................................................................................................... 472
Personal Hotspot ............................................................................................................... 472
Notifications ....................................................................................................................... 472
Control Center .................................................................................................................... 473
Do Not Disturb .................................................................................................................... 473
General .................................................................................................................................. 473
Display & Brightness ......................................................................................................... 478
Wallpaper ............................................................................................................................. 479
Sounds .................................................................................................................................. 479
Touch ID & Passcode .......................................................................................................... 480
Privacy ................................................................................................................................... 481
iCloud ................................................................................................................................... 483
iTunes & App Store ............................................................................................................ 484
Passbook and Apple Pay .................................................................................................... 485
Mail, Contacts, Calendars ................................................................................................. 485
Notes .................................................................................................................................... 490
Reminders ............................................................................................................................ 491
Messages .............................................................................................................................. 491
FaceTime .............................................................................................................................. 492
Maps ...................................................................................................................................... 492
Safari ..................................................................................................................................... 492
Music .................................................................................................................................... 495
Videos ................................................................................................................................... 496
Photos & Camera ................................................................................................................ 496
iBooks ................................................................................................................................. 497
Podcasts ............................................................................................................................... 497
Game Center ....................................................................................................................... 497
Twitter, Facebook, Flickr, Vimeo ..................................................................................... 497
App Preferences .................................................................................................................. 498
Part 5: Appendixes

Appendix A: Signup & Setup ........................................... 501
    Buying a New iPad................................................................. 501
    Setting Up a New iPad.............................................................. 501
    Upgrading an iPad to iOS 8......................................................... 505
    Software Updates........................................................................ 506
    Restrictions and Parental Controls............................................. 507
    Cases and Accessories............................................................ 509

Appendix B: Troubleshooting & Maintenance .................. 511
    First Rule: Install the Updates.................................................. 511
    Seven Ways to Reset the iPad..................................................... 512
    iPad Doesn’t Turn On............................................................... 514
    Battery Life Is Terrible.............................................................. 515
    Out of Space............................................................................ 515
    Warranty and Repair............................................................... 517
    The Battery Replacement Program.......................................... 517
    What to Do about a Cracked Screen......................................... 518
    Where to Go from Here........................................................... 518

Index...................................................................................... 519
David Pogue (author, illustrator, indexer) is the founder of Yahoo Tech (yahootech.com), a job for which he was groomed by 13 years writing the weekly tech column for *The New York Times*.

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As the sun began to set on this book’s deadline, I appealed to my followers on Twitter to help beta-read this book. My new best friends Tim Allen, Richard Wemberley, Adriana Belotti, Bill Groll, Clark Averill, Elizabeth Howell, Gilbert Tang, Grace Suarez, Lew Piper, Robert Ameeti, Jeff Hagedon, Logan Buren, Ken Falk, Tom Kerber, Matt Hausmann, and Skip Dodson cheerfully answered the call. They enthusiastically found all kinds of little things (and big ones) that needed fixing, and I’m deeply grateful.

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—David Pogue

The Missing Manual Series

Missing Manuals are witty, superbly written guides to computer products that don’t come with printed manuals (which is just about all of them). Each book features a handcrafted index, cross-references to specific page numbers (not just “see Chapter 14”), and an ironclad promise never to put an apostrophe in the possessive pronoun “its.”
Here’s a sampling of current and upcoming titles: (The complete list awaits at www.missingmanuals.com/library.html.)

For the Mac

- **OS X Yosemite: The Missing Manual** by David Pogue
- **OS X Mavericks: The Missing Manual** by David Pogue
- **AppleScript: The Missing Manual** by Adam Goldstein
- **FileMaker Pro 13: The Missing Manual** by Susan Prosser and Stuart Gripman
- **iMovie: The Missing Manual** by David Pogue and Aaron Miller
- **iPhoto: The Missing Manual** by David Pogue and Lesa Snider
- **iWork: The Missing Manual** by Jessica Thornsby and Josh Clark
- **Switching to the Mac: The Missing Manual, Yosemite Edition** by David Pogue
- **Photoshop CS6: The Missing Manual** by Lesa Snider
- **Photoshop Elements 13: The Missing Manual** by Barbara Brundage

For Windows

- **Windows 8.1: The Missing Manual** by David Pogue
- **Windows 7: The Missing Manual** by David Pogue
- **Access 2013: The Missing Manual** by Matthew MacDonald
- **Excel 2013: The Missing Manual** by Matthew MacDonald
- **Microsoft Project 2013: The Missing Manual** by Bonnie Biafore
- **Office 2013: The Missing Manual** by Nancy Conner and Matthew MacDonald
- **QuickBooks 2105: The Missing Manual** by Bonnie Biafore
- **Photoshop CS6: The Missing Manual** by Lesa Snider
- **Photoshop Elements 13: The Missing Manual** by Barbara Brundage

Electronics

- **iPhone: The Missing Manual, Eighth Edition** by David Pogue
- **David Pogue’s Digital Photography: The Missing Manual**
• Galaxy S5: The Missing Manual by Preston Gralla
• Galaxy Tab: The Missing Manual by Preston Gralla
• iPad App Development: The Missing Manual by Craig Hockenberry
• Kindle Fire HD: The Missing Manual by Peter Meyers
• Fire Phone: The Missing Manual by Preston Gralla
• Netbooks: The Missing Manual by J.D. Biersdorfer
• NOOK HD: The Missing Manual by Preston Gralla
• Motorola Xoom: The Missing Manual by Preston Gralla

Web Technologies
• Adobe Edge Animate: The Missing Manual by Chris Grover
• Creating a Web Site: The Missing Manual, Third Edition by Matthew MacDonald
• Dreamweaver CC: The Missing Manual by David Sawyer McFarland
• Flash CS6: The Missing Manual by Chris Grover
• Google+: The Missing Manual by Kevin Purdy

Life
• Buying a Home: The Missing Manual by Nancy Conner
• Personal Investing: The Missing Manual by Bonnie Biafore
• Your Brain: The Missing Manual by Matthew MacDonald
• Your Body: The Missing Manual by Matthew MacDonald
• Your Money: The Missing Manual by J.D. Roth
It’s often said that Steve Jobs, Apple’s founder, knew what the public wanted before it did. Over and over again, Apple came up with inventions that seemed to feed a hunger we didn’t know we had.

There’s no better example than the iPad. Apple unveiled it in January 2010, three months before anybody could actually buy one. Without ever having tried the it, tech critics called it the dumbest machine ever invented.

“An utter disappointment and abysmal failure,” wrote the Orange County Design Blog. “Consumers seem genuinely baffled by why they might need it,” said Businessweek. “It’s nothing more than a luxury bauble that will appeal to a few gadget freaks,” declared Bloomberg. “Insanely great it is not,” snarked CBS MarketWatch. “My god, am I underwhelmed,” said Gizmodo.

As we know now, the joke was on them. Apple sold 300,000 iPads on the first day they were available; 1 million in the first month; 250 million in the first seven years. The iPad became the fastest-adopted new product category in history.

The iPad Defined

Now here we are, five iPad models (and three mini models) later, and we can now see that the iPad was a turning point in computing history. Today, lots of people carry around an iPad instead of a laptop.

Your ability to replace a laptop with an iPad, however, depends on what you want to do with it. For years, the conventional wisdom was that the iPad is fantastic for consuming material—surfing the Web, reading ebooks, watching videos, playing music, doing a first pass on email—but a clumsy tool for creating it. Sometimes, a mouse and keyboard are faster, more precise tools than your fat fingertips.
These days, that view has softened. Especially in iOS 8.1, the iPad’s dictation feature has gotten so fast and accurate that you don’t ache for a keyboard quite so much.

And then there are the apps (programs). Sooooooo many apps. 750,000 apps written just for the iPad, including, surprisingly, Microsoft Office.

And then there are those 1.3 million *iPhone* apps that also run on the iPad.

The iPad is already a thin, light, touchscreen computer with a dazzling screen. But those apps turn it into a sensational Internet viewer. It shows fully formatted email (with attachments, thank you) and displays entire Web pages with fonts and design intact. It’s tricked out with a tilt sensor, a proximity sensor, a light sensor, WiFi, Bluetooth, GPS, a gyroscope, and that amazing multitouch screen.

For many people, the iPad is also a camera and a camcorder—one that’s getting better with every year’s new model.

Furthermore, it’s a calendar, address book, alarm clock, stopwatch, traffic reporter, RSS reader, medical reference, musical keyboard, time tracker, remote control, reader, and so on. And, whoa, those games! Thousands of them, with smooth 3-D graphics and tilt control.

All of this sends the iPad’s utility and power through the roof.

By the way: As a thoughtful courtesy to people who own multiple Apple gadgets (as well as people who write books about them), Apple wrote iOS to work almost identically on the iPad and the iPhone. Where things are, what they’re called, and what they look like is almost exactly the same.

In fact, there are only a few iPhone features that the iPad *doesn’t* have, some of which may surprise you:

- **Phone features.** Without the assistance of an iPhone, an iPad can’t make a traditional phone call or send traditional text messages.

- **Vibrate mode.** The iPad can get your attention with visuals and sound, but not touch; there’s no vibration.

- **Certain apps.** For reasons nobody can quite figure out, the iPad doesn’t come with as many apps as the iPhone. It’s missing Calculator, Stocks, Weather, Voice Memos, Compass, and Health.

- **A flash.** There are cameras on the iPad, front and back, but it doesn’t have a flash.
Meet iOS

Apple introduces a new iPad model every fall. In October 2014, for example, it introduced the sixth full-size iPad model—the iPad Air 2—and the third 7-inch model, the iPad mini 3. They're thinner, faster, and better in most ways.

More importantly, there's a new, free version of the iPad's software, called iOS 8.1. (Why not “iPad OS” anymore? Because the same operating system runs on the iPhone and iPod Touch. It's not just for iPads anymore, and saying “the iPad/iPhone/iPod Touch OS” takes too long.)

You can run iOS 8 on older iPad models without having to buy a new phone. This book covers all phones that can run iOS 8: the iPad Air 2, iPad Air, iPad 2, iPad 3rd Generation, iPad 4th Generation, and all three mini models.

About This Book

You don't get a printed manual when you buy an iPad. Online, you can find an electronic PDF manual that covers the basics well, but it's largely free of details, hacks, workarounds, tutorials, humor, and any acknowledgment of the iPad's flaws. You can't easily mark your place, underline, or read it in the bathroom.

The purpose of this book, then, is to serve as the manual that should have accompanied the iPad. (If your older iPad doesn't have iOS 8, you really need one of this book's earlier editions.)

Writing a book about the iPad is a study in exasperation, because the darned thing is a moving target. Apple updates the iPad's software fairly often, piping in new features, bug fixes, speed-ups, and so on.

Therefore, you should think of this book the way you think of the first iPad: as a darned good start. To keep in touch with updates we make to it as developments unfold, drop in to the book's Errata/Changes page. (Go to www.missingmanuals.com, click this book's name, and then click View/Submit Errata.)

TIP: This book covers the iOS 8.1.2 software. There will surely be an 8.1.3, an 8.2, and so on. Check this book's page at www.missingmanuals.com to read about those updates when they occur.
About the Outline

*iPad: The Missing Manual* is divided into five parts, each containing several chapters:

- **Part 1, iPad Basics,** covers everything related to instant communication: voice calls, video calls, text messaging, iMessages, and the Contacts (address book) program. It’s also where you can read about entering text, either by typing or by speaking; Siri, the “virtual assistant”; and the rich array of features for people with disabilities—some of which are surprisingly useful even for people without them.

- **Part 2, Pix, Flix & Apps,** is dedicated to the iPad’s built-in apps, with a special emphasis on its multimedia abilities: playing music, podcasts, movies, TV shows, and photos; capturing photos and videos; the Maps app; reading ebooks; and so on. These chapters also cover some of the standard techniques that most apps share: installing, organizing, and quitting them; switching among them; and sharing material from within them using the Share sheet.

- **Part 3, The iPad Online,** is a detailed exploration of the iPad’s third talent: its ability to get you onto the Internet, either over a WiFi hotspot connection or (if you have a cellular model) via the cellular network. It’s all here: email, Web browsing, and tethering (that is, letting your phone serve as a sort of Internet antenna for your laptop).

- **Part 4, Connections,** describes the world beyond the iPad itself—like the copy of iTunes on your Mac or PC that can fill up the iPad with music, videos, and photos; and syncing the calendar, address book, and mail settings. These chapters also cover the iPad’s control panel, the Settings program; Continuity (the wireless integration of iPad and Mac); and how the iPad syncs wirelessly with corporate networks using Microsoft Exchange ActiveSync—or with your own computers using Apple’s iCloud service.

- **Part 5, Appendixes,** contains two reference chapters. Appendix A walks you through the setup process; Appendix B is a master compendium of troubleshooting, maintenance, and battery information.

**About→These→Arrows**

Throughout this book, and throughout the Missing Manual series, you’ll find sentences like this one: Tap *Settings→General→Keyboard.* That’s shorthand for a much longer instruction that directs you to open three nested screens in sequence, like this: “Tap the *Settings* button. On the next screen, tap *General.* On the screen after that, tap *Keyboard.*” (In this book, tappable things on the screen are printed in *orange* to make them stand out.)
Similarly, this kind of arrow shorthand helps to simplify the business of choosing commands in menus on your Mac or PC, like File→Print.

About MissingManuals.com

To get the most out of this book, visit www.missingmanuals.com. Click the Missing CDs link, and then click this book’s title to reveal a neat, organized list of the shareware, freeware, and bonus articles mentioned in this book.

The Web site also offers corrections and updates to the book; to see them, click the book’s title, and then click View/Submit Errata. In fact, please submit corrections yourself! Each time we print more copies of this book, we’ll make any confirmed corrections you’ve suggested. We’ll also note such changes on the Web site, so you can mark important corrections into your own copy of the book, if you like. And we’ll keep the book current as Apple releases more iPad updates.

iPad Air 2: What’s New

Apple’s usual routine is to introduce a new iPad every October. In the 2014 model, here’s what’s new:

- **Thinner.** That’s really the biggest feature: The Air 2 is less than a quarter of an inch thick (6.1 millimeters). Any thinner, and you could fold it into a paper airplane. A tablet is something you have to hold all the time you’re using it, so thinness and lightness matter.

- **Faster.** There’s a new processor inside: Apple’s own chip, the A8X. Apple says it’s 40 percent faster than before, and it does feel faster. Yet the iPad’s 10-hour battery life hasn’t suffered as a result.

- **Camera.** The camera’s been improved, too. It has a new, 8-megapixel sensor that brings to the iPad most of the tricks of the iPhone 6, like time-lapse video, slow motion, burst mode, self-timer, and panorama mode. It still lacks some of the iPhone camera’s awesomeness, though—like superfast autofocus (what Apple calls “focus pixels”), optical stabilization, hypersmooth 60 frames-per-second video, and a tap-to-focus feature.

- **Fingerprint sensor.** The iPad Air 2 has a fingerprint sensor embedded into the Home button (what Apple calls Touch ID), just as the last couple of iPhones have. It’s smooth, fast, and reliable; it doesn’t care what angle your finger is at. In many cases, it spares you having to remember passwords.
You can use your fingerprint to unlock the iPad Air 2, or to make purchases from Apple’s online stores (music, movies, apps), or, now, to buy stuff online with just a touch of your finger.

This doesn’t mean that you can buy things in physical stores by wielding your iPad, as you can with the iPhone 6 models. You can, however, use your fingerprint for the other part of Apple Pay: shopping online from within shopping apps like Houzz (housewares), Fancy.com; Target; Panera Bread; Uber, and so on.

• **Faster WiFi.** WiFi is much faster on the iPad Air 2—and you really feel it when you’re opening Web pages. The cellular iPad models ($130 extra) are 50 percent faster than before, too.

• **Better screen.** Apple reduced the number of layers between your eye and the image, so that the image seems slightly closer to your fingers. Apple also says the screen is less reflective than before.
• **Universal SIM card.** Apple now sells a single cellular iPad model that can hop onto any of three U.S. cellular networks: AT&T, Sprint, or T-Mobile. Unfortunately, that doesn’t mean you can freely flit between those companies; there’s a lot of fine print (page 25).

The iPad comes in 16-, 64-, or 128-gigabyte models these days, with black or white fronts and black, white, or gold backs. The model with a cellular connection always costs $130 more.

### iPad Mini 3: What’s New

There’s a new iPad mini this year, too. Apple made only one change to it, though: It now has a Touch ID fingerprint reader built into the Home button, just as on its big brother.

The mini remains a fascinating machine, though. Its 7.9-inch screen displays just as much image as the bigger iPad’s 9.7-inch screen—just **smaller**. You can carry this thing in an overcoat pocket or a purse, making it much more transportable, manageable, and handleable.

### What’s New in iOS 8

In 2013, Apple freaked out the world by introducing a radical iPad-software redesign in iOS 7: clean, white, almost barren, with a razor-thin font (Helvetica Neue) and bright, light colors. The design was controversial and polarizing.

The iOS 8 design is the same—by now, people have gotten used to it—so the improvements now are focused on features and flexibility.

**TIP:** If the fonts are too thin for your taste, you can fatten them up just enough by turning on **Settings** → **Display & Brightness** → **Bold Text**. While you’re there, you can make text larger in most apps, too; tap the **Larger Type** control.

Apple says iOS 8 contains over 200 new features, but here are the big-ticket items:

• **Predictive keyboard (and Swype, and SwiftKey).** At long last, the iPad now offers three onscreen buttons, predicting the next word you’re likely to type above the onscreen keyboard. It’s smart enough to save you a lot of typing.

But if you think other companies do the onscreen keyboard thing better, go for it: In iOS 8, you can now install any of dozens of popular keyboard systems, like Swype or SwiftKey, to replace Apple’s.
• **Family Sharing.** The days of having to share your iCloud password with your kid—or to type it into the kid’s phone every time he wants to download something—are over. Now, up to six family members can share one another’s Apple-purchased books, videos, and music. You can keep track of your teenagers’ locations. And you each get a common Family category in Calendar, Reminders, and Photos, so the whole family can share.

• **iCloud Drive.** Now there’s a single folder in the sky—the iCloud Drive—that stores whatever files you want to be able to access from any Mac, Windows PC, phone, or tablet. It’s like the Apple version of Dropbox.

• **Expanded Spotlight.** The iPad’s built-in search bar can find all kinds of stuff beyond the phone. You can search for Wikipedia entries, movie showtimes, news, Apple’s online app/movie/bookstores, and so on.

• **Continuity.** If you have an iPhone too, prepare to be mind-blown. The suite of features Apple calls Continuity (Chapter 15) makes the phone an extension of the iPad. Now you can use the iPad as a speakerphone, taking and making calls. You can send and receive text messages from your iPad—to any cellphone, Apple or not. You can begin working on something in Mail, Safari, Pages, Numbers, Keynote, Maps, Messages, Reminders, Calendar, or Contacts—and when you arrive at your Mac or iPhone, the half-finished document is magically already on the screen, ready to complete.

• **Photo editing.** There’s a lot less need to duck into another app to adjust color, saturation, brightness, and other photographic settings; that’s all right in the Photos app now. So is a search command. So are “smart albums” that can round up all photos taken within a certain time period, or in a certain place.

• **Video and audio texting.** Hard to explain, easy to use: Now, when you’re texting in Messages, you can hold down a button to record a sound or a video instead of typing; when you release your finger, it shoots off to the recipient instantly. The iPad becomes a walkie-talkie.

• **Mail upgrades.** You can swipe across a Mail message in the list to delete it—no second confirmation tap required. Swipe a different way to archive it, flag it, or mark it as read. When you’re composing a message, you can now refer to another message without losing your place. And Data Detectors, a great feature on the Mac, have finally come to the iPad: When an incoming message contains the sender’s contact information or a date for an event, Mail offers to pop it into Contacts or Calendar automatically.
• **A thousand helpful tweaks.** When a notification about an incoming text, mail message, calendar invitation, or reminder appears, you can reply, delete it, accept it, or snooze it on the spot—right in the notification banner. The app-switcher screen now has icons of the people you contact the most, so shooting off a call or a text is only a double-press of the Home button away.

You can use the fingerprint reader (iPad Air 2, mini 3) to do more than unlock the phone. You can use it to log into apps instead of remembering a password. The Camera app can now record time-lapse video.

• **They’ve fixed Siri.** Siri’s speech recognition is much more accurate, especially if you have an accent. You see the words appear as you’re speaking them now. And there’s a new, hands-free, “always listening” mode for Siri whenever the iPad is charging (for example, in the car). Even if it’s asleep, you can say, “Hey, Siri” to make it listen to a spoken command.

It’s a lot of tweaks, polishing, and finesse—and a lot to learn. Fortunately, 500 pages of instructions now await you.
Imagine your grandparents coming across the iPad lying on your desk. They might not guess it was a computer (let alone a music player/Web browser/alarm clock/stopwatch/voice recorder/musical instrument/compass/camera).

It’s all there, though, hidden inside this sleek, thin slab.

For the rest of this book, and for the rest of your life with the iPad, you’ll be expected to know what’s meant by, for example, “the Home button” and “the Sleep switch.” A guided tour, therefore, is in order.
Sleep Switch (On/Off)

You could argue that knowing how to turn on your tablet might be a useful skill. For that, you need the Sleep switch. It’s a metal button shaped like a dash on the top-right edge.

It has several functions:

• **Sleep/Wake.** Tapping it once puts the iPad to sleep—into Standby mode, ready for receiving Internet data but consuming very little power. Tapping it again turns on the screen so it’s ready for action.

• **On/Off.** The same switch can also turn the iPad off completely so it consumes no power at all. You might turn the iPad off whenever you’re not going to use it for a few days.

To turn the iPad off, press the Sleep switch for 3 seconds. The screen changes to say *slide to power off.*

Confirm your decision by placing a fingertip on the➢ and sliding to the right. The device shuts off completely.
If you change your mind about turning the iPad off, tap the **Cancel** button or do nothing; after a moment, the iPad backs out of the **slide to power off** screen automatically.

To turn the iPad back on, press the switch again for 1 second. The Apple logo appears as the tablet boots up. (The Apple logo is black if your iPad is white and white if your iPad is black. Nice touch.)

• **Force restart.** The Sleep switch has one more function. If your iPad is frozen, and no buttons work, and you can't even turn the thing off, this button is also involved in force-restarting the whole machine. Steps for this last-ditch procedure are on page 512.

**Locked Mode**

When you don’t touch the screen for 1 minute (or another interval you choose), or when you put the iPad to sleep, the tablet **locks** itself. When it’s locked, the screen is dark and doesn’t respond to touch. If music is playing, it keeps going; if you’re recording audio, the recording proceeds.

But when the tablet is locked, you don’t have to worry about accidental button pushes. You wouldn’t want to discover that your iPad has been taking photos from the depths of your bag.

**TIP:** Deep in **Settings**→**General**, you’ll find the **Lock/Unlock** switch. That refers to Apple’s magnetic-closure iPad cases. If this switch is on, then closing the case’s cover puts the iPad to sleep automatically, and opening the cover wakes it. A nice arrangement, really.

**The Lock Screen**

To wake the iPad when it’s locked, press either the Sleep switch **or** the Home button.

That gesture alone doesn’t fire up the full iPad world, though. Instead, it presents the Lock screen.

From here, slide your finger rightward across the screen (anywhere—you don’t have to aim for the **slide to unlock** area!) to unlock the tablet with your password or fingerprint. (See page 48 or page 50.)
NOTE: You can adjust how quickly the tablet locks itself, or make it stop locking itself altogether; see page 475.

Things to Do on the Lock Screen

These days, though, the Lock screen is more than just a big Do Not Disturb sign. It’s a lively bulletin board for up-to-date information about your life—information you can scan or work with right at the Lock screen.

Lock screen with notifications

Swipe to open in the appropriate app
For starters, you can use the iPad as a watch—lots of people do. Just tap the Sleep switch to consult the Lock screen’s time and date display, and put the tablet right down again. The iPad goes back to sleep after a few seconds.

Better yet, the Lock screen is a handy status screen. Here you see a record of everything that happened while you weren’t paying attention. It’s a list of messages received, notifications from your apps, and other essential information.

Now, each of these notices has come from a different app (software program). To see a Facebook post, for example, you’d want to open the Facebook app; to reply to a message, you’d want the Messages app, and so on.

So here’s a handy shortcut: You can dive directly into the relevant app by swiping your finger across the notification itself, like this:

That shortcut saves you the trouble of unlocking the iPad and trying to find the corresponding app.

**TIP:** If you’d rather not have all these details show up on the Lock screen, you can turn them off. (Privacy is the main reason you might want to do so—the bad guys don’t need a password to view your Lock screen. They just have to tap the Sleep switch or the Home button.)

You can hide these items from your Lock screen on an app-by-app basis. For example, you might want missed calls to show up here but not missed text messages. To set this up, choose Settings → Notifications. Tap the app in question; turn off Show on Lock Screen.

More ways to accomplish things on the Lock screen:

- **Swipe down** from the top of the screen to view your Notification Center—a detailed one-stop screen that shows your missed calls, texts, and emails; upcoming appointments; stock and weather alerts; and so on. (See page 42.)

- **Swipe up from the bottom edge** to open the Control Center, with all the important settings (volume, brightness, play/pause music, Airplane mode, flashlight, and more) in one place. See page 37.

- **Swipe up on the camera (📸) icon** to open the Camera app (page 201).
• **Swipe up on the app icon at lower left**, if you see one. This feature, new in iOS 8, is supposed to let you know when there’s an app you might find useful *based on your location right now.*

If you’re entering a Starbucks, the Starbucks app icon might appear there, so that you can pay wirelessly. If you’re at a train station, your tablet might use this opportunity to let you know about a schedule app for that train line. You may also see this little icon as you enter a bank, store, hospital, college, and so on (assuming your iPad can get online at the time).

In each case, the suggested app opens when you swipe up on this icon. Or, if you don’t have the app already, the App Store opens to the right page, so that you can *download* the app.

**TIP** Creeped out? You can turn off this lower-left app-suggestion feature easily enough. Choose *Settings*→*Notifications*. Tap *App Store*, and then turn off *Show on Lock Screen*.

**Locking Down the Lock Screen**

Now, remember: You can enjoy any of the activities described above even *before* you’ve entered your password or used your fingerprint.

In other words, some stranger picking up your iPad can do all of these things, too. If that bothers you, don’t worry; you can turn all of those features off on the corresponding Settings screens. For example, to block Lock-screen access to your Control Center, open *Settings*→*Control Center*. Turn off *Access on Lock Screen*. To turn off individual apps’ presence on the Lock screen, open *Settings*→*Control Center*; tap the app’s name, and then turn off *Show on Lock Screen.*
Home Button

Here it is: the one and only button on the front of this tablet. Push it to summon the Home screen, which is your gateway to everything the iPad can do. (You can read more about the Home screen at the end of this chapter.)

The Home button is a wonderful thing. It means you can never get lost. No matter how deeply you burrow into the iPad’s software, no matter how far off track you find yourself, one push of the Home button takes you back to the beginning.

On the iPad Air 2 and iPad mini 3 models, of course, the Home button is also a fingerprint scanner—one that actually works.

But, as time goes on, Apple keeps saddling the Home button with more and more functions. It’s become Apple’s only way to provide shortcuts for common features; that’s what you get when you design a tablet that has only one button. In iPad Land, you can press the Home button one, two, or three times for different functions—or even hold it down. Here’s the rundown.

Quick Press: Wake Up

Pressing the Home button once wakes the tablet if it’s in locked mode. That’s sometimes easier than finding the Sleep switch on the edge. It gives you a quick glance at your notifications and missed texts—or the time and date.
Momentary Touch: Unlock (iPad Air 2, iPad mini 3)
If you’ve taught the iPad Air 2 or iPad mini 3 to recognize your fingerprint, then just resting your finger on the Home button is enough to unlock the tablet, bypassing the password screen. In other words, you should get into the habit of pressing the Home button (to wake the tablet) and then leaving your finger on it for about a half-second to unlock it. Page 48 has more on fingerprints.

Long Press: Siri
If you hold down the Home button for about 3 seconds, you wake up Siri, your virtual voice-controlled assistant. Details are in Chapter 3.

Two Quick Presses: App Switcher
If, once the tablet is awake, you press the Home button twice quickly, the current image fades away—to reveal the app switcher screen, the key to the iPad’s multitasking feature.

What you see here are icons and currently open screens of the programs you’ve used most recently (older ones are to the right), as shown below. Swipe horizontally to bring more apps into view; the Home screen is always at the far left.
With a single tap (on either the icon or the screen miniature), you can jump right back into a program you had open, without waiting for it to start up, show its welcome screen, and so on—and without having to scroll through 11 Home screens trying to find the icon of a favorite app.

In short, the app switcher gives you a way to jump *directly* to another app, without a layover at the Home screen first.

**TIP:** On this screen, you can also quit a program by flicking it upward. In fact, you can quit *several programs at once*, using two or three fingers. Fun for the whole family!

This app switcher is the only visible element of the iPad’s multitasking feature. Once you get used to it, that double-press of the Home button will become second nature—and your first choice for jumping among apps.

**Two Quick Presses: Your VIP List**

In iOS 8, the app switcher screen offers another new feature that you may eventually rank as one of iOS 8’s finest: the VIP list.

That’s not what Apple calls it, but that’s what it is: a row of headshots, at the top of the screen, that represent the people you’ve contacted most recently and most often. See page 277 for details on this extraordinarily handy feature.

**Three Presses: VoiceOver, Zoom, Inverted Colors...**

In *Settings*→*General*→*Accessibility*, you can set up a triple-press of the Home button to turn one of several accessibility features on or off: *VoiceOver* (the tablet speaks whatever you touch), *Invert Colors* (white-on-black type, which is sometimes easier to see), *Grayscale* (a new mode that makes the whole iPad black-and-white); *Zoom* (magnifies the screen), *Switch Control* (accommodates external gadgets like sip-and-puff straws), and *AssistiveTouch* (help for people who have trouble with physical switches).

All of these features are described beginning on page 154.

**TIP:** The Home button is also part of the *force quit* sequence—a good troubleshooting technique when a particular program seems to be acting up. See page 512.
Mute Switch, Volume Keys

The mute switch is a tiny flipper on the right edge at the top.

NOTE: There’s a mute switch on every model until the iPad Air 2, which doesn’t have one. The Air 2 has a mute switch on the screen—in the Control Center, described on page 37.

On a phone, the mute switch means that no ringer will humiliate you in a meeting, at a movie, or in church. Since you can’t receive traditional phone calls with the iPad, though, this switch isn’t quite as essential. Which is probably why Apple lets you change it into a Lock Rotation switch instead (page 38). And why Apple killed it off in the Air 2.

NOTE: Even when silenced, the iPad still makes noise in certain circumstances: when an alarm goes off; when you’re playing music; when you’re using Find My iPad (page 37); when you’re using VoiceOver; or, sometimes, when a game is playing.

On the same right edge, you’ll find the volume controls. They work in various ways:

• When you’re listening to music, they adjust the playback volume—even when the tablet is locked and dark.

• When you’re taking a picture, either one serves as a shutter button or a camcorder start/stop button.

• At all other times, they adjust the volume of sound effects like the ringer, alarms, and Siri.

• When a FaceTime call comes in, they silence the ringing or vibrating.

In each case, if the screen is on, a corresponding volume graphic appears on the screen to show you where you are on the volume scale.

Screen

The touchscreen is your mouse, keyboard, and notepad. You might expect it to get fingerprinty and streaky.
But the iPad has an **oleophobic** screen. That may sound like an irrational fear of yodeling, but it actually refers to a coating that repels grease. A wipe on your clothes restores the screen to its right-out-of-the-box crystal sheen.

You can also use the screen as a mirror when the iPad is off.

The iPad models with Retina screens have crazy high resolution (the number of tiny pixels per inch). It’s really, really sharp, as you’ll discover when reading text or making out the details of a map or a photo. The Retina models manage 2048 × 1536 pixels (more dots than a high-definition TV); earlier models have 1024 × 768.

The front of the iPad is made of Gorilla Glass, a special formulation made by Corning. It’s unbelievably resistant to scratching. (You can still shatter it if you drop it just the wrong way.)

**NOTE:** This is how Corning’s Web site says this glass is made: “The glass is placed in a hot bath of molten salt at a temperature of approximately 400°C. Smaller sodium ions leave the glass, and larger potassium ions from the salt bath replace them. These larger ions take up more room and are pressed together when the glass cools, producing a layer of compressive stress on the surface of the glass. This layer of compression creates a surface that is more resistant to damage from everyday use.”

But you probably guessed as much.

If you’re nervous about protecting your iPad, you can always get a case for it. But if you’re worried about scratching the glass, you’re probably worrying too much. It’s really hard to scratch.

Radio signals can’t pass through metal. That’s why there’s a plastic strip on the top back.

**Screen Icons**

Here’s a roundup of the icons you may see in the status bar at the top of the iPad screen, from left to right:

- **Cell signal.** As on a phone, the number of bars—or dots, in iOS 8’s case—indicates the strength of your cell signal (if you have a cellular iPad), and thus the quality of your Internet connection when you’re beyond a WiFi hotspot. If there are no dots, then the dreaded words “No service” appear here.
• **Network name and type.** These days, different parts of the country—and even your street—are blanketed by cellular Internet signals of different speeds, types, and ages. Your status bar always shows you the kind of signal it has right now. From slowest to fastest:

![Network signal](image)

- 📶 or ☪ means your cellular iPad is connected to your carrier’s slowest, oldest Internet system. You might be able to check email, but you’ll lose your mind waiting for a Web page to load.

If you see the 3G logo, you’re in a city where your cell company has installed a 3G network—meaning fairly decent Internet speed. A 4G logo is better yet; you have speed in between 3G and LTE.

And if you see LTE up there—well, then, get psyched. You have a fairly recent iPad (3rd Generation or later), and you’re in a city with a 4G LTE cellular network. And that means *very* fast Internet (maybe even faster than you have at home), fast Web browsing, fast app downloading—just fast.

• **Airplane Mode.** If you see the airplane instead of signal and WiFi bars, then the iPad is in Airplane mode (page 346).

• **Do Not Disturb.** When the tablet is in Do Not Disturb mode, nothing can make it ring, buzz, or light up except communications from the most important people. Details on page 121.

• **WiFi signal.** When you’re connected to a wireless Internet hotspot, this indicator appears. The more “sound waves,” the stronger the signal.

• **9:50 AM.** When the iPad is unlocked, a digital clock appears on the status bar.

• **Alarm.** You’ve got an alarm set. This reminder, too, can be valuable, especially when you intend to sleep late and don’t want an alarm to go off.

• **Bluetooth.** The iPad is connected wirelessly to a Bluetooth earpiece, speaker, or car system. (If this symbol is gray, then it means Bluetooth is turned on but not connected to any other gear—and not sucking down battery power.)
• **VPN.** You corporate stud, you! You’ve managed to connect to your corporate network over a secure Internet connection, probably with the assistance of a systems administrator—or by consulting page 464.

• **Syncing.** The iPad is currently syncing with some Internet service—iCloud, for example (Chapter 15).

• **Battery meter.** When the iPad is charging, the lightning bolt appears. Otherwise, the battery logo “empties out” from right to left to indicate how much charge remains. (You can even add a “% full” indicator to this gauge; see page 38.)

• **Navigation active.** You’re running a GPS navigation program in the background (yay, multitasking!). Why is a special icon necessary? Because those GPS apps slurp down battery power like a thirsty golden retriever. Apple wants to make sure you don’t forget you’re running it.

• **Lock Rotation.** This icon reminds you that you’ve deliberately turned off the screen-rotation feature, where the screen image turns 90 degrees when you rotate the tablet. Why would you want to? And how do you turn the rotation lock on or off? See page 38.

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**Cameras**

At the top of the iPad, the tiny pinhole is the front-facing camera. Its primary purpose is to let you conduct video chats using the FaceTime feature, but it’s also handy for taking self-portraits or just checking to see if you have spinach in your teeth.

It’s not as good a camera as the one on the back, though. It’s not as good in low light, and takes much lower-resolution shots (1.2 megapixels).

The camera on the back of the iPad, meanwhile, takes very good photos indeed—8 megapixels on the iPad Air 2, 5 megapixels on the other iOS 8 models.
The tiny pinhole next to the lens (recent models only) is a microphone. It’s used for recording clearer sound with video, for better noise cancellation on FaceTime calls, and for better directional sound pickup.

There’s more on the iPad’s cameras in Chapter 8.

**Sensors**

Behind the glass, front center, is a very tiny sensor. It’s hard to see.

It’s an ambient-light sensor that brightens the display when you’re in sunlight and dims it in darker places.

Many people prefer to adjust the screen brightness themselves. Fortunately, it’s easy to turn off this automatic brightness-setting feature; see page 478.

**SIM Card Slot**

There are two kinds of iPad: the WiFi-only models and the more expensive **cellular + WiFi models**, which can also get online anywhere there’s cellular coverage. You don’t have to sign up for two years of cellular service, as you usually do with a cellphone; on the iPad, you can sign up for a month of data at a time, only when you need it. (Page 351 has the details.)

On the right edge of the cellular models, there’s a pinhole next to what looks like a very thin slot cover. If you push an unfolded paper clip straight into the hole, the *SIM card* tray pops out.

So what’s a SIM card?
Every cellphone and cellular tablet stores your account info—things like your carrier account details—on a tiny memory card known as a SIM (subscriber identity module) card. These days, every iPad is identical; only the SIM card inside makes it a T-Mobile iPad, a Verizon iPad, or whatever.

So if you travel, you can rent a temporary SIM card when you get to the destination country. That’s a lot less expensive than paying your U.S. carrier’s insane roaming fees.

**The Universal Apple SIM Card**

With the iPad Air 2, Apple executed a mind-blowing feat of engineering and negotiation: It created a single SIM card that works with AT&T, T-Mobile, and Sprint (and other carriers around the world). It’s the same tablet and the same SIM card, no matter which of those three companies you buy it from.

In theory, Apple’s universal SIM card should mean that you can use the same iPad on anyone’s network. You can hop around, shop around, using T-Mobile when its signal is best, Sprint when its signal is best, and so on.

In reality, things work that way only if you plan to hop between Sprint and T-Mobile. If you ever choose an AT&T plan, the SIM becomes locked to AT&T forever. (And if you choose another carrier, you lose the option to choose AT&T in the future.)

Note, furthermore, that you get an Apple SIM only if you buy the iPad from Apple. If you buy it from one of the carriers, you usually get a card locked to the carrier. (T-Mobile is the exception.)

And Verizon, of course, refuses to play ball with Apple at all; a Verizon iPad has a Verizon SIM card, period.

**Headphone Jack**

On the top-left edge of the iPad, there’s a miniplug. That’s where you can plug in earbuds (not included).

It’s more than an ordinary 3.5-millimeter audio jack, however. It contains a secret fourth pin that conducts sound *into* the tablet from the microphone, if your earbuds have one on the cord. On a FaceTime audio call, for example, you hear the other person through your earbuds, and the mike on the cord picks up your voice.
Speakers

On the bottom edge, Apple has parked another important component: the speakers.

The Charge/Sync Connector

Directly below the Home button, on the bottom edge of the tablet, you’ll find the connector that charges and syncs the iPad with your computer.

The Lightning Connector

For nearly 10 years, the charge/sync connector was identical on every iPad, iPod, and iPhone—the famous 30-pin connector. But on the iPad Air and later models, Apple replaced that inch-wide connector with a new, far smaller one it calls Lightning.

The Lightning connector is a great design: It clicks nicely into place (you can even dangle the iPad from it), yet you can yank it right out. You can insert the Lightning into the tablet either way—there’s no “right-side up” anymore. It’s much sturdier than the old connector. And it’s tiny, which was Apple’s primary goal—only 0.3 inches wide (the old one was almost 0.9 inches wide).

Unfortunately, as a result, the latest iPads don’t fit a lot of existing charging cables, docks, chargers, car adapters, hotel-room alarm clocks, speakers, or accessories.

The makers of those accessories will happily sell you new models that have Lightning connectors. Or you can buy an adapter from Apple:

- Additional USB charging cables, like the one that came with your iPad, cost $20.
- A white adapter plug costs $30. It connects the modern iPad to any accessory that was built for the old 30-pin connector.
- If the iPad doesn’t quite fit the older accessory, sometimes the solution is the $40 adapter plug with an 8-inch cable “tail.”
In time, as the Lightning connectors come on all new iPads, iPods, and iPhones, a new ecosystem of accessories will arise. We’ll arrive at a new era of standardization—until Apple changes jacks again in another 10 years.

In the Box

Inside the minimalist box, you get the iPad and these items:

- **The USB charging/syncing cable.** When you connect your iPad to your computer using this white USB cable, it simultaneously syncs and charges. See Chapter 14.

- **The AC adapter.** When you’re traveling without a computer, you can plug the USB cable into the included two-prong outlet adapter, so you can charge the iPad directly from a wall socket.

- **Decals and info card.** iPad essentials.

You don’t need a copy of the iTunes software, or even a computer, to use the iPad—but it makes loading up the tablet a lot easier, as described in Chapter 14.

If you don’t have iTunes on your computer, then you can download it from [www.apple.com/itunes](http://www.apple.com/itunes).

Seven Basic Finger Techniques

The iPad isn’t quite like any machine that came before it. You do everything on the touchscreen instead of with physical buttons, like this:

**Tap**

The iPad’s onscreen buttons are nice and big, giving your fleshy fingertip a fat target.

You can’t use a fingernail or a pen tip; only skin contact works. (You can also buy an iPad stylus. But a fingertip is cheaper and much harder to misplace.)

**Swipe**

In some situations, you’ll be asked to confirm an action by swiping your finger across the screen. That’s how you unlock the tablet, for example.

You also have to swipe to confirm that you want to turn off the iPad, or to shut off an alarm. Swiping like this is also a great shortcut for deleting an email or a text message.
Drag

When you’re zoomed into a map, Web page, email, or photo, you can scroll around just by sliding your finger across the glass in any direction—like a flick (described later), but slower and more controlled. It’s a huge improvement over scroll bars, especially when you want to scroll diagonally.

Flick

A flick is a faster, less-controlled slide. You flick vertically to scroll lists on the iPad. The faster you flick, the faster the list spins downward or upward. But lists have a real-world sort of momentum; they slow down after a second or two, so you can see where you wound up.

At any point during the scrolling of a list, you can flick again (if you didn’t go far enough) or tap to stop the scrolling (if you see the item you want to choose).
Pinch and Spread

In apps like Photos, Mail, Safari, and Maps, you can zoom in on a photo, message, Web page, or map by *spreading*.

That’s when you place two fingers (usually thumb and forefinger) on the glass and spread them. The image magically grows, as though it’s printed on a sheet of rubber.

**NOTE:** The English language has failed Apple here. Moving your thumb and forefinger closer together has a perfect verb: *pinching*. But there’s no word to describe moving them in the opposite direction.

Apple uses the oxymoronic expression *pinch out* to describe that move (along with the redundant-sounding *pinch in*). In this book, the opposite of “pinching” is “spreading.”

Once you’ve zoomed in like this, you can zoom out again by putting two fingers on the glass and pinching them together.
Double-Tap

Double-tapping is pretty rare on the iPad, at least among the programs supplied by Apple. It’s generally reserved for two functions:

• In the Safari Web browser, Photos, and Maps apps, double-tapping zooms in on whatever you tap, magnifying it. (At that point, double-tapping means “Restore to original size.”) Double-tapping also zooms into formatted email messages, PDF files, Microsoft Office files, and others.

• When you’re watching a video (or recording one), double-tapping switches the aspect ratio (video screen shape).

Edge Swipes

Swiping your finger inward from outside the screen has a few variations:

• From the top edge. Opens the Notification Center, which lists all your missed FaceTime calls and texts, appointments, and so on.

• From the bottom edge. Opens the Control Center, a unified miniature control panel for brightness, volume, WiFi, and so on.

• From the left edge. In many apps, this means “Go back to the previous screen.” It works in Mail, Settings, Notes, Messages, Safari, Facebook, and some other apps.

It sometimes makes a big difference whether you begin your swipe within the screen or outside it. At the Home screen, for example, starting your downward swipe within the screen area doesn’t open the Notification Center—it opens Spotlight, the iPad’s search function.

Charging the iPad

The iPad has a built-in, rechargeable battery that fills up most of its interior. How long a charge lasts depends on what you’re doing—music playback saps the battery the least, 3-D games sap it the most. But one thing is for sure: You’ll have to recharge the iPad regularly. For most people, it’s every couple of days.

NOTE: The iPad’s battery isn’t user-replaceable. It’s rechargeable, but after 400 or 500 charges, it starts to hold less juice. Eventually, you’ll have to pay Apple to install a new battery. (Apple says the added bulk of a protective plastic battery compartment, a removable door and latch, and battery-retaining springs would have meant a much smaller battery—or a much thicker iPad.)
You recharge the iPad by connecting the white USB cable that came with it. You can plug the far end into either of two places to supply power:

- **Your computer’s USB jack.** In general, the iPad charges even if your computer is asleep. (If it’s a laptop that itself is not plugged in, though, then the tablet charges only if the laptop is awake. Otherwise, you’d come home to a depleted laptop.)

- **The AC adapter.** The little white two-prong cube that came with the iPad connects to the end of the cradle’s USB cable—and then plugs into the wall.

You can usually use the iPad while it’s charging. Usually. It depends on how you’re charging it and how you’re using it.

A low-powered USB jack, like the one on a Windows computer or a USB hub, doesn’t supply enough juice to charge the tablet while you’re using it; you may even see a “Not charging” indication while you’re using the tablet.

The USB jack on a recent Mac should be able to charge your iPad slowly, even if you’re using the thing.

The wall plug is the best of all.

What you’re doing also affects charging speed. Video games with full screen brightness may use up more energy than your charger is supplying; simple activities, like typing or answering email, don’t consume nearly as much power.

If you really want your iPad to charge quickly, then put it to sleep and plug it into the wall.

**Battery Life Tips**

The battery life of the iPad is either terrific or terrible, depending on your point of view.

If you were an optimist, you’d point out that the iPad gets longer battery life than most rival tablets. If you were a pessimist, you’d observe that you sometimes can’t even make it through a single day without needing a recharge.

So knowing how to scale back your iPad’s power appetite could come in extremely handy.
The biggest wolverers of electricity are the screen and the wireless features. Therefore, these ideas will help you squeeze more life out of each charge:

- **Dim the screen.** Turning down your screen saves a lot of power. The quickest way is to swipe up from the bottom of the screen to open the Control Center (page 37), and then drag the brightness slider.

  On a new iPad, Auto Brightness is turned on, too. In bright light, the screen brightens automatically; in dim light, it darkens. That’s because when you unlock the tablet after waking it, it samples the ambient light and adjusts the brightness. (You can turn this auto-brightness feature off altogether in Settings→Display & Brightness.)

- **Turn off WiFi.** If you’re not in a wireless hotspot, you may as well stop the thing from using its radio. Swipe up from the bottom of the screen to open the Control Center, and tap the ⚙ icon to turn it off.

  Or at the very least tell the iPad to stop searching for WiFi networks it can connect to. Page 344 has the details.

- **Turn off “push” data.** This is a big one. Your iPad can keep itself wirelessly up to date with your latest email, calendar, and address book information. Unfortunately, all that continual sniffing of the airwaves, looking for updates, costs you battery power. If you can do without the immediacy, then visit Settings→Mail, Contacts, Calendars→Fetch New Data. If you turn off the Push feature and set it to Manually instead, then your iPad checks for email and new appointments only when you actually open the Mail or Calendar apps. Your battery goes a lot further.

- **Turn off background updating.** Non-Apple apps check for frequent updates, too: Facebook, Twitter, stock-reporting apps, and so on. Not all of them need to be busily toiling in the background. Your best bet on battery life, then, involves visiting Settings→General→Background App Refresh and turning the switch Off for each app whose background activity isn’t strictly necessary.

- **Turn off automatic app updates.** App companies update their wares far more often than PC or Mac apps, sometimes many times a year.

  The iPad comes set to download them automatically when they become available. But that constant checking and downloading costs you battery life.

  To shut that feature down, open Settings→iTunes & App Store. Scroll down to the Automatic Downloads section. Turn off Updates. (The other switches—Music, Apps, Books—are responsible for au-
to-downloading things that you or your brood have downloaded on other iOS gadgets. You might want to make sure they’re off, too, if battery life is a concern.)

- **Consider Airplane mode.** In Airplane mode, you shut off all the iPad’s power-hungry radios. Even a nearly dead iPad can hobble on for a few hours in Airplane mode—something to remember when you’re desperate. To enter Airplane mode, swipe up from the bottom of the screen to open the Control Center, and tap the 📡 icon.

- **Turn off Cellular Data.** This option on cellular iPads (in **Settings**→**Cellular**) turns off the cellular Internet features. You can still get online in a WiFi hotspot. This feature is designed for people who have a capped data plan—a limited amount of Internet use per month—which is almost everybody. If you discover that you’ve used up almost all your data allotment for the month, and you don’t want to go over your limit (and thereby trigger an overage charge), you can use this option to shut off all data. Now your iPad uses less power, too.

- **Turn off GPS checks.** In **Settings**→**Privacy**→**Location Services**, there’s a list of all the apps on your tablet that are using its location feature to know where you are. (It’s a combination of GPS, cell tower triangulation, and WiFi hotspot triangulation.) All that checking uses battery power, too.

Some apps, like Maps, Find My Friends, and Yelp, don’t do you much good unless they know your location. But plenty of apps don’t really need to know where you are. Facebook and Twitter, for example, want that information only so that they can location-stamp your posts. In any case, the point is to turn off Location Services for each app that doesn’t really need to know where you are.

**TIP:** In the list of apps under Location Services, tiny 🗺 icons show you which apps are using GPS right now (the 🗺 appears in purple), and which have used it in the past 24 hours. These icons can help guide you in shutting off the GPS use of various apps.

- **Turn off Bluetooth.** If you’re not using a Bluetooth speaker or the Mac’s Handoff feature (page 453), then shut down that Bluetooth radio. Open the Control Center and tap the 📀 icon to turn it off.

- **Turn off the screen.** You can actually turn off the screen, rendering it totally black and saving incredible amounts of battery power. Music playback and Maps navigation continue to work just fine.
By the way, beware of 3-D games and other graphically intensive apps, which can be serious power hogs. And turn off EQ when playing your music (see page 190).

If your battery still seems to be draining faster than it should, a new iOS 8 feature awaits you. It’s this amazing table, which shows you exactly which apps are using the most power:

To see it, open **Settings → General → Usage → Battery Usage**. You can switch between battery readouts for the past 24 hours or for the past 4 days. Keep special watch for labels like these:

- **Low signal.** A cellular iPad uses the most power of all when it’s hunting for a cellular signal, because the tablet amplifies its radios in hopes of finding one. If your battery seems to be running down faster than usual, the “Low Signal” notation is a great clue—and a suggestion that maybe you should use Airplane mode when you’re on the fringes of cellular coverage.

- **Background activity.** As hinted on the previous pages, background Internet connections are especially insidious. These apps do online work invisibly, without your awareness—and drain the battery. Now, for the first time, you can clearly see which apps are doing it.

Once you know the culprit app, it’s easy to shut its background work down. Open **Settings → General → Background App Refresh** and switch **Off** each app whose background activity isn’t strictly necessary.
The Home Screen

The Home screen is the launching pad for every iPad activity. It’s what appears when you press the Home button. It’s the immortal grid of colorful icons.

It’s such an essential landmark, in fact, that a quick tour might be helpful.

• **Icons.** Each icon represents one of your iPad apps (programs)—Mail, Maps, Camera, and so on—or a folder that you’ve made to contain some apps. Tap one to open that program or folder.

The iPad comes with about 25 apps preinstalled by Apple; you can’t remove them. The real fun, of course, comes when you download more apps from the App Store (Chapter 9).

• **Badges.** Every now and then, you’ll see a tiny, red number “badge” (like 2) on one of your app icons. It’s telling you that something new awaits: new email, new text messages, new chat entries, new updates for the apps on your iPad. It’s saying, “Hey, you! Tap me!”

• **Home page dots.** The standard Home screen can’t hold more than 20 or 24 icons. As you install more and more programs on your iPad, you’ll need more and more room for their icons. Fortunately, the iPad creates additional Home screens automatically. You can spread your new programs’ icons across 11 such launch screens.

The little white dots are your map. Each represents one Home screen. If the third one is “lit up,” then you’re on the third Home screen.

To move among the screens, swipe horizontally—or tap to the right or left of the little dots to change screens.

And if you ever scroll too far away from the first Home screen, here’s a handy shortcut: Press the Home button (yes, even though you’re technically already home). That takes you back to the first Home screen.

**TIP:** Note to upgraders: The very first “page,” at the far left, used to be the Spotlight (search) screen. But in iOS 7 and iOS 8, you open Spotlight by dragging down anywhere on any Home screen; there’s nothing to the left of the Home screens anymore. You can tug down on any “page” of the Home screens—you don’t have to scroll all the way to the left of them anymore.

• **The Dock.** At the bottom of the Home screen, four exalted icons sit in a row on a tinted panel. This is the Dock—a place to park the most
important icons on your iPad. These, presumably, are the ones you use most often. Apple starts you off with Messages, Mail, Safari, Music, and App Store.

What’s so special about this row? As you flip among Home screens, the Dock never changes. You can never lose one of your five most cherished icons by straying from the first page; they’re always handy.

• **The background.** You can replace the background image (behind your app icons) with a photo. A complicated, busy picture won’t do you any favors—it will just make the icon names harder to read—so Apple provides a selection of handsome, relatively subdued wallpaper photos. But you can also choose one of your own photos.

For instructions on changing the wallpaper, see page 244.

It’s easy (and fun!) to rearrange the icons on your Home screens. Put the most frequently used icons on the first page, put similar apps into folders, and reorganize your Dock. Full details are on page 268.

**TIP:** In iOS 8, you can set up a completely empty first Home screen by moving all of its app icons onto other Home “pages.” (In previous versions of iOS, the tablet automatically deleted the first Home screen if it was empty.) That’s a weird little arrangement for anyone who wants to show off a really great wallpaper photo.
Control Center

For such a tiny device, there are an awful lot of settings you can change—hundreds of them. Trouble is, some of them need changing (volume, brightness) a lot more often than others (language preference, cookie settings).

That’s why Apple invented the Control Center: a panel that offers quick access to the controls you need the most.

To open the Control Center, no matter what app you’re using, swipe upward from beneath the screen.

**TIP:** You can even open the Control Center from the Lock screen, unless you’ve turned off that feature (page 16).

The Control Center is a translucent gray panel filled with one-touch icons for the settings you’ll probably change most often.

**TIP:** Truth be told, the Control Center is easier to use when it’s not translucent. Visit SettingsÆGeneralÆAccessibility and turn on Increase Contrast. Now the Control Center’s background is solid gray instead of see-through gray.

Now, many of these settings are even faster to change using Siri, the voice-command feature described in Chapter 3. When it’s not socially awkward to speak to your tablet (like at the symphony or during a golf game), you can use spoken commands—listed below under each button description—to adjust settings without even touching the screen.
Here’s what’s in the Control Center:

• **Airplane mode (✈).** Tap to turn the icon white. Now you’re in Airplane mode; the tablet’s wireless features are all turned off. You’re saving the battery and obeying flight attendant instructions. Tap again to turn off Airplane mode.

  **Sample Siri command:** “Turn Airplane mode on.” (Siri warns you that if you turn Airplane mode on, Siri herself will stop working. Say “OK.”)

• **WiFi (_WIFI).** Tap to turn your tablet’s WiFi off (black) or on (white).

  **Sample Siri commands:** “Turn off WiFi.” “Turn WiFi back on.”

• **Bluetooth (.bluetooth).** Tap to turn your Bluetooth transmitter off (black) or on (white). That feature alone is a godsend to anyone who uses the iPad with a car’s Bluetooth audio system. Bluetooth isn’t the battery drain it once was, but it’s still nice to be able to flick it on so easily when you get into the car.

  **Sample Siri commands:** “Turn Bluetooth on.” “Turn off Bluetooth.”

• **Do Not Disturb (🌙).** Do Not Disturb mode, described in Chapter 4, means that the tablet won’t ring or buzz at all—except when a few handpicked people are trying to reach you. Perfect for sleeping hours; in fact, you can set up an automated schedule for Do Not Disturb (say, midnight to 7 a.m.).

  But what if you wake up early or want to stay up late? Now you can tap to turn Do Not Disturb on (white) or off (black).

  **Sample Siri commands:** “Turn on Do Not Disturb.” “Turn Do Not Disturb off.”

• **Mute (🔇), Lock Rotation (🔒).** Mute (🔇) means your iPad won’t ring, chime, or beep—nothing to embarrass you in a meeting or at a funeral service.

  When Lock Rotation (🔒) is turned on (white), the screen no longer rotates when you turn the tablet. Sometimes, like when you’re reading on your side in bed, you don’t want the screen picture to turn; you want it to stay upright relative to your eyes. (The condition icon appears at the top of the screen to remind you why the screen isn’t turning.)
You probably have only one of these two buttons on your Control Center—and you decide which.

Most iPad models have a physical switch on the right edge. It can be either Mute or Lock Rotation; you make your choice in Settings (see page 39).

Whichever function you don’t assign to the side switch appears in the Control Center, for your convenience. If you’ve set your side switch to mean Mute, then the button appears in the Control Center, and vice versa.

The iPad Air 2 doesn’t have a physical switch on the right edge. So on this mode, both buttons— and —appear in the Control Center.

• Brightness. Hallelujah! Here’s a screen-brightness slider. Drag the little white ball to change the screen brightness.

  Sample Siri commands: “Make the screen brighter.” “Decrease the brightness.” “Dim the screen.” “Brighten up!”

• Playback controls ( , , ). These controls govern playback in whatever app is playing music or podcasts in the background: the Music app, Pandora, Spotify, whatever it is. You can skip a horrible song quickly and efficiently without having to interrupt what you’re doing, or pause the music to chat with a colleague. (Tap the song name to open whatever app is playing.)

  You also get a scrubber bar that shows where you are in the song, the name of the song and the performer, and the album name. And, of course, there’s a volume slider. It lets you make big volume jumps faster than you would by pressing the volume buttons on the side of the tablet.

  Sample Siri commands: “Pause the music.” “Skip to the next song.” “Play some Billy Joel.”

• AirDrop ( ). AirDrop gives you a quick, effortless way to shoot photos, maps, Web pages, and other stuff to nearby iPads, iPhones, iPod Touches, and even Macs. (See page 515 for details.)

  On the Control Center, the AirDrop button isn’t an on/off switch like most of the other icons here. Instead it produces a pop-up menu of options that control whose i-gadgets can “see” your iPad: Contacts Only (people in your address book), Everyone, or Off (nobody).

• AirPlay ( ). The AirPlay button lets you send your iPad’s video and audio to a wireless speaker system or TV—if you have an AirPlay
receiver, of which the most famous is the Apple TV. Details are on page 190.

• **Timer (⏰).** Tap to open the Clock app—specifically, the Timer mode, which counts down to zero. Apple figures you might appreciate having direct access to it when you’re cooking, for example, or waiting for your hair color to set.

  **Sample Siri commands:** “Open the Timer.” Or, better yet, bypass the Clock and Timer apps altogether: “Start the timer for three minutes.” “Count down from six minutes.” (Siri counts down right there on the Siri screen.)

• **Camera (📸).** Tap to jump directly into the Camera app. Because photo ops don’t wait around.

  **Sample Siri commands:** “Take a picture.” “Open the camera.”

The Control Center closes when any of these things happen:

• You tap the Timer or Camera button

• You tap the ✤ button

• You tap or drag downward from any spot above the Control Center (the dimmed background of the screen).

• You press the Home button.

**NOTE:** In some apps, swiping up doesn’t open the Control Center on the first try, much to your probable bafflement. Instead, swiping up just makes a tiny ✤ tab appear at the edge of the screen. (You’ll see this behavior whenever the status bar—the strip at the top that shows the time and battery gauge—is hidden, as can happen in the full-screen modes of iBooks, Maps, Videos, and so on. It also happens in the Camera.)

In those situations, Apple is trying to protect you from opening the Control Center accidentally—for example, when what you really wanted to do was scroll the image up. No big deal; once the ✤ appears, swipe up a second time to open the Control Center panel.

If you find yourself opening the Control Center accidentally—when playing games, for example—you can turn it off. Open **Settings** → **Control Center**. Turn off **Access Within Apps**. Now swiping up opens the Control Center only at the Home screen. (You can also turn off **Access on Lock Screen** here, to make sure the Control Center never appears when the tablet is asleep.)
Notifications

A notification is an important status message. You get one every time a message comes in, an alarm goes off, a calendar appointment is imminent, or your battery is running low.

Responding to Notifications

These days, there’s a lot more you can do with a notification than just read it and nod OK. Apple has gone to a lot of effort to ensure that notifications disrupt your important tablet activities as rarely as possible. So:

• **Flick it away.** When a notification appears at the top of the screen, it’s sometimes covering up whatever you were doing. If you wait a couple of seconds, the message goes away by itself. But you don’t have to wait. You can just flick it upward with your finger to make it disappear.

• **Answer it.** Often, a notification displays an incoming text message, email, or calendar invitation. In iOS 8, you can swipe down on it to reveal buttons that let you take action: *Reply*, for example, or *Decline* and *Accept* (for an invitation). And you never have to leave the app you were using, which is deliciously efficient.

**TIP:** This trick works even on the Lock screen. That is, you can respond to something even without unlocking the tablet.

• **Open it.** Finally, the obvious one: You can tap a notification to open the app it came from. Tap an email notification to open the message in Mail; tap a message notification to open it in Messages; and so on.
That’s handy when you want to dig in and see the full context of the notification.

**The Notification Center**

No matter what kind of notification pops up, you still see only one alert at a time. And once it’s gone, you can’t get it back. Or can you?

Meet the Notification Center screen. It lists every notification you’ve recently received, in a tidy, scrolling list.

You can check it out right now: Swipe down from above the iPad’s screen. The Notification Center pulls down like a classy window shade, printed in white with every recent item of interest.

Here you’ll find all your apps’ notifications, as well as your recent messages, reminders, and upcoming calendar appointments.
You can inspect two different lists here (a redesign in iOS 8):

- **Today.** The **Today** screen presents an executive summary of everything you need to know today, in plain English: your upcoming appointments (“‘Salary meeting’ is next up on your calendar, at 2 PM”); reminders coming due; weather and stock information; and a preview of your schedule tomorrow. If you’re away from your home or office, you’ll even see an estimated commuting time, based on current traffic conditions. Pretty slick.

In iOS 8, the Today screen has become a much bigger deal. Apple now allows apps to add their own sections to the Today list.

For example, Dropbox can show a list of files that have been added to your Dropbox folder; Evernote can add buttons for creating new notes or reminders; The New York Times, Yahoo Digest, and Huffington Post apps can add headlines; Yahoo Weather can add weather information, including a photo of current conditions; the Kindle app offers links to the books you’re reading right now; and so on.

To manage all of this, scroll down to the bottom of the Today list and tap **Edit.** In the resulting list, you can tap - to remove a module from
the Today list, drag the up or down to move it higher or lower in the list, or tap + to add a module. Then tap Done.

• Notifications. On this tab, you see every notification you’ve received, sorted by app: all the FaceTime calls, texts, and other notifications that came in while your tablet was asleep or turned off. (They disappear after a day.) It can be a very long list.

Tap a line in the Notification Center to open the relevant app for more details—for example, to see more information about that appointment, or to read the whole message in context.

Tap the × next to an app’s name, and then tap Clear to remove that app’s current listings from the Notification Center—for now. That app’s heading will reappear the next time it has anything to tell you.

And if you see an email message or a text message, drag left across it to reveal handy instant buttons: Reply, Mark as Read, Archive, or Delete, for example (as shown in the illustration on page 42).

TIP: To switch between the Today and Notification views, you can tap the tabs or just swipe across the screen.

To close the Notification Center, press the Home button or drag the bottom handle (⋮) upward. (Actually, you don’t have to aim for the handle. You can just swipe upward from beneath the screen, quickly and sloppily.)

Customizing Notifications

You can (and should) specify which apps are allowed to junk up your Notification Center. Open Settings → Notifications to see the master list (shown on page 46), with one entry for every app that might ever want your attention. (Or just tell Siri, “Open notification settings.”)

Under Notifications View, you can specify the order of the various apps’ notifications in the center. If you tap Sort By Time, then the apps with the newest alerts appear at the top. But if you tap Sort Manually and then Edit, you can drag the handles up or down to specify the order of your apps’ notifications on the Notification Center screen.

The most important work you can do in Notifications settings, though, is to control the behavior of each individual app. You’ll quickly discover that every app thinks it’s important; every app wants its notifications to blast into your face when you’re working.
You, however, may disagree. You may not consider it essential to know when your kid’s Plants vs. Zombies game score has changed, for example.

So: Tap an app’s name to open its individual Notifications screen (at right on the next page—the Messages app, in this example). Here you’ll find settings that vary by app, but they generally run along these lines:

- **Allow Notifications.** If you don’t want this app to make any notifications pop up at all, then turn this off.

- **Show in Notification Center.** *How many* recent notifications from this app are allowed to appear in your Notification Center? You can choose anything from **No Recent Items** (the app can still get your attention with banners or alert bubbles—but it won’t appear in the Notification Center) to **10 Recent Items** (for really important things like emails).

- **Sounds.** Some apps try to get your attention with a sound effect when a notification appears. Turn this off if you think your tablet makes too many beeps and burbles as it is.

- **Notification Sound.** Some apps offer this control. It lets you choose *which* sound effect plays to get your attention. You can change the sound or choose **None**.

- **Badge App Icon.** A badge is a little red circled number ( מחיר, for example). It appears right on an app’s icon to indicate how many updates are waiting for you. Turn it off if you really don’t need that reminder.

- **Show on Lock Screen.** The Lock screen (page 13) is another place to see what’s been trying to get your attention while the tablet was in your bag: new messages and email, Facebook updates, and so on. The Lock screen may seem just like the Notification Center—but there are differences. For example, each time you wake the tablet, whatever notifications are on the Lock screen are wiped clear. They don’t stay put, as they do on the Notification Center.

The Lock screen may seem just like the Notification Center—but there are differences. For example, each time you wake the tablet, whatever notifications are on the Lock screen are wiped clear. They don’t stay put, as they do on the Notification Center.

You might want a *different* set of apps to list their nags on the Lock screen. Maybe you want the Lock screen to show only new text messages and new mail—but you’d like the Notification Center to be fully stocked with Twitter and Facebook updates, for example. Or maybe you’d rather not permit passing evildoers to pick up your tablet and see your notifications without even having to unlock it.
That’s why you have this switch. It governs your ability to see this app’s updates on the Lock screen (and the Notification Center when you open it while at the Lock screen).

What Notifications Look Like
Notifications can appear in any of three styles—and you get to choose which you prefer, for each app.
On the same screen described above (open Settings ➔ Notifications and tap the app’s name), you can choose one of these three styles:

- **None.** If a certain app bugs you with news you really don’t care about, you can shut it up forever. Tap None.

- **Banners** are incoming notifications that appear quietly and briefly at the top of the screen (below, top). The message holds still long enough for you to read it, but it doesn’t interrupt your work and goes away after a few seconds. Banners are a good option for things like Facebook and Twitter updates and incoming email messages.

  **TIP:** A reminder: If you tap a banner before it disappears, you jump directly to the app that’s trying to get your attention. You can also flick a banner up off the screen if it’s in your way.

- **Alerts.** A white alert box appears, center screen, to get your attention (above, bottom). You might use this option for apps whose messages are too important to miss, like alarms, flight updates, and messages.
TIP: You can also use the Include setting to specify how much of the Notification Center this app is allowed to use up—that is, how many lines of information. Maybe you need only the most recent alert about your upcoming flight (1 Item), but you want to see a lot more of your upcoming appointments (10 Items).

Miscellaneous Weirdness

As you poke around in the Notification Center settings, you’ll discover that certain oddball apps offer some options that don’t match up with the settings you see for most apps. Don’t freak out. It’s all part of Apple’s master plan to put controls where it hopes you’ll find them.

Password (or Fingerprint) Protection

About half of iPad owners don’t bother setting up a password to protect the tablet. Maybe they never set the thing down in public, so they don’t worry about thieves. Or maybe there’s just not that much personal information on the tablet—and, meanwhile, having to enter a password every single time you wake the tablet gets to be a hassle.

TIP: Besides—if you ever do lose your tablet, you can put a password on it by remote control; see page 439.

The other half of people reason that the inconvenience of entering a password many times a day is a small price to pay for the knowledge that nobody can get into your stuff if you lose it.

If you think your tablet is worth protecting, here’s how to set up a password—and, if you have an iPad Air 2 or iPad mini 3, how to use the fingerprint reader instead.

Setting Up a Password

If you didn’t already create a tablet password the first time you turned your iPad on, here’s how to do it. (And just because you’re an Air 2 or mini 3 owner, don’t be smug; you have to create a password even if you plan to use the fingerprint reader. As a backup.)

Open Settings→Touch ID & Passcode. (On pre-2014 models, it’s just called Passcode Lock.)

You can set up either a four-digit number—convenient, but not so impossible to guess—or a full-blown alphanumeric password of any length. You decide, using the Simple Passcode on/off switch.
Now tap **Turn Passcode On**. You’re asked to type the password you want, either on the number keypad (for Simple Passcodes) or the alphabet keypad. You’re asked to do it again to make sure you didn’t make a typo.

**NOTE:** Don’t kid around with this passcode. If you forget the iPad code, you’ll have to **restore** your iPad (page 513), which wipes out everything on it. You’ve still got most of the data on your computer, of course (music, video, contacts, calendar), but you may lose text messages, mail, and so on.

Once you confirm your password, you return to the **Passcode Lock** screen. Here you have a few more options.

For example, the **Require Passcode** option lets you specify how quickly the password is requested before locking somebody out: immediately after the iPad wakes or 1, 15, 30, 60, or 240 minutes later. (Those options are a convenience to you, so you can quickly
check your calendar or missed messages without having to enter the passcode—while still protecting your data from, for example, evildoers who pick up your iPad while you’re out getting coffee.)

Certain features are accessible on the Lock screen even before you’ve entered your password: the **Today** and **Notifications** tabs of the Notification Center, and **Siri**. These are huge conveniences, but also, technically, a security risk. Somebody who finds your tablet on your desk could, for example, look up your schedule or use Siri to send a text. If you turn these switches off, then nobody can use these features without entering the password (or using your fingerprint).

Finally, here is **Erase Data**—an option that’s scary and reassuring at the same time. When this option is on, then if someone makes 10 incorrect guesses at your passcode, your iPad erases itself. It’s assuming that some lowlife burglar is trying to crack into it to have a look at all your personal data.

This option, a pertinent one for professional people, presents potent protection from patient password prospectors.

And that is all. From now on, each time you wake your iPad (if it’s not within the window of repeat visits you established), you’re asked for your password.

**Fingerprint Security (Touch ID)**

If you have an iPad Air 2 or mini 3—you lucky thing—you have the option of using a more secure and much more convenient kind of “password”: your fingertip.

The lens built right into the Home button (clever!) actually works—every time. It’s not fussy, it’s not balky. It reads your finger at any angle. It can’t be faked out by a plastic finger or even a chopped-off finger. You can teach it to recognize up to five fingerprints; they can all be yours, or some can belong to other people you trust.

Before you can use your fingertip as a password, though, you have to teach the tablet to recognize it. Here’s how that goes:

1. **Create a passcode.** That’s right: You can’t use a fingerprint instead of a password; you can only use a fingerprint in addition to one. You’ll still need a password from time to time to keep the tablet’s security tight. For example, you need to enter your password if you can’t make your fingerprint work (maybe it got encased in acrylic in a hideous crafts accident), or if you restart the tablet, or if you haven’t used the tablet in 48 hours or more.
So open **Settings→Touch ID & Passcode** and create a password, as described on the previous pages.

**2. Teach a fingerprint.** At the top of the Touch ID & Passcode screen, you see the on/off switches for the three things your fingerprint can do: It can unlock the tablet (**iPad Unlock**), buy things online from within shopping apps (Apple Pay), and serve as your password when you buy books, music, apps, and videos from Apple’s online stores (**iTunes & App Store**).

But what you really want to tap here, of course, is **Add a fingerprint**.

Now comes the cool part. Place the finger you want to train onto the Home button—your thumb or index finger are the most logical candidates. Touch it to the Home button over and over, maybe six times. Each time, the gray lines of the onscreen fingerprint darken a little more.

Once you’ve filled in the fingerprint, you see the Adjust Your Grip screen. Tap **Continue**. Now the iPad wants you to touch the Home button another few times, this time tipping the finger a little each time so the sensor gets a better view of your finger’s **edges**.

Once that’s done, the screen says “Success!”

You are now ready to start using your fingerprint. Try it: Put the tablet to sleep. Then wake it (press the Sleep switch or press the Home button), and
then leave your finger on the Home button for about a second. The tablet reads your fingerprint and instantly unlocks itself.

And now, a few notes about using your fingerprint as a password:

• Yes, you can touch your finger to the Home button at the Lock screen. But you can also touch it at any Enter Passcode screen. Suppose, for example, that your Lock screen shows that you missed a text message. And you want to reply. Well, you can swipe across that notification to open it in its native habitat—the Messages app—but first you’re shown the Enter Passcode screen. Ignore that. Just touch the Home button with the finger whose print you recorded.

• Apple says the image of your fingerprint is encrypted and stored in the iPad’s processor chip. It’s never transmitted anywhere, it never goes online, and it’s never collected by Apple.

• If you return to the Touch ID & Passcode screens, you can tap Add a Fingerprint again to teach your tablet to recognize a second finger. And a third, fourth, and fifth.

The five “registered” fingerprints don’t all have to belong to you. If you share the tablet with a spouse or a child, for example, that special somebody can use up some of the fingerprint slots.

• To rename a fingerprint, tap its current name (“Finger 1” or whatever). To delete one, tap its name and then tap Delete Fingerprint. (You can figure out which finger label is which by touching the Home button; the corresponding label blinks. Sweet!)

• You can register your toes instead of fingers, if that’s helpful. Or even patches of your wrist or arm, if you’re patient (and weird).

• The Touch ID scanner may have trouble recognizing your finger if it (your finger) is wet, greasy, or scarred.

• The iPad’s finger reader isn’t just a camera; it doesn’t just look for the image of your fingerprint. It’s actually measuring the tiny differences in electrical conductivity between the raised parts of your fingerprint (which aren’t conductive) and the skin just beneath the surface (which is). That’s why a plastic finger won’t work—and even your own finger won’t work if it’s been chopped off (or if you’ve passed away).

Fingerprints for Apps, Web Sites, and Apple Pay

So if your fingerprint is such a great solution to password overload, how come it works only to unlock the tablet and to buy stuff from Apple’s online stores? Wouldn’t it be great if your fingerprint could also log you into secure Web sites? Or serve as your ID when you buy stuff online?
In iOS 8, that dream has become a reality. Software companies can now use your Touch ID fingerprint to log into their apps. Mint (for checking your personal finances), Evernote (for storing notes, pictures, and to-do lists), Amazon (for buying stuff), and other apps now permit you to substitute a fingerprint touch for typing a password.

What’s really wild is that password-storing apps like 1Password and LastPass have been updated, too. Those apps are designed to memorize your passwords for all sites on the Web, of every type—and now you can use your fingerprint to unlock them.

Moreover, your fingerprint is now the key to the magical door of Apple Pay, the buy-with-your-fingerprint technology described on page 445.

All of this is great news. Most of us would be happy if we never, ever had to type in another password.
As a tablet computer, the iPad faces a fundamental limitation: It has no real keyboard or mouse. Which might be considered a drawback on a gadget that’s capable of running hundreds of thousands of programs.

Fortunately, where there’s a problem, there’s software that can fix it. The modern iPad’s virtual keyboard is smart in all kinds of ways—automatically predicting words and correcting typos, for example. And, hey, this is iOS 8; if you don’t like the iPad’s onscreen keyboard, you can just choose one designed by a different company.

This chapter covers every aspect of working with text on the iPad: entering it, fixing it, dictating it, and searching for it.

**The Keyboard**

The iPad has no physical keys. A virtual keyboard, therefore, is the only possible built-in system for typing text. Like it or not, you’ll be doing a lot of typing on glass.

The keyboard appears automatically whenever you tap in a place where typing is possible: in an outgoing email, in the Notes app, in the address bar of the Web browser, and so on.

Just tap the key you want. It doesn’t darken or light up to confirm that you’ve typed something, but you may hear a little key-tap sound, and, of course, whatever character you typed appears on the screen.

In darker gray, surrounding the letters, you’ll find these special keys:

- **Shift (⇧).** When you tap this key, it turns dark to indicate that it’s in effect. The next letter you type appears as a capital. Then the key returns to normal, meaning that the next letter will be lowercase.
TIP: The iPad has a Caps Lock “key,” too, but it’s hidden. To engage it, double-tap the key; it changes to . You’re now in Caps Lock mode, and you’ll now type in ALL CAPITALS until you tap the key again. (If you can’t seem to make Caps Lock work, try double-tapping the key fast. Or see if maybe Caps Lock got turned off in SettingsÆGeneralÆKeyboard.)

- Backspace ( ). This key actually has three speeds.

  Tap it once to delete the letter just before the blinking insertion point.

  Hold it down to “walk” backward, deleting as you go.

  If you hold the key down long enough, it starts deleting words rather than letters, one whole chunk at a time.

- .?123. Tap this button when you want to type numbers or punctuation. The keyboard changes to offer a palette of numbers and symbols. Tap the same key—which now says —to return to the letters keyboard.

  Once you’re on the numbers/symbols pad, a new dark-gray button appears, labeled #=. Tapping it summons a third keyboard layout, containing the less frequently used symbols, like brackets, the # and % symbols, bullets, and math symbols.

NOTE: Because the period is such a frequently used symbol, there’s an awesome shortcut that doesn’t require switching to the punctuation keyboard: At the end of a sentence, tap the space bar twice. You get a period, a space, and a capitalized letter at the beginning of the next word. (This, too, can be turned off—in SettingsÆGeneralÆKeyboard—even though it’s hard to imagine why you’d want to.)
• **return.** Tapping this key moves to the next line, just as on a real keyboard. (There’s no Tab key or Enter key in iPad Land.)

## Making the Keyboard Work

Some people have no problem tapping those virtual keys; others struggle for days. Either way, here are some tips:

- **Don’t be dismayed by the smaller-than-standard keys.**

  As you type, use the whole pad of your finger or thumb. Don’t try to tap with only a skinny part of your finger to match the smallish keys. You’ll be surprised at how fast and accurate this method is. (Tap, don’t press.)

- **This may sound like New Age hooey, but trust the keyboard. Don’t pause to check the result after each letter. Just plow on.**

  **TIP:** Although you don’t see it, the sizes of the keys on the iPad keyboard are changing all the time. That is, the software enlarges the “landing area” of certain keys, based on probability.

  For example, suppose you type *tim*. The iPad knows that no word in the language begins with *timw* or *timr*—and so, invisibly, it enlarges the “landing area” of the E key, which greatly diminishes your chances of making a typo on that last letter.

- **Without cursor keys, how are you supposed to correct an error you made a few sentences ago? Easy—use the loupé.**

  Hold your fingertip down anywhere in the text until the magnified circle appears. Without lifting your finger, drag anywhere in the text; the insertion point moves along with it. Release when the blue line is where you want to delete or add text, just as though you’d clicked there with a mouse.
TIP: In the Safari address bar, you can skip the part about waiting for the loupe to appear. Once you click into the address, start dragging to make it appear at once.

- Don’t bother using the Shift key to capitalize a new sentence. The iPad does that capitalizing automatically. (To turn this feature on or off, open SettingsÆGeneralÆKeyboard. Turn off Auto-Capitalization.)

- You can save time by leaving out the apostrophe in contractions. Type im, dont, or cant. The iPad proposes I’m, don’t, or can’t, so you can just tap the space bar to fix the word and continue.

- In time, you can learn to type two-handed, as on a laptop. Since you can’t feel the keys (and they’re smaller than a laptop’s) it’s not as fast. But it beats hunting and pecking with one finger as on a phone.

- If you’re a two-thumbs typist, you’ll like this tip.

Unless you’re a concert pianist, your thumbs probably aren’t long enough to reach all of the keys. But try this: Put your thumbs on the keyboard and pull them apart. The keyboard splits in half and shrinks. The result: a split keyboard whose keys are all thumb-reachable on both sides.

To restore the original keyboard, just push inward on both halves simultaneously.
QuickType

The typing experience in iOS 8 is drastically different, thanks to what Apple calls its QuickType keyboard. It saves you a lot of time, tapping, and errors.

The idea is simple: As you type a sentence, the software predicts which word you might type next—which are the three most likely, actually—and displays them as three buttons above the keyboard.

If you begin the sentence by typing, “I really,” then the three suggestions might be want, don’t, and like.

But what if you intended to say, “I really hope...”? In that case, type the first letter of “hope.” Instantly, the three suggestions change to “h,” hope, and hate. (The first button always shows, in quotes, whatever non-word you’ve typed so far, just in case that’s what you really intend. To place it into your text, you can tap that button or tap the space bar or some punctuation.)

In other words, QuickType is autocomplete on steroids. Frankly, it’s a rush when QuickType correctly proposes finishing a long word for you.

With QuickType, you can produce a sentence like “I’ll gladly pay you Tuesday for a hamburger today” with 26 taps on the screen. If you had to type out the whole thing, you’d have tapped 50 keys. QuickType also adds spaces for you.

A set of three buttons guessing what you might want to type next isn’t a new idea; Android and BlackBerry phones have had it for years. But QuickType is smarter in several ways:

• QuickType’s suggestions are different in Messages (where language tends to be casual) than in Mail (where people write more formally).

• Similarly, QuickType modifies its suggestions based on whom you’re writing to. It learns.
• You can hide the QuickType bar if it’s getting on your nerves. Just swipe down on it with your finger; you’ll see it collapse into a horizontal white line. (To bring it back, swipe up on the white line.)

• Sometimes, QuickType offers you several words on a single button, to save you even more time (for example, up to or in the).

• QuickType automatically adds a space after each word you select, so you don’t have to mess with the space bar.

• When someone texts you a question that ends with a choice (“Coffee, tea, or me?”), the QuickType buttons cleverly offer those choices on the buttons. Before you’ve even typed a single letter, the choices say coffee, tea, and you.

**TIP:** If you forget to capitalize a word, double-tap to select it. Now tap Shift once (To Initial Cap The Word) or twice (FOR ALL CAPS). Lo and behold, the QuickType suggestions are now capitalized renditions of the word, ready to replace it!

QuickType does mean that you have to split your focus. You have to pay attention to both the keys you’re tapping and the ever-changing word choices above the keyboard. With practice, though, you’ll find that QuickType offers impressive speed and accuracy. You won’t miss the little autocorrect bubbles of old.

**TIP:** But if you do, you can turn QuickType off. Open **Settings**→**General**→**Keyboard**, and turn off **Predictive**.
The Spelling Checker

Here’s the world’s friendliest typo-fixer. Apple calls it a spelling checker, but maybe that’s stretching it.

The idea is that anytime the iPad doesn’t recognize something you’ve typed, it draws a dotted red underline beneath it. Tap the word to see a pop-up balloon with one, two, or three alternate spellings. Often, one of them is what you wanted, and you can tap it to fix the mistake. (Equally often, none of them is, and it’s time to break out the loupe and the keyboard.)

**TIP:** You can also invoke the spelling checker’s suggestions even if you haven’t made a typo. Double-tap the word; on the editing bar that appears, tap Replace.

The Spelling Dictionary

If you start typing a word the iPad doesn’t recognize, the first of the three suggestion buttons displays your word in quotation marks.

If you really do intend to type that nonstandard word, tap its button. You’ve just allowed the “mistake” to stand—and you’ve added it to the iPad’s custom, dynamic dictionary. The tablet assumes that you’ve just typed some name, bit of slang, or terminology that wasn’t in its dictionary originally.

From now on, it will accept that bizarre new word as a legitimate word—and, in fact, will even suggest it the next time you start typing it.

**TIP:** If you feel you’ve really made a mess of your custom dictionary, and the iPad keeps suggesting ridiculous alternate words, you can always start fresh. From the Home screen, tap SettingsÆGeneralÆReset, and then tap Reset Keyboard Dictionary. Now the iPad’s dictionary is the way it was when it came from the factory, without any of the words it learned from you.
The Widescreen Keyboard

In most apps, you can turn the tablet 90 degrees to type. When the keyboard stretches out the long way, the keys get a lot bigger. You may find it easier to type.

This feature doesn’t work in every app, but it does work in the apps where you do the most typing: Mail, Messages, the Safari browser, Contacts, Notes, and so on. (The screen also rotates in Camera, Music, Calculator, Calendar, and Stocks, though not for typing purposes.)

Punctuation and Numbers with One Touch

On the iPad, the alphabet keys and most punctuation keys appear on two different keyboard layouts. That’s a hassle, because each time you want, say, an @ sign, it’s an awkward, three-step dance: (1) Tap the 123 key to get the punctuation layout. (2) Tap the @. (3) Tap the ABC key or the space bar to return to the alphabet layout.

Fortunately, there’s a secret way to get a symbol (numbers, slash, hyphen, semicolon, dollar sign, etc.) with only a single finger gesture. The iPad doesn’t register most key presses until you lift your finger. But the Shift and Punctuation keys register their taps on the press down instead.

So here’s what you can do, all in one motion:

1. **Touch the .?123 key, but don’t lift your finger.** The punctuation layout appears.

2. **Slide your finger onto the number or symbol key you want and release.** The ABC layout returns automatically. You’ve typed a symbol or number with one finger touch instead of three.

**TIP:** If you’re a two-thumbed typist, you can also hit the 123 key with your left thumb and then tap the punctuation key with your right. It even works on the #+= sub-punctuation layout, although you’ll probably visit that screen less often.
In fact, you can type any of the punctuation symbols the same way. This technique makes a **huge** difference in the usability of the keyboard.

**TIP:** This same trick saves you a finger-press when capitalizing words, too. You can put your finger down on the \( \text{A} \) key and slide directly onto the letter you want to type in its uppercase version. Or, if you’re a two-handed iPad typist, you can work the Shift key like the one on your computer: Hold it down with your left thumb, type a letter with your right, and then release both.

### Accented Characters

To produce an accented character (like é, è, ê, è, and so on), keep your finger pressed on that key for 1 second. A palette of diacritical marks appears; slide onto the one you want.
Not all keys sprout this pop-up palette. Here’s a list of the keys that do:

<table>
<thead>
<tr>
<th>Key</th>
<th>Alternates</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>à á à å æ å å</td>
</tr>
<tr>
<td>I</td>
<td>ĭ ĭ ĭ ĭ ĭ ĭ ĭ ĭ</td>
</tr>
<tr>
<td>S</td>
<td>Ŝ Ŝ Ŝ Ŝ Ŝ Ŝ Ŝ Ŝ</td>
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<td>?</td>
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<td>€ £ ¥ ¥</td>
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<td>0 (zero)</td>
<td>°</td>
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<td>%</td>
<td>% %</td>
</tr>
</tbody>
</table>

**Typing Shortcuts (Abbreviation Expanders)**

Here’s a feature that nobody ever talks about—probably because nobody even knows it exists. But it’s a huge time- and sanity-saver; for a gadget with no physical keys, anything that can do your typing for you is very welcome indeed.

You can program your tablet to expand abbreviations that you type. Set up `addr` to type your entire mailing address, or `eml` to type out your email address. Create two-letter abbreviations for big legal or technical words you have to type a lot. Set up `goaway` to type out a polite rejection paragraph for use in email. And so on.

This feature has been in Microsoft Office forever (called AutoCorrect). And it’s always been available as a separate app (TypeIt4Me and TextExpander, for example—but because they were separate, you had to copy your
expanded text, switch to the target program, and then paste). But since it’s now built right into the operating system, it works anywhere you can type.

You build your list of abbreviations in **Settings → General → Keyboard → Shortcuts**. Tap the + button. On the resulting screen, type the expanded text into the **Phrase** box. (It can be very long, but it all has to be one continuous blob of text; it can’t contain Returns.) In the **Shortcut** box, type the abbreviation you want to trigger the phrase.

**TIP:** The **Shortcut** box says “Optional.” You might wonder: Why would you leave the shortcut blank? Then your new shortcut will be un-triggerable and pointless.

Not quite. It’s optional to enable a sneaky trick: to make the tablet stop mis-replacing some word (for example, insisting that you mean **PTA** when you type **pta**, a new chemical you’ve designed).

In that case, type your phrase into the **Phrase** box, but leave **Shortcut** blank.

That’s it! Now, whenever you type one of the abbreviations you’ve set up, the iPad proposes replacing it with your substituted text.
Swype, SwiftKey, and Other Keyboards

This new iOS 8 feature is a really big deal: You’re no longer stuck with Apple’s onscreen keyboard. You can, for the first time, install virtual keyboards from other companies. (Hey—just like on Android devices!)

Many people swear that these rival keyboard systems are superior to the standard iOS 8 keyboard in speed and accuracy. In particular, people like keyboards like Swype; in these systems, you don’t have to tap each key to spell out a word. Instead, you rapidly and sloppily drag your finger across the glass, hitting the letters you want and lifting your finger at the end of a word. The software figures out which word you were going for.

Sounds bizarre, but it’s fast and very satisfying. And pretty; your finger leaves a sort of fire trail as it slides across the glass.

These keyboards generally incorporate their own versions of QuickType—that is, they offer three predictions about the word you’re going to type next.

Most don’t vary their predictions depending on the person you’re writing to or which app you’re using, as iOS 8’s predictions do. But they do offer other impressive features; for example, SwiftKey can sync what it’s learned to your other gadgets (iOS 8 doesn’t do that; it learns, but its education is locked on your iPad).

Then there are Fleksy, TouchPal, KuaiBoard, and a raft of others.
Note, however, that none of them offer a ß button. Apple doesn’t allow them access to Siri, so you can’t use voice dictation when one of these keyboards is on the screen. And, sometimes, you can’t use these alternate keyboards for typing into Password boxes.

Otherwise, these alternate keyboard systems are fascinating and, often, better and faster than Apple’s. Many are free, so they’re well worth exploring.

To install an alternate keyboard, download it from the App Store (page 66).

Then go to Settings → General → Keyboard → Keyboards. When you tap Add New Keyboard, you’ll see your newly downloaded keyboard’s name. Turn it on by tapping it.

Now, when you arrive at any writing area in any app, you’ll discover that a new icon has appeared on the keyboard: a tiny globe (˚) next to the space bar. Tap it. The keyboard changes to the new one you installed. (Each tap on the ˚ button summons the next keyboard you’ve installed—or you can hold your finger down on it for a pop-up list.)

International Typing

Because the iPad is sold around the world, it has to be equipped for non-English languages—and even non-Roman alphabets. Fortunately, it’s ready.

To prepare the iPad for language switching, go to Settings → General → Language & Region. Tap iPad Language to set the iPad’s primary language (for menus, button labels, and so on).

To make other keyboards available, go to Settings → General → Keyboard → Keyboards, tap Add New Keyboard, and then turn on the keyboard layouts you’ll want available: Russian, Italian, whatever.

If you choose Japanese or Chinese, you’re offered the chance to specify which kind of character input you want. For Japanese, you can choose a QWERTY layout (Romaji) or a Kana keypad. For Simplified or Traditional Chinese, your choices include the Pinyin input method (which uses a QWERTY layout) or handwriting recognition, where you draw your symbols onto the screen with your fingertip; a palette of potential interpretations appears to the right. (That’s handy, since there are thousands of characters in Chinese, and you’d need a 65-inch iPad to fit the keyboard.) Or hey—it’s a free tic-tac-toe game!

As described in the previous section, a new key has now appeared on the keyboard: ˚ next to the space bar. Each time you tap it, you rotate to the
next keyboard you requested earlier. The new language’s name appears briefly on the space bar to identify it.

Thanks to that button, you can freely mix languages and alphabets within the same document without having to duck back to some control panel to make the change. And thanks to the iPad’s virtual keyboard, the actual letters on the “keys” change in real time. (As an Apple PR rep puts it, “That’s really hard to do on a BlackBerry.”)

The button works in three ways:

- Tap it once to restore the most recent keyboard. Great if you’re frequently flipping back and forth between two languages.

- Tap it rapidly to cycle among all the keyboards you’ve selected. (The name of the language appears briefly on the space bar to help you out.)

- If you, some United Nations translator, like to write in a lot of different languages, you don’t have to tap that key over and over again to cycle through the keyboard layouts. Instead, hold your finger down on the key. You get a convenient pop-up menu of the languages you’ve turned on, so you can jump directly to the one you want.
The Emoji Keyboard

Even if you speak only one language, don’t miss the emoji keyboard. It gives you a palette of smileys and fun symbols, also known as emoticons, to use in your correspondence.

Install it just as you would any other keyboard, as described above. Now, though, when you choose its name from the onscreen keyboard, you get hundreds upon hundreds of little graphic symbols, spread across five categories (plus a Recently Used category). Each category offers several pages full of symbols, represented by tiny dots above the keyboard.

**TIP:** To return to a category’s first page, you don’t have to swipe; just tap the category’s icon.

The bottom line is clear: Smileys are only the beginning.

**Note:** These symbols show up fine on Apple machinery (phones, tablets, Macs) but generally don’t appear on other kinds of phones.

Connecting a Real Keyboard

This iPad feature barely merits an asterisk in Apple’s marketing materials. But if you’re any kind of wandering journalist, blogger, or writer, you might flip your lid over this: You can type on a real, full-sized, physical keyboard, and watch the text magically appear on your iPad’s screen—wirelessly.
That’s because you can use a Bluetooth keyboard (the Apple Wireless Keyboard, for example) to type into your iPad. Dozens of iPad cases with built-in keyboards are also available; most also connect with Bluetooth.

To set this up, from the Home screen, tap **Settings**→**Bluetooth**. Turn Bluetooth on, if it’s not already.

Now turn on the wireless keyboard. After a moment, its name shows up on the iPad screen in the Devices list; tap it. You’ll know the pairing was successful, because when you tap in a spot where the onscreen keyboard would usually appear, well, it doesn’t.

Typing is a lot easier and faster with a real keyboard. As a bonus, the Apple keyboard’s brightness, volume, and playback controls actually work to control the iPad’s brightness, volume, and playback.

**TIP:** The Apple keyboard’s `key even works: It makes the iPad’s onscreen keyboard appear or disappear. Oh, and to switch languages, press ⌘-space bar on the wireless keyboard. You’ll see the list of languages. Tap the space bar again to choose a different language.

When you’re finished using the keyboard, turn it off. The iPad goes back to normal.

**Dictation**

The iPad’s speech-recognition feature, sometimes called Siri (even though Siri is also the voice **command** feature), lets you enter text anywhere, into any program, just by **speaking**. Behind the scenes, it’s using the same Nuance recognition technology that powers the Dragon line of dictation programs.

It’s extremely fast and, in iOS 8, much more accurate (especially if you have an accent). Suddenly you don’t have to fuss with the tiny keyboard. The experience of “typing” is no longer claustrophobic. You can blather away into an email or draft a memo without ever looking at the screen.

Now, before you get all excited, here are the necessary footnotes:

- Voice typing works only when you have an Internet connection. If you don’t, the little ✱ button on the keyboard appears dimmed.
- Voice typing works best if there’s not a lot of background noise.
• Voice typing isn’t always practical, since everybody around you can hear what you’re saying.

• Voice typing isn’t always accurate. Often, you’ll have to correct an error or two.

All right—expectations set? Then here’s how to type by speaking.

First, open up someplace where you can call up the keyboard: Messages, Notes, Mail, Safari, whatever. Tap, if necessary, so that the onscreen keyboard appears.

Tap the 🎧 next to the space bar. When you hear the xylophone note, say what you have to say (below, top).

Subject: Tomato Growers ’ Assn

I write this letter with heavy heart. Clearly,
If there’s background noise, hold the tablet up to your head; if it’s relatively quiet, a couple of feet away is fine. You don’t have to speak slowly, loudly, or weirdly; speak normally.

As you speak, the words fly onto the screen; that’s new in iOS 8. (In previous iOS versions, you’d have to wait until you stopped speaking to see any text appear. Sometimes, no text appeared at all, and you gnashed your teeth at all the time you’d just wasted.)

You have to speak your own punctuation, like this: “Dear Dad (colon); Please send money (dash)—as much as you can (comma), please (period).” The table at the end of this section describes all the different punctuation symbols you can dictate.

After you finish speaking, tap Done. Another xylophone note plays—higher, this time—and you may see some of the words change right before your eyes, as though Siri is changing her mind. In fact, she is; she’s using the context of all the words you said to revise what she originally thought you said, as you said it. See?

**NOTE:** If no text appears at all, your Internet connection probably isn’t good enough. You can try again, or you can just sigh and resort to typing with your finger.

If the transcription contains errors, you can tap with your finger to edit them, exactly as you would fix an error in something you typed (previous page, bottom). (Make the effort; you’re simultaneously teaching your iPad to do better the next time.) Or, if the whole thing is a mess, you can shake your iPad, the universal gesture for Undo.

**NOTE:** Often, the iPad knows perfectly well when it might have gotten a word wrong—it draws a dashed underline beneath words or phrases it’s insecure about. You can tap one of those words or phrases to see the iPad’s alternative interpretation, which is often correct.

Usually, you’ll find the accuracy pretty darned good, considering you didn’t have to train the software to recognize your voice. You’ll also find that the accuracy is better when you dictate complete sentences, and that long words fare better than short ones.
### Punctuation

Here’s a handy table that shows you what punctuation you can say and how to say it.

**NOTE:** If you’ve ever used Dragon NaturallySpeaking (for Windows) or Dragon Dictation (for the Mac), then you already know these commands; they’re the standard Nuance dictation-software shortcuts, because that’s what the iPad uses behind the scenes.

<table>
<thead>
<tr>
<th>Say this:</th>
<th>To get this:</th>
<th>For example, saying this:</th>
<th>Types this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“period” or “full stop”</td>
<td>. [space and capital letter afterward]</td>
<td>“Best (period) date (period) ever (period)”</td>
<td>Best. Date. Ever.</td>
</tr>
<tr>
<td>“dot” or “point”</td>
<td>. [no space afterward]</td>
<td>“My email is frank (dot) smith (at sign) gmail (dot) com”</td>
<td>My email is <a href="mailto:frank.smith@gmail.com">frank.smith@gmail.com</a></td>
</tr>
<tr>
<td>“comma,” “semicolon,” “colon”</td>
<td>, ; :</td>
<td>“Mom (comma) hear me (colon) I’m dizzy (semicolon) tired”</td>
<td>Mom, hear me: I’m dizzy; tired</td>
</tr>
<tr>
<td>“question mark,” “exclamation point”</td>
<td>? ! [space and capital letter afterward]</td>
<td>“Ellen (question mark) Hi (exclamation point)”</td>
<td>Ellen? Hi!</td>
</tr>
<tr>
<td>“inverted question mark,” “inverted exclamation point”</td>
<td>¿ ¡</td>
<td>“(inverted question mark) Que paso (question mark)”</td>
<td>¿Que paso?</td>
</tr>
<tr>
<td>“ellipsis” or “dot dot dot”</td>
<td>…</td>
<td>“Just one (ellipsis) more (ellipsis) step (ellipsis)”</td>
<td>Just one... more...step...</td>
</tr>
<tr>
<td>“space bar”</td>
<td>[a space, especially when a hyphen would normally appear]</td>
<td>“He rode the merry (space bar) go (space bar) round”</td>
<td>He rode the merry go round</td>
</tr>
<tr>
<td>Say this:</td>
<td>To get this:</td>
<td>For example, saying this:</td>
<td>Types this:</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>“open paren” then “close paren” (or “open bracket/close bracket,” or “open brace/close brace”)</td>
<td>( ) or [ ] or { }</td>
<td>“Then she (open paren) the doctor (close paren) gasped”</td>
<td>Then she (the doctor) gasped</td>
</tr>
<tr>
<td>“new line”</td>
<td>[a press of the Return key]</td>
<td>“milk (new line) bread (new line) Cheez Whiz”</td>
<td>milk bread Cheez Whiz</td>
</tr>
<tr>
<td>“new paragraph”</td>
<td>[two presses of the Return key]</td>
<td>“autumn leaves (new paragraph) softly falling”</td>
<td>autumn leaves softly falling</td>
</tr>
<tr>
<td>“quote,” then “unquote”</td>
<td>“ “</td>
<td>Her perfume screamed (quote) available (unquote)</td>
<td>Her perfume screamed “available”</td>
</tr>
<tr>
<td>“numeral”</td>
<td>[writes the following number as a digit instead spelling it out]</td>
<td>“Next week she turns (numeral) eight”</td>
<td>Next week she turns 8</td>
</tr>
<tr>
<td>“asterisk,” “plus sign,” “minus sign,” “equals sign”</td>
<td>*, +, −, =</td>
<td>“numeral eight (asterisk) two (plus sign) one (minus sign) three (equals sign) fourteen”</td>
<td>8*2+1−3=14</td>
</tr>
<tr>
<td>“ampersand,” “dash”</td>
<td>&amp;, −</td>
<td>“Barry (ampersand) David (dash) the best (exclamation point)”</td>
<td>Barry &amp; David—the best!</td>
</tr>
<tr>
<td>“hyphen”</td>
<td>- [without spaces]</td>
<td>“Don’t give me that holier (hyphen) than (hyphen) thou attitude”</td>
<td>Don’t give me that holier-than-thou attitude</td>
</tr>
<tr>
<td>Say this:</td>
<td>To get this:</td>
<td>For example, saying this:</td>
<td>Types this:</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>“backquote”</td>
<td>‘</td>
<td>“Back in (backquote) (numeral) fifty-two”</td>
<td>back in ’52</td>
</tr>
<tr>
<td>“smiley,” “frowny,” “winky” (or “smiley face,” “frowny face,” “winky face”)</td>
<td>:-):-( ;:-)</td>
<td>“I think you know where I’m going with this (winky face):)”</td>
<td>I think you know where I’m going with this ;-)</td>
</tr>
</tbody>
</table>


The software automatically capitalizes the first new word after a period, question mark, or exclamation point. But you can also force it to capitalize words you’re dictating by saying “cap” right before the word, like this: “Dear (cap) Mom, I’ve run away to join (cap) The (cap) Circus (comma), a nonprofit cooperative for runaway jugglers.”

Here’s another table—this one shows the other commands for capitalization, plus spacing and spelling commands.

**TIP:** Speak each of the on/off commands as a separate utterance, with a small pause before and after.

<table>
<thead>
<tr>
<th>Say this:</th>
<th>To get this:</th>
<th>For example, saying this:</th>
<th>Types this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“cap” or “capital”</td>
<td>Capitalize the next word</td>
<td>“Give me the (cap) works”</td>
<td>Give me the Works</td>
</tr>
<tr>
<td>“caps on,” then “caps off”</td>
<td>Capitalize the first letter of every word</td>
<td>“Next week, (caps on) the new england chicken cooperative (caps off) will hire me”</td>
<td>Next week, The New England Chicken Cooperative will hire me</td>
</tr>
<tr>
<td>Say this:</td>
<td>To get this:</td>
<td>For example, saying this:</td>
<td>Types this:</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>“all caps on,” then “all caps off”</td>
<td>Capitalize everything</td>
<td>“So (all caps on) please please (all caps off) don’t tell anyone”</td>
<td>So PLEASE PLEASE don’t tell anyone</td>
</tr>
<tr>
<td>“all caps”</td>
<td>Type just the next word in all caps</td>
<td>“We (all caps really don’t belong here”</td>
<td>We REALLY don’t belong here</td>
</tr>
<tr>
<td>“no caps”</td>
<td>Type the next word in lowercase</td>
<td>“see you in (no caps) Texas”</td>
<td>see you in texas</td>
</tr>
<tr>
<td>“no caps on,” then “no caps off”</td>
<td>Prevents any capital letters</td>
<td>“I’ll ask (no caps on) Santa Claus (no caps off)”</td>
<td>I’ll ask santa claus</td>
</tr>
<tr>
<td>“no space”</td>
<td>Runs the next two words together</td>
<td>“Try our new mega (no space) berry flavor”</td>
<td>Try our new megaberry flavor</td>
</tr>
<tr>
<td>“no space on,” then “no space off”</td>
<td>Eliminates all spaces</td>
<td>“(No space on) I can’t believe you ate all that (no space off) (comma) she said excitedly”</td>
<td>I can’t believe you ate all that, she said excitedly</td>
</tr>
<tr>
<td>[alphabet letters]</td>
<td>Types the letters out, though usually not very accurately.</td>
<td>“The stock symbol is A P P L”</td>
<td>The stock symbol is APPL</td>
</tr>
</tbody>
</table>

You don’t always have to dictate these formatting commands, by the way. The iPad automatically inserts hyphens into phone numbers (you say, “212-556-1000,” and get “212-556-1000”); formats two-line street addresses without your having to say, “New line” before the city); handles prices automatically (“six dollars and thirty-two cents” becomes “$6.32”).

It formats dates and Web addresses well, too; you can even use the nerdy shortcut “dub-dub-dub” when you want the “www” part of a Web address.
The iPad recognizes email addresses, too, as long as you remember to say “at sign” at the right spot. You’d say, “harold (underscore) beanfield (at sign) gmail (dot) com” to get harold_beanfield@gmail.com.

TIP: You can combine these formatting commands. Many iPad owners have wondered: “How do I voice-type the word “comma,” since saying, “comma” types out only the symbol?”

The solution: Say, “No space on, no caps on, C, O, M, M, A, no space off, no caps off.” That gives you the word “comma.”

Then again, it might just be easier to type that one out with your finger.

Cut, Copy, Paste

Copy and Paste do just what you’d expect. They let you grab some text off a Web page and paste it into an email message, copy directions from email into Notes, paste a phone number from your address book into a text message, and so on.

So how do you select text and trigger Cut, Copy, and Paste functions on a machine with no mouse and no menus? As on the Mac or PC, it takes three steps.

Step 1: Select the Text

Start by highlighting the text you want to cut or copy.

• To select all. Suppose you intend to cut or copy everything in the text box or message. In that case, tap anywhere in the text to place the blinking insertion point. Then tap the insertion point itself to summon the selection buttons—one of which is Select All.

• To select some. Double-tap the first word (or last word) that you want in the copied selection. That word is now highlighted, with blue dots at diagonal corners. Drag these handles to expand the selection to include all the text you want. The little magnifying loupe helps you release the dot at just the right spot.
TIP: On a Web page, you can’t very well double-tap to select a word, because double-tapping means “zoom in.” Instead, hold your finger down on a word to produce the blue handles; the loupe magnifies the proceedings to help you. (If you highlight the wrong word, keep your finger down and slide to the correct one; the highlighting goes with you.)

However, if you’re zoomed out to see the whole page, holding down your finger highlights the entire block of text (a paragraph or even a whole article) instead of one word. Now you can expand the selection to include a photo, if you like; that way, you can copy and paste the whole enchilada into an outgoing email message.

Double-tap…

Slice tomatoes right before serving, put them on a platter. Sprinkle with sea salt and black pepper and pour olive oil and balsamic over the tomatoes. Chiffonade the basil leaves and sprinkle on top.

Step 2: Cut or Copy

At this point, you’ve highlighted the material you want, and the Cut and Copy buttons are staring you in the face. Tap Cut (to remove the selected text) or Copy (to leave it but place a duplicate on your invisible Clipboard).

TIP: And what if you want to get rid of the text without copying it to the Clipboard (because you want to preserve something you copied earlier, for example)? Easy: Just tap the key!

Step 3: Paste

Finally, switch to a different spot in the text, even if it’s in a different window (for example, a new email message) or a different app (for example, Calendar or Notes). Tap in any spot where you’re allowed to type. Tap the Paste button to paste what you cut or copied. Ta-da!
(Possible Step 4: Undo)
Everyone makes mistakes, right? Fortunately, there’s a secret Undo command, which can come in handy when you cut, copy, or paste something by mistake.

The trick is to *shake* the iPad. The iPad then offers you an Undo button, which you can tap to confirm the backtracking. One finger touch instead of three.

**TIP:** The shake-to-undo feature also works to undo *dictating or typing*—not just cutting or pasting.

In fact, you can even undo the Undo. Just shake the tablet again; now the screen offers you a *Redo* button. Fun! (Except when you shake the tablet by accident and you get the *Nothing to Undo* message. But still.)

The Definitions Dictionary

On page 61, you can read about the spelling dictionary that’s built into the iOS—but that’s just a list of words. Your iPad also has a *real* dictionary, one that shows you definitions.
You can look up any word that appears on the screen. Double-tap it to get the editing bar shown here at top; then tap Define.

**TIP:** You can also double-tap the blinking insertion point that’s just before a word. On the editing bar, tap ▶ to see the Define button.

(If you discover that there are “No definitions found,” tap Manage at the bottom of this screen for a list of dictionaries that you can download: English, French, Simplified Chinese, and so on. Tap 🔄 to download the ones you think you’ll use.)

**Speak!**

The iPad can read to you, too. Visit Settings → General → Accessibility → Speech and turn on Speak Selection. Choose a language (or accent), a voice, and a speaking rate. (The more realistic-sounding voices, like Alex and his brother Enhanced Quality, require you to download some audio files from Apple. Just tap the name to begin the download.)

From now on, among the other buttons that pop up whenever you select text, a handy Speak button appears. (You can see it in the illustration above.)
You can use the Speak button whenever you want to double-check the pronunciation of a word, whenever you want to have a Web article or email read to you aloud while you’re getting dressed for the day, or whenever you lose your voice and just want to communicate with the rest of the world.

**TIP:** Once you tap **Speak**, the button changes to say **Pause**. You’re in charge.

### Spotlight: Global Search

The iPad’s global search feature is called Spotlight—and in iOS 8, it’s really global. Spotlight is no longer primarily for searching your tablet; it’s more like a typed version of Siri, in that it can call up information about movies, restaurants, news, and so on (details below).

#### How to Use Spotlight

The Spotlight screen is built into your Home screens. To see it, drag downward *within* the screen. (If you drag down from the *top* by accident, you’ll open the Notification Center, which is a different story.)

In any case, the keyboard opens automatically (next page). Begin typing to identify what you want to find and open. For example, if you were trying to find a file called *Pokémon Fantasy League*, typing just *pok* or *leag* would probably suffice. (Spotlight doesn’t find text in the *middles* of words, though; it searches from the beginnings of words.)

As you type, a results list appears below the search box, listing everything Spotlight can find containing what you’ve typed so far.

They’re neatly grouped by category; the beginning of each category is marked with a heading like **CONTACTS** or **MUSIC**.

**TIP:** If you drag your finger to scroll the list, the keyboard helpfully vanishes so you can see more results.

Here’s what you might find in Spotlight’s list of results:

- **Applications.** For frequent downloaders, this may be the juiciest function: Spotlight searches the names of every app on your iPad. If you have dozens installed, this is a much more efficient way to find one than trying to page through all the Home screens, eyeballing the icons as you go. (The search results even identify which **folder** an app is in.)
Spotlight Suggestions. This is the big new feature in iOS 8— the business about finding movies, music, apps, and other stuff from the Web.

The feature itself works beautifully. The hard part is teaching yourself to use it—just remembering that it’s available.

Spotlight now lists results from Wikipedia (when you search for, say, “rhubarb” or “Thomas Edison”); news (search for “SF Giants” or “Middle East negotiations”); restaurants, shops, and businesses (“Olive Garden” or “Apple Store”); the App Store (“Instagram” or “Angry Birds”); the iTunes Store (“Gravity” or “Beatles”); and the iBooks store (“Grisham” or “Little Women”).

The results list identifies which category each hit comes from. Tapping a result does what you’d expect: for a Web article, opens the article; for a business, opens its Maps page so you can call it or get instant directions; for something from an Apple Store, opens the appropriate store.
• **Contacts.** First names, last names, and company names.

• **Music, Podcasts, Videos, Audiobooks.** Song, performer, and album names, plus the names of podcasts, videos, and audiobooks.

• **Notes, Reminders, Voice Memos.** The actual text of your notes and to-do items, and the names and descriptions of voice memos.

• **Events.** Calendar stuff: appointment names, meeting invitees, and locations (but not any notes attached to your appointments).

• **Mail.** The **To**, **From**, and **Subject** fields of all accounts. For certain accounts, you can even search inside the messages.

• **Messages.** Yep, you can search your text messages, too.

• **Bing Web Results.** You can tap **Search Web** at the bottom of the results list to hand off to Safari for a search. Handy to have it built right into Spotlight, really.

**TIP:** Many apps, like Contacts, Mail, Calendar, Music, and Notes, have their own search boxes (usually hidden until you scroll to the top of their lists). Those individual search functions are great when you’re already in the program where you want to search. The Spotlight difference is that it searches all these apps at once.

If you see the name and icon of whatever you were hoping to dig up, tap to open it. The corresponding app opens automatically.

**How to Tweak Spotlight**

You’ve just read about how Spotlight works fresh out of the box. But you can tailor its behavior to fit it to the kinds of things you look up most often. To open Spotlight’s settings, start on the Home screen. Tap **Settings** → **General** → **Spotlight Search**.

You can tweak Spotlight in two ways here:

• **Turn off categories.** The checkmarks identify the kinds of things that Spotlight tracks. If you find that Spotlight uses up precious screen space listing categories you don’t use much, then tap to turn off their checkmarks. Now more of Spotlight’s space-constrained screen is allotted to icon types you do care about.

• **Prioritize the categories.** This screen also lets you change the order of the category results; using the grip strip at the right side, you can drag an individual list item up or down.
For example, the factory setting is for Contacts to appear first in the menu. But Contacts has its own search box, so it might make more sense to put Events or Applications at the top of the list so that it’s quicker to do a schedule check or to fire up a certain app. You’ll have less scrolling to do once the results menu appears.
Siri, the iPad’s famous voice-recognition technology, is actually two features, not one. First, there’s dictation, where the tablet types out everything you say. It’s faster than typing with the little onscreen keys, and it’s described in Chapter 2.

Second, there’s Siri the voice-controlled minion. You can say, “Wake me up at 7:45,” or “What’s Megan’s work number?” or “How do I get to the airport?” or “What’s the weather going to be like in San Francisco this weekend?”

You can say, “Make a note to rent Titanic this weekend.” Or “How many days until Valentine’s Day?” Or “Play some Electric Light Orchestra.”

You can also ask questions about movies, sports, and restaurants. In each case, Siri thinks for a few seconds, displays a beautifully formatted response, and speaks in a calm voice.

In iOS 8, Siri gains two new magical powers. First, you can operate her hands-free, as long as your tablet is plugged into power. Instead of pressing the Home button to get her attention, you just say, “Hey, Siri.”

Second, you can now ask her, “What song is that?” or “Name that tune.” She’ll identify whatever song is playing in the background, just as the popular Shazam app does. It’s creepy/amazing.

**NOTE:** Siri requires an Internet connection. When your iPad isn’t in a WiFi hotspot (or when your cellular iPad doesn’t have service), you can’t use her.

Siri also requires an iPad that’s newer than the iPad 2.
Siri Voice Command

In 2010, Apple bought Siri, a company that made a voice-control app (no longer available) for the iPad. Apple cleaned it up, beefed it up, integrated it with iOS, and wound up with Siri, your virtual servant.

NOTE: Believe it or not, Siri is a spinoff from a Department of Defense research project called CALO (Cognitive Assistant that Learns and Organizes), which Wikipedia describes as “the largest artificial-intelligence project ever launched.” In a very real way, therefore, Siri represents your tax dollars at work. The spinoff was run by the Stanford Research Institute (SRI), which should provide a hint as to the origin of Siri’s name.

Siri is a crisply accurate, astonishingly understanding, uncomplaining, voice-commanded servant. No voice training or special syntax is required.

Most speech-recognition systems work only if you issue certain limited commands with predictable syntax, like, “Call 445-2340” or “Open Microsoft Word.” But Siri is different. She’s been programmed to respond to casual speech, normal speech. It doesn’t matter if you say, “What’s the weather going to be like in Tucson this weekend?” or “Give me the Tucson weather for this weekend” or “Will I need an umbrella in Tucson?” Siri understands almost any variation.

And she understands regular, everyday speaking. You don’t have to separate your words or talk weirdly; you just speak normally.

It’s not Star Trek. You can’t ask Siri to clean your gutters or to teach you French. (Well, you can ask.)

But, as you’ll soon discover, the number of things Siri can do for you is rather impressive. Furthermore, Apple continues adding to Siri’s intelligence through software updates.

NOTE: Apple also keeps increasing the number of languages that Siri understands. Already, Siri understands English (American, British, Canadian, and Australian), German, French, Italian, Spanish, Japanese, Chinese, Cantonese, Mandarin, and Korean. You change the language by visiting Settings → General → Siri.
How to Use Siri

To get Siri’s attention, you have three choices:

• Hold down the Home button until you hear a double-beep. The iPad doesn’t have to be unlocked or awake, which is awesome. Just pick it up, and then hold down that Home button.

  TIP: Some people press the Home button until the double-beep, then release the button and start talking. But you can also hold the Home button down the entire time you’re speaking. That way you know that Siri won’t attempt to execute your command before you’re finished saying it.

• Hold down the clicker on your earbuds cord, if you have one, or the Call button on your Bluetooth earpiece.

• Say, “Hey, Siri.” The double-beep plays. (You have to turn this feature on in advance. And it works only when the tablet is plugged into power, like a USB jack. Details in a moment.)

When that double-beep sounds, a visual “sound wave” responds to your voice, so you know Siri is listening. Ask your question or say your command. You don’t have to hold the iPad up to your mouth; Siri works perfectly well at arm’s length, on your desk in front of you, or on the car seat beside you.

  NOTE: Apple insists that Siri is neither male nor female. In fact, if you ask Siri her gender, she’ll say something noncommittal, like, “Is this relevant?” But that’s just political correctness. Any baby-name Web site will tell you that Siri is a girl’s name.

When you’re finished speaking, be quiet for a moment (or, if you’ve been pressing the Home button, release it). The iPad double-beeps again, at a higher pitch this time (meaning, “OK, I’ve got it”). About a second after you stop speaking, the ring around the microphone icon spins with animation—your sign that Siri is connecting with her master brain online and processing your request. After a moment, she presents (and speaks) an attractively formatted response.

  TIP: You generally see only the most recent question and response on the Siri screen. But you can drag downward to see all the previous exchanges you’ve had with Siri during this session.
To rephrase your question or cancel or start over, tap the screen to interrupt Siri’s work. (You can also cancel by saying “Cancel” or just by pressing the Home button.) Tap the microphone icon to trigger your new attempt.

And when you’re completely finished talking to Siri, you can either press the Home button, hold down your earbuds clicker, or say something like “Goodbye,” “See you later,” or “Adios.” You’re taken back to whatever app you were using before.

How to Use “Hey, Siri”

Apple couldn’t very well let Android phones have all the fun with hands-free voice commands. So in iOS 8 the iPad, too, can accept spoken commands without your touching it. It’s an ideal feature for use in the car, when your hands and eyes should be focused on driving. (Of course, the safest arrangement is not to interact with your tablet at all when you’re driving.)

The iPad doesn’t respond to “Hey, Siri” unless you’ve met these two conditions:

- You’ve opened Settings ➔ General ➔ Siri and turned on Allow “Hey Siri.” (It comes turned off. Otherwise, a lot of people would be freaked out when they say things like “Jay’s weary” or “Space? Eerie!” and the tablet double-beeps in response.)

- The iPad is charging. Having to listen constantly for the “Hey, Siri” command is exhausting; it uses a lot of power. This requirement ensures that it won’t drain your battery.

At that point, you’re good to go. Anytime you want to ask Siri something, just say, “Hey, Siri”; at the sound of the double-beep, say your thing.

Thanks to “Hey, Siri,” you now have a front-seat conversationalist, a little software friend who’s always happy to listen to what you have to say—and whose knowledge of the world, of news, of sports, and of history can help make those cross-country drives a little less dull.

What to Say to Siri

Siri comes with two different cheat sheets to help you learn her capabilities. To produce either one, hold down the Home button to make Siri’s “What can I help you with?” screen appear. Then:

- Wait. After 5 seconds of silence, Siri begins displaying screen after screen of example commands, under the heading “Some things you can ask me.”
• Tap the tiny ? button to reveal the list of categories shown below.

TIP: Or just trigger Siri and then say, “What can I say?” or “What can you do?” or “Help me!” The same cheat sheet appears.

Here are the general categories of things you can say to Siri:

• **Opening apps.** If you don’t learn to use Siri for anything else, for the love of Mike, learn this one.

  You can say, “Open Calendar” or “Play Angry Birds” or “Launch Calculator.”

  **Result:** The corresponding app opens instantly. It’s exactly the same as pressing the Home button, swiping across the screen until you find the app you’re looking for, and then tapping its icon—but without pressing the Home button, swiping across the screen until you find the app you’re looking for, and then tapping its icon.

• **Change your settings.** You can make changes to certain basic settings just by speaking your request. You can say, for example, “Turn on Bluetooth,” “Turn off WiFi,” “Turn on Do Not Disturb,” and “Turn on Airplane mode.” (You can’t turn **off** Airplane mode by voice, because Siri doesn’t work without an Internet connection.)

  You can also make screen adjustments: “Make the screen brighter.” “Dim the screen.”
**Result:** Siri makes the requested adjustment, tells you so, and displays the corresponding switch in case she misunderstood your intention.

**NOTE:** If you’ve protected your iPad Air 2 or iPad mini 3 with a fingerprint, you have to unlock it before you’re allowed to change any settings. Security and all that.

- **Open Settings panels.** When you need to make tweakier changes to Settings, you can open the most important panels by voice. “Open WiFi settings,” “Open Notification settings,” “Open wallpaper settings,” and so on.

  You can open your apps’ settings this way, too: “Open Maps settings,” “Open Netflix settings,” “Open Delta settings,” and so on.

  Siri’s smart enough not to open security-related settings this way; remember that you can use Siri even from the Lock screen. She’s protecting you from passing pranksters who might really mess up your tablet.

  **Result:** Siri silently opens the corresponding page of Settings.

- **Calling.** Siri can place FaceTime calls for you. “FaceTime Harold.” “FaceTime Audio Nicole.” “Start a FaceTime call with Sheila Withins.”

  **Result:** Siri hands you off to the FaceTime app and places the call. At this point, it’s just as though you’d initiated the call yourself.

- **Alarms.** You can say, “Wake me up at 7:35,” “Change my 7:35 alarm to 8:00,” “Wake me up in 6 hours,” “Cancel my 6 a.m. alarm,” (or “Delete my...” or “Turn off my...”).

  This is so much quicker than setting the iPad’s alarm the usual way.
**Result:** When you set or change an alarm, you get a sleek digital alarm clock, right there beneath Siri’s response. And Siri speaks to confirm what she understood.

- **Timer.** You can also control the Timer module of the tablet’s Clock app. It’s like a stopwatch in reverse, in that it counts down to zero—handy when you’re baking something, limiting your kid’s video-game time, and so on. For example: “Set the timer for 20 minutes.” Or “Show the timer,” “Pause the timer,” “Resume,” “Reset the timer,” and “Stop it.”

**Result:** A cool digital timer appears. A little stopwatch icon appears on the Lock screen to remind you that time is ticking down.

**TIP:** You can specify minutes and seconds: “Set the time for two minutes, thirty seconds,” for example.

- **Clock.** “What time is it?” “What time is it in San Francisco?” “What’s today’s date?” “What’s the date a week from Friday?”

**Result:** When you ask about the time, you see the clock identifying the time in question. (For dates, Siri just talks to you and writes out the date.)

- **Contacts.** You can ask Siri to look up information in your address book (the Contacts app)—and not just addresses. For example, you can say, “What’s Gary’s work number?” “Give me Sheila Jenkins’s office tablet.” “Show Tia’s home email address.” “What’s my boss’s home address?” “When is my husband’s birthday?” “Show Larry Murgatroid.” “Find everybody named Smith.” “Who is P.J. Frankenberg?”

**Result:** A half “page” from your Contacts list. You can tap it to jump into that person’s full card in Contacts. (If Siri finds multiple listings for the person you named—“Bob,” for example—she lists all the matches and asks you to specify which one you meant.)
TIP: In many of the examples on these pages, you’ll see that you can identify people by their relationship to you. You can say, “Show my mom’s work number,” for example, or “Give me directions to my boss’s house,” or “Call my girlfriend.” For details on teaching Siri about these relationships, see “Advanced Siri” on page 108.

• **Text messages.** “Send a text to Alex Rybeck.” “Send a message to Peter saying, ‘I no longer require your services.’” “Tell Cindy I’m running late.” “Send a message to Janet’s mobile asking her to pick me up at the train.” “Send a text message to 212-561-2282.” “Text Frank and Ralph: Did you pick up the pizza?”

If this person has iMessage (an Apple gadget), the iPad sends an iMessage. If not, the “text” command works only if the iPad is set up to send texts through your iPhone (page 136).

**Result:** You see a miniature outgoing text message. Siri asks if you want to send it; say “Yes,” “Send,” or “Confirm” to proceed.

TIP: If you’re using earbuds, headphones, or a Bluetooth speaker, Siri reads the message back to you before asking if you want to send it. (You can ask her to read it again by saying something like, “Review that,” “Read it again,” or “Read it back to me.”) The idea, of course, is that if you’re wearing earbuds or using Bluetooth, you might be driving, so you should keep your eyes on the road.
If you need to edit the message before sending it, you have a couple of options. First, you can tap it; Siri hands you off to the Messages app for editing and sending.

Second, you can edit it by voice. You can say, “Change it to” to redictate the message; “Add” to add more to the message; “No, send it to Frank” to change the recipient; “No” to leave the message on the screen without sending it; or “Cancel” to forget the whole thing.

You can also ask Siri to read incoming messages to you, which is great if you’re driving. For example, you can say, “Read my new messages,” and “Read that again.”

**NOTE:** If you’ve opted to conceal the actual contents of incoming texts so that they don’t appear on your screen (page 15), then Siri can read you only the senders’ names or numbers—not the messages themselves.

You can even have her reply to messages she’s just read to you. “Reply, ‘Congratulations (period). Can’t wait to see your trophy (exclamation point)! ’ ” “Tell him I have a flat tire and I’m going to be late.”

• **Email.** Siri can read your email to you. For example, if you say, “Read my latest email” or “Read my new email,” Siri reads aloud your most recent email message. (Siri then offers you the chance to dictate a response.)

Or you can use the summary-listing commands. When you say, “Read my email,” Siri starts walking backward through your inbox, telling you the subject of each, plus who sent it and when.
After a few listings, Siri says: “Shall I read the rest?” That’s your opportunity to shut down what could be a very long recitation. If you say “Yes,” she goes on to read the entire list of subject lines, dates, and senders.

**TIP:** You can also use commands like, “Any new mail from Chris today?” “Show new mail about the world premiere.” “Show yesterday’s email from Jan.” All of those commands produce a list of the messages, but Siri doesn’t read them.

**Result:** Siri reads aloud.

You can also compose a new message by voice; anytime you use the phrase “about,” that becomes the subject line for your new message. “Email Mom about the reunion.” “Email my boyfriend about the dance on Friday.” “New email to Freddie Gershon.” “Mail Mom about Saturday’s flight.” “Email Frank and Cindy Vosshall and Peter Love about the picnic.” “Email my assistant and say, ‘Thanks for arranging the taxi!’ ” “Email Gertie and Eugene about their work on the surprise party, and say I really value your friendship.”

(If you’ve indicated only the subject and addressee, Siri prompts you for the body of the message.)

**TIP:** You can’t send mail to canned groups of people using Siri—at least not without MailShot, an iPad app that exists expressly for the purpose of letting you create email addressee groups.

You can reply to a message Siri has just described, too. “Reply, ‘Dear Robin (comma), I’m so sorry about your dog (period). I’ll be more careful next time (period).’ ” “Send him a message saying, ‘I got your note.’ ”

**Result:** A miniature Mail message, showing you Siri’s handiwork before you send it.

**Calendar.** Siri can make appointments for you. Considering how many tedious finger taps it usually takes to schedule an appointment in the Calendar app, this is an enormous improvement. “Make an appointment with Patrick for Thursday at 3 p.m.” “Set up a haircut at nine.” “Set up a meeting with Charlize this Friday at noon.” “Meet Danny Cooper at six.” “New appointment with Steve, next Sunday at seven.” “Schedule a conference call at 5:30 p.m. tonight in my office.”

**Result:** A slice of that day’s calendar appears, filled in the way you requested.
Siri & Speech

TIP: Siri may also alert you to a conflict, something like this: “Note that you already have an all-day appointment about ‘Boston Trip’ for this Thursday. Shall I schedule this anyway?” Amazing.

You can also move previously scheduled meetings by voice. For example, “Move my 2:00 meeting to 2:30.” “Reschedule my meeting with Charlize to a week from Monday at noon.” “Add Frank to my meeting with Harry.” “Cancel the conference call on Sunday.”

You can even consult your calendar by voice. You can say, “What’s on my calendar today?” “What’s on my calendar for September 23?” “When’s my next appointment?” “When is my meeting with Charlize?” “Where is my next meeting?”

Result: Siri reads you your agenda and displays a tidy Day view of the specified date.

• Directions. By consulting the tablet’s GPS, Siri can set up the Maps app to answer requests like these: “How do I get to the airport?” “Show me 1500 Broadway, New York City.” “Directions to my assistant’s house.” “Take me home.” “What’s my next turn?” “Are we there yet?”

TIP: You can also say, “Stop navigation”—a great way to make Siri stop harassing you when you realize you know where you are.
You can ask for directions to the home or work address of anyone in your Contacts list—provided that those addresses are in your Contacts cards.

**Result:** Siri fires up the Maps app, with the start and end points of your driving directions already filled in.

- **Reminders.** Siri is a natural match for the Reminders app. She can add items to that list at your spoken command. For example: “Remind me to file my IRS tax extension.” “Remind me to bring the science supplies to school.” “Remind me to take my antibiotic tomorrow at 7 a.m.”

The *location-based* reminders are especially amazing. They rely on GPS to know where you are. So you can say, “Remind me to visit the drugstore when I leave the office.” “Remind me to water the lawn when I get home.” “Remind me to check in with Nancy when I leave here.”

**Tip:** It’s pretty obvious how Siri knows to remind you when you leave “here,” because she knows where you are right now. But she also understands “home” and “office,” both yours and other people’s—if you’ve entered those addresses onto the corresponding people’s cards in Contacts.

**Result:** A miniature entry from the Reminders app, showing you that Siri has understood.
• **Notes.** You create a new note (in the Notes app) by saying things like, “Make a note that my shirt size is fifteen and a half” or “Note: Dad will not be coming to the reunion after all.” You can even name the note in your request: “Create a ‘Movies to Rent’ note.”

But you can also call up a certain note to the screen, like this: “Find my frequent-flyer note.” You can even summon a table-of-contents view of all your notes by saying, “Show all my notes.”

**Result:** A miniature Notes page appears, showing your newly dictated text (or the existing note that you’ve requested).

**TIP:** You can keep dictating into the note you’ve just added. Say, “Add ‘Return books to library’” (or just say, “Add,” and she’ll ask you what to add). She’ll keep adding to the same note until you say, “Note that…” or “Start a note” or “Take a note” to begin a fresh note page.

You can add text to an earlier Note: “Add *Titanic II: The Voyage Home* to my ‘Movies to Rent’ note.” (The first line of any note is also its title—in this case “Movies to Rent.”)

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**Result:** Siri displays a handsome list of businesses nearby that match your request.

**TIP:** She’s a sly dog, that Siri. She’ll help you out even if your requests are, ahem, somewhat off the straight and narrow. If you say, “I think I’m drunk,” she’ll list nearby cab companies. If you indicate that you’re craving relief from your drug addiction, she’ll provide you with a list of rehab centers. If you refer to certain biological urges, she’ll list escort services.

- **Restaurants.** Siri is also happy to serve as your personal concierge. Try “Good Italian restaurants around here,” “Find a good pizza joint in Cleveland,” or “Show me the reviews for Olive Garden in Youngstown.” Siri displays a list of matching restaurants (below, left), now with ratings, reviews, hours, and so on.
But she’s ready to do more than just give you information. She can actually book your reservations, thanks to her integration with the OpenTable Web site. You can say, “Table for two in Belmont tonight,” or “Make a reservation at an inexpensive Mexican restaurant Saturday night at seven.”

**Result:** Siri complies by showing you the proposed reservation (facing page, right). Tap one of the offered alternative time slots, if you like, and then off you go. Everything else is tappable here, too—the ratings (tap to read customer reviews), phone number, Web address, map, and so on.

- **Playing music.** Instead of fumbling around in your Music app, save yourself steps and time by speaking the name of the album, song, or band: “Play some Beatles.” “Play ‘I’m a Barbie Girl.’” “Play some jazz.” “Play my jogging playlist.” “Play the party mix.” “Shuffle my ‘Dave’s Faves’ playlist.” “Play.” “Pause.” “Resume.” “Skip.”

If you’ve set up any iTunes Radio stations (Chapter 7), you can call for them by name, too: “Play Dolly Parton Radio.” Or be more generic: Just say, “Play iTunes Radio” and be surprised. Or be more specific: Say, “Play some country music” (substitute your favorite genre).

**Result:** Siri plays (or skips, shuffles, or pauses) the music you asked for—without ever leaving whatever app you were using.

- **Identifying music.** In iOS 8, Siri can listen to the music playing in the room and try to identify it (song name, singer, album, and so on).

Whenever there’s music playing, you can say things like, “What’s that song?” “What’s playing right now?” “What song is this?” or “Name that tune!”

**Result:** Siri listens to the music playing at your home/office/bar/restaurant/picnic—and identifies the song by name and performer. There is also, needless to say, a Buy button.

- **Weather.** “What’s the weather going to be today?” “What’s the forecast for tomorrow?” “Show me the weather this week.” “Will it snow in Dallas this weekend?” “Check the forecast for Memphis on Friday.” “What’s the forecast for tonight?” “Can you give me the wind speed in Kansas City?” “Tell me the windchill in Chicago.” “What’s the humidity right now?” “Is it nighttime in Cairo?” “How’s the weather in Paris right now?” “What’s the high for Washington on Friday?” “When will Jupiter rise tomorrow?” “When’s the moonrise?” “How cold will it be in Houston tomorrow?” “What’s the temperature outside?” “Is it windy out there?” “When does the sun rise in London?” “When will the sun set today?” “Should I wear a jacket?”
**Result:** A convenient miniature Weather display for the date and place you specified.

![Weather display](image)

- **Stocks.** “What’s Google’s stock price?” “What did Ford close at today?” “How’s the Dow doing?” “What’s Microsoft’s P/E ratio?” “What’s Amazon’s average volume?” “How are the markets doing?”

  **Result:** A tidy little stock graph, bearing a wealth of up-to-date statistics.

- **Find My Friends.** You see this category only if you’ve installed Apple’s Find My Friends app. “Where’s Ferd?” “Is my dad home?” “Where are my friends?” “Who’s here?” “Who is nearby?” “Is my mom at work?”

  **Result:** Siri shows you a beautiful little map with the requested person’s location clearly indicated by a blue pushpin. (She does, that is, if you’ve set up Find My Friends, you’ve logged in, and your friends have made their locations available.)

- **Search the Web.** “Search the Web for a 2014 Ford Mustang.” “Search for healthy smoothie recipes.” “Search Wikipedia for the Thunderbirds.” “Search for news about the Netflix-Amazon merger.”

  **TIP:** Siri uses Microsoft’s Bing search service to perform its Web searches. If you prefer Google, just say so. Say, “Google Benjamin Franklin.” (For that matter, you can also ask Siri to “Yahoo” something—or example, “Yahoo low-cal dessert recipes.”)
Wikipedia is a search type all its own. “Search Wikipedia for Harold Edgerton.” “Look up Mariah Carey on Wikipedia.” Pictures get special treatment, too: “I want to see pictures of cows.” You can also say, “Show me pictures of...” or “Find me...” or “Search for...”

**Result:** Siri displays the results of your search right there on her own screen. Tap one of the results to open the corresponding Web page in Safari.

**Sports scores.** At last you have a buddy who’s just as obsessed with sports trivia as you are. You can say things like, “How did the Indians do last night?” “What was the score of the last Yankees game?” “When’s the next Cowboys game?” “What baseball games are on today?”

You can also ask questions about individual players, like, “Who has the best batting average?” “Who has scored the most runs against the Red Sox?” “Who has scored the most goals in British soccer?” “Which quarterback had the most sacks last year?”

And, of course, team stats are fair game, like “Show me the roster for the Giants,” “Who is pitching for Tampa this season?” and “Is anyone on the Marlins injured right now?”

**Result:** Neat little box scores or factoids, complete with team logos.

**Movies.** Siri is also the virtual equivalent of an insufferable film buff. She knows everything. “Who was the star of Groundhog Day?” “Who directed Chinatown?” “What is Waterworld rated?” “What movie won Best Picture in 1952?”
It’s not just about old movies, either. Siri also knows everything about current showtimes in theaters. “What movies are opening this week?” “What’s playing at the Watton Cineplex?” “Give me the reviews for Titanic 2: The Return.” “What are today’s showtimes for Monsters University?”

**Result:** Tidy tables of movie theaters or movie showtimes. (Tap one for details.) Sometimes you get a movie poster filled with facts—and, of course, a link to rent or buy it on iTunes.

**Facts and figures.** This is a huge category. It represents Siri’s partnership with the Wolfram Alpha factual search engine (www.wolframalpha.com). The possibilities here could fill an entire chapter—or an entire encyclopedia.

You can say things like, “How many days until Valentine’s Day?” “When was Abraham Lincoln born?” “How many teaspoons are in a gallon?” “What’s the exchange rate between dollars and euros?” “What’s the capital of Belgium?” “How many calories are in a Hershey bar?” “What’s a seventeen percent tip on sixty-two dollars for three people?” “What movie won the Oscar for Best Picture in 1985?” “When is the next solar eclipse?” “Show me the Big Dip-
per.” “What’s the tallest mountain in the world?” “What’s the price of gold right now?” “What’s the definition of ‘schadenfreude’?” “How much is twenty-three dollars in pesos?” “Generate a random number.” “Graph x equals 3y plus 12.” “What flights are overhead?”

**Result:** A specially formatted table, ripped right out of Wolfram Alpha’s knowledge base.

**TIP:** Siri can also harness the entire wisdom of Wikipedia. You can say, for example, “Search Wikipedia for Harold Edgerton,” or “Tell me about Abraham Lincoln,” or “Show me the Wikipedia page about Richard Branson.”

• **Post to Twitter or Facebook.** iOS is a red-blooded, full-blown Twitter companion. So you can say things like, “Tweet, ‘I just saw a three-headed dog catch a Frisbee in midair. Unreal.’” “Tweet with my location, ‘My car just broke down somewhere in Detroit. Help?’”

Facebook is fair game, too. You can say, “Post to Facebook, ‘The guy next to me kept his cellphone on for the whole plane ride,’ ” or “Write on my wall, ‘I can’t believe I ate the whole thing.’”

**Result:** Siri offers you a sheet (miniature dialog box) where you can approve the transcription and then, if it all looks good, send it off to your Twitter or Facebook feed.

**TIP:** If someone’s Twitter address is recorded in Contacts, you can say, “Tweet Casey Robin: Loved your last tweet!” Siri sends a tweet to that person (**@CaseyRobin253 Loved your last tweet!**). Anyone who follows **both** of you will see that tweet. (Alas, Siri cannot send direct messages—private person-to-person tweets.)
• Search Twitter. If you say something like, “What are people saying?” or “What’s going on?” or “What’s happening on Twitter?” you see a list of tweets on the current trending topics on Twitter. (Tap a tweet in the list to open it into a new window that contains more information and a View in Twitter button.)

Or ask, “What are people saying about the Chicago Bears?” to read tweets on that subject. Or, “What does Ashton Kutcher say?” to see his most recent tweets. (You can substitute the names of other people or companies on Twitter.) Or “Search Twitter for the hashtag ‘FirstWorldProblems.’ ” (A hashtag is a searchable phrase like #toofunny or #iPadAir, that makes finding tweets on Twitter easier.)

Result: Siri displays 10 tweets that match your query.

You may never find the end of the things Siri understands, or the ways that she can help you. If her repertoire seems intimidating at first, start simple—use her to open apps, dial by voice, send text messages, and set alarms. You can build up your bag of tricks as your confidence builds.

NOTE: Remember that you can use Siri without even unlocking your tablet—and without any security, like your passcode. Among certain juvenile circles, therefore, Siri is the source of some juicy pranks. Someone who finds your tablet on a table could change your calendar, send texts or emails, or even change what Siri calls you (“Call me, ‘You idiot’ ”), without needing the iPad password!

The solution is simple. In Settings→Passcode (or Touch ID & Passcode), scroll way down; under “Allow access when locked,” you can turn off Siri. Of course, you’ve now lost the convenience of using Siri when the tablet is locked. But at least you’ve prevented having your own tablet call you an idiot.
When Things Go Wrong

If Siri mis-recognizes your instructions, you’ll know it, because you can see her interpretation of what you said (as shown on the facing page). And, as indicated by the little hint tap to edit, you can tap Siri’s interpretation to open up an editing screen so that you can make corrections by typing.

**TIP:** You can also correct a misheard command just by speaking the correct version, like this: “I meant Chicago.” Siri gets what you mean.

If Siri recognizes what you said but it isn’t within her world of comprehension, she offers you a Search the web button as a last resort.

Siri’s Personality

Siri’s understanding of casual spoken commands is so impressive that you might sometimes think she’s almost human. And that, of course, is exactly what Apple wants you to think.

You can say all kinds of off-kilter things to Siri. Whoever programmed her had a deliciously sassy sense of humor.

For example, if you ask her, “What is the meaning of life?” she responds with one of nine different answers. She might say, “I can’t answer that now, but give me some time to write a very long play in which nothing happens.” Or “Try and be nice to people, avoid eating fat, read a good book every now and then, get some walking in, and try to live in peace and harmony with people of all creeds and nations.” Or: “All evidence to date suggests it’s chocolate.”

Siri is full of such comebacks, and there are whole Web sites dedicated to her snark. Here are a few examples. (The list here won’t ruin the fun, because Siri actually has several different comebacks to most of these questions.)

You: “Who’s your daddy?” Siri: “You are. Can we get back to work now?”

You: “Open the pod bay doors, Hal.” Siri: “I’m sorry, I’m afraid I can’t do that.” (Then: “Are you happy now?”)


You: “What are you wearing?” Siri: “You have the wrong personal assistant, David.”

You: “Who’s the boss?” (Siri presents the vital statistics of Bruce Springsteen.)
You: “Beam me up, Siri!” Siri: “Please remove your belt, shoes, and jacket, and empty your pockets.”

You: “Show me the money.” Siri: “I’ve found 23 ATMs that are fairly close to you…”

You, in the evening: “Good morning, Siri.” Siri: “Good morning? It’s 9:24 p.m.!”

You: “How much wood would a woodchuck chuck if a woodchuck could chuck wood?” Siri: “42 cords of wood, to be exact. Everyone knows that.”

You: “Guess what.” Siri: “You won the lottery?”


You: “Why did the chicken cross the road?” Siri: “I am not perspicacious about the peregrinations of poultry.”

You: “Do you have a religion?” Siri: “My policy is the separation of spirit and silicon.”

You: “Klaatu barada nikto.” Siri: “OK, I’ll pass the message on to Gort.” (You kind of have to know The Day the Earth Stood Still to get it.)

Here are a few other things to say to Siri when you get bored:

**TIP:** You may notice that Siri addresses you by name in her typed answers, but she doesn’t always speak it when she reads those answers out loud.

Ordinarily, she calls you whatever you’re called in Contacts. But you can make her call you whatever you like. Say, “Call me Master” or “Call me Frank” or “Call me Ishmael.” If you confirm when she asks, then from now on that’s what Siri will call you in her typed responses.

I love you, Siri.

Will you marry me?

You’re so sexy.

When is your birthday?

What’s the best tablet?

Can you sing?

Why are we here?

You’re cute.

You make me so mad!

What do you want?

Tell me a joke.

Tell me a story.

Sing for me.

I’m cold.

Do you love me?

Why are we here?

I need a bathroom.

What are you doing?
You’re the best assistant ever!
Take me to your leader.
You’re funny.
Guess what?
You’re an idiot.
Have a nice day.
How are you today?
I don’t have any friends.
What do you think is the best tablet?
How many pickled peppers did Peter Piper pick?
Oh my god.
Do you know Eliza?
What does “Siri” mean?
Am I your best friend?
Do you believe in love?
What is the best computer in the world?
Testing 1, 2, 3.
I’m tired.
What’s your secret?
Who let the dogs out?
What do you think of Android?
What do you think of Windows?
You don’t understand love.
You don’t understand me.
I’m sorry.
Am I fat?
What are you wearing?
Siri?
Who’s on first?
Why are you so awesome?
What’s your favorite color?
Where are you?
What do you think of Google Now?
Okay, Glass.
Do you like Android phones?
What’s the best cellphone?
What’s the best computer?
How much do you cost?
What are you doing later?
Make me a sandwich.
Does Santa Claus exist?
Do you believe in Santa Claus?
Should I give you a female or male voice?
I don’t like your voice.
Are you serious?
Are you kidding me?
Do you want to go on a date?
Blah blah blah.
LOL.
Who’s your boss?
You are good to me.
You are boring.
Give me a kiss.
What are the three laws of robotics?
Let’s play a game.
Testing, testing.
Take me to your leader.
Can I borrow some money?
Advanced Siri

With a little setup, you can extend Siri’s powers in some intriguing ways.

Teach Siri about Your Relationships

When you say, “Text my mom” or “Call my fiancée” or “Remind me to replace the lightbulbs when I get to my son’s house,” how does Siri know whom you’re talking about? Sure, Siri is powerful artificial intelligence, but she’s not actually *magic*.

Turns out you teach her by referring to somebody in your Contacts list. Say to her something like, “My assistant is Jan Carpenter” or “Tad Cooper is my boyfriend.” When Siri asks for confirmation, say “Yes” or tap Confirm.

Or wait for Siri to ask you herself. If you say, “Email my dad,” Siri asks, “Who is your dad?” Just say his name; Siri remembers that relationship from now on. (The available relationships are mother, father, brother, sister, child, son, daughter, spouse, wife, husband, boss, partner, manager, assistant, girlfriend, boyfriend, and friend.)

Behind the scenes, Siri lists these relationships on your card in Contacts.

Now that you know that, you can figure out how to edit or delete these relationships. Which is handy—not all relationships, as we know, last forever.

Fix Siri’s Name Comprehension

Siri easily understands common names—but if someone in your family, work, or social circle has an unusual name, you may quickly become frustrated. After all, you can’t text, call, email, or get directions to someone’s house unless Siri understands the person’s name when you say it.

One workaround is to use a relationship, as described earlier. That way, you can say, “Call my brother” instead of “Call Ilyich” (or whatever his offbeat name is).

Another is to use Siri’s pronunciation-learning feature. It kicks in in several different situations:

- **When you’re texting.** If Siri offers the wrong person’s name when you try to text someone by voice, say, “Someone else.” After you’ve sent the message, Siri apologetically says, “By the way, sorry I didn’t recognize that name. Can you teach me how to say it?”
• **After Siri botches a pronunciation.** Tell her, “That’s not how to pronounce his name.”

• **Whenever it occurs to you.** You can start the process by saying, “Learn to pronounce Reagann Tsuki’s name” or “Learn to pronounce my mom’s name.”

• **In Contacts.** Open somebody’s “card” in Contacts; start Siri and say, “Learn to pronounce her name.”

In each case, with tremendous courtesy, Siri walks you through the process of teaching her the correct pronunciation. She offers you three buttons; each triggers a different pronunciation. Tap Select next to the correct one (or tap Tell Siri again if none of the three is correct).

By the end of the process, Siri knows two things: how to speak that person’s name aloud, and how to recognize that name when you say it aloud.

**Siri Settings**

In **Settings → General → Siri**, you can fiddle with several Siri settings:

• **On/Off.** If you turn Siri off, you can no longer command your iPad using the Siri commands described in this chapter. Nor can you dictate to type; the button disappears from the onscreen keyboard.

**NOTE:** And why would anyone willingly turn off Siri? One reason: Using Siri involves transmitting a lot of data to Apple, which gives some people the privacy willies. Apple’s computers collect everything you say to Siri, the names of your songs and playlists, your personal information in Contacts, plus all the other names in your Contacts (so that Siri can recognize them when you refer to them).

• **Allow “Hey, Siri.”** Siri’s new ability to wake up when spoken to is a blessing when your hands have better things to do. But if you find her perking up to take requests when you didn’t say “Hey, Siri”—if she’s misinterpreting everyday spoken expressions as attempts to wake her—you can turn her listening off here.

• **Language.** What language and accent do you have? The options here include 19 languages, accents, and dialects. For example, Siri can speak English in four accents—American, British, Canadian, and Australian. Even if you’re American, it’s fun to give Siri a cute Australian accent.
• **Voice Gender.** That’s right, kids: Siri can have either a man’s voice or a woman’s voice.

• **Voice Feedback.** Siri generally replies to your queries with both text and a synthesized voice. Here, by choosing **Handsfree Only**, you can tell Siri not to bother speaking when you’re looking at the screen and can read the responses for yourself. In other words, you’re telling her to speak only if you can’t see the screen because you’re on speakerphone, using a headset, listening through your car’s Bluetooth system, and so on.

• **My Info.** Siri needs to know which card in Contacts contains your information and lists your relationships. That’s how she’s able to respond to queries like “Call my mom,” “Give me directions to my brother’s office,” “Remind me to shower when I get home,” and so on. Use this setting to show Siri which card is yours.
The iPad, of course, is not a phone. Most people assume, therefore, that you can’t send and receive regular text messages on it—and that you can’t make voice calls on it, holding the thing up to your head to carry on a conversation. That’s because even the cellular-equipped model doesn’t connect to the cellular voice network; only the cellular data network, for using Internet features.

And yet it’s not quite as poor a communications device as you might think. No, you can’t make traditional cellular voice calls with the iPad alone, but you can make FaceTime audio calls (to other people who have Apple gadgets). You can’t send regular text messages, but you can send iMessages (again, to other Apple devices).

But if you also own an iPhone, then you can make regular tablet calls and send regular texts from the iPad. The phone in your pocket acts as a glorified relay station.

This chapter covers all these tricks.

**FaceTime Audio Calls**

FaceTime is Apple’s proprietary wireless calling software. It lets you place free audio and video calls from your iPad to any other Apple gadget: phone, tablet, iPod Touch, or Mac. Some people consider it Apple’s version of Skype; others consider it a godsend for communicating with people in other cities or countries for free. In any case, it’s pretty simple and pretty great.

These calls don’t eat into your cell minutes and aren’t transmitted over your cell carrier’s voice network; these are Internet calls.

When you’re in a WiFi hotspot, they’re completely free. When you’re not, your carrier’s data network carries your voice (if you have the cellular iPad). Sold yet?
All right: Here’s how to make free Internet voice and video calls.

The Setup
Before you begin, open **Settings**→**FaceTime**, make sure FaceTime is turned on, and sign in with your Apple ID.

Note, furthermore, that—in case you missed it—you can place FaceTime calls only to other iPhones, iPads, iPod Touches, and Macs. Your call recipients must **also** have FaceTime turned on, and must **also** have signed in with their Apple IDs.

You have to know their phone number (if it’s an iPhone) or their Apple ID-registered email address (if it’s an iPad, iPod Touch, Mac, or iPhone). You can use either (phone or email) to place a FaceTime call. Weird but true.

Placing a Call
There are starting points for placing a FaceTime call all over iOS 8. For example:

- **From Siri.** The quickest way to start a FaceTime call may be simply to say, “FaceTime audio call Mom,” “FaceTime audio call Chris Taylor,” or whatever. The iPad refers to your Contacts app for the right connection info.

- **From the FaceTime app.** Open the FaceTime app. It presents a list of your recent FaceTime calls. Tap a name to place a new call to that person, or tap ✐ to view a history of your calls with that person (and buttons for placing new ones).

  Or, to find your callee from your own Contacts list, tap the ✆ button. Find a name, tap it, and then tap ✆ to place the call.

  If your future conversation partner *isn’t* in Contacts yet, then tap where it says **Enter name, email, or number**, and do just that.

- **From Contacts.** In the Contacts app, if you tap a person’s name, you’ll find ✆ buttons that place FaceTime audio calls.

- **From Messages.** If you’re chatting away with somebody by text and you realize that typing is no longer appropriate for the conversation, tap **Details** at the top of the screen. Tap ✆.

For the call to go through, both devices must be online, either in a WiFi hotspot or, for devices so equipped, in a cellular coverage area.
Answering a Call

When someone calls your iPad, you’ll know it, you hear a ring and see the caller’s name and photo fill that giant screen. (Smell, feel, and taste will have to wait until iOS 9.)

**NOTE:** For details on choosing a ringtone, see page 479.

How you answer depends on what’s happening at the time:

- **If you’re using the iPad,** tap the green **Accept** button. Tap the red hangup button when you’ve both said enough.

- **If the iPad is asleep or locked,** the screen lights up and says **slide to answer.** If you slide your finger as indicated by the arrow, you simultaneously unlock the tablet and answer the call.

- **If you’re wearing earbuds,** the music fades out and then pauses; you hear the ring both through the tablet’s speaker and through your earbuds. Answer by squeezing the clicker on the earbud cord or by using either of the methods described above.

When the call is over, you can click again to hang up—or just wait until the other guy hangs up. Either way, the music fades in again and resumes from the spot where you were so rudely interrupted.
Online and on the Tablet, Together

Don’t forget that the iPad is a multitasking master. Once you’re on a FaceTime call, you can dive into any other program—to check your calendar, for example—without interrupting the call.

You can even use the tablet’s Internet functions (Web, email, apps, and so on) without interrupting your call.

Silencing the Ring

Sometimes you need a moment before you can answer the call; maybe you need to exit a meeting or put in the earbuds, for example. In that case, you can stop the ringing by pressing one of the physical buttons on the edges (the Sleep/Wake button or either volume key). The caller still hears the tablet ringing, and you can still answer, but at least the sound won’t be annoying those around you.

If nobody answers, the call eventually gives up, and a “missed call” note appears on the callee’s screen. There’s no such thing as FaceTime voicemail.

Not Answering Calls

There are all kinds of reasons why you might not want to accept an incoming call. Maybe you’re in a meeting. Maybe you’re driving. Maybe you can see that the call is coming from someone you really don’t want to deal with right now.

Fortunately, you’ve chosen the right tablet. You have all kinds of juicy ways to slam the door in somebody’s face.

If you wait long enough (about 20 rings), the incoming ringing will just give up.

Whenever your tablet rings, though, the screen bears a small white Message button (shown here at right). If you tap it, you get a choice of three canned text messages. Tapping one immediately ends the call and sends the cor-
responding message to the Apple gadget that’s calling you. If you’re driving or in a meeting, this feature is a lot more polite and responsive than just ignoring the poor slob.

**TIP:** You can’t edit these three canned messages on the iPad, even though you can on the iPhone.

The fourth button, **Custom**, lets you type or dictate a new message on the spot. (“I’m in a meeting and, frankly, your call isn’t worth getting fired for” comes to mind.)

**Remind Me**

Tapping the **Remind Me** button—another way to decline an incoming call—offers you one time-based option, **In 1 Hour** (which sets up a reminder to return the call an hour from now), and three location-based options (facing page, left): **When I leave**, **When I get home**, and **When I get to work**. (The home and work options appear only if the iPad knows your home and work addresses—because you’ve entered them in your own card in Contacts.)

These options use the tablet’s GPS circuitry to detect when you’ve left your current inconvenient-to-take-the-call location, whether it’s a job interview, a first date, or an outhouse.

**Leave a Message**

OK, let’s say you’re the one placing the call. And the dude at the other end doesn’t pick up—or hits **Decline** because he really doesn’t want to talk to you right now.

You have three options on your iPad’s screen: **Cancel**, **Call Back** (that is, try again right now), or **Leave a Message**. That last option doesn’t really leave a message in the voicemail sense; instead, it opens the Messages app, so you can type or dictate a text message for the person you were trying to reach.

**Fun with FaceTime Audio Calls**

The iPad makes it pitifully easy to perform stunts like turning on the speakerphone, putting someone on hold, taking a second call, and so on. Here are the options you get when you’re on a call (previous picture, bottom middle).
Mute
Tap this button to mute your own microphone, so the other guy can’t hear you. (You can still hear him, though.) Now you have a chance to yell upstairs, to clear the phlegm from your throat, or to do anything else you’d rather the other party not hear. Tap again to unmute.

Keypad
This button is dimmed on FaceTime calls. It’s available only when you’re making actual phone calls through your iPhone, as described on page 122.

Speaker
Tap this button to turn on the iPad’s built-in speakerphone—a great hands-free option when you’re caught without your earbuds or Bluetooth headset. (In fact, the speakerphone doesn’t work if the earbuds are plugged in or if a Bluetooth headset is connected.)

When you tap the button, it turns white to indicate that the speaker is activated. Now you can put the iPad down on a table or a counter and have a conversation with both hands free. Tap speaker again to channel the sound back into the built-in earpiece.

Add Call
Suppose you’re on a call. Here are some of the tricks you can do:

• Make an outgoing call. Tap add call. The iPad puts the first person on hold—neither of you can hear the other—and opens your Contacts list. You can now make a second call just the way you made the first. The top of the screen makes clear that the first person is still on hold as you talk to the second.

• Receive an incoming call. What happens when a second FaceTime call comes in while you’re already on a call? You can tap End & Accept (answer the incoming call, hang up on the first), Decline (reject the incoming call), or Hold & Accept (take the incoming call, put the first one on hold).

When you’re on two FaceTime calls at once, the top of the screen identifies both other parties. Two new buttons appear, too:

• Swap lets you flip between the two calls. At the top of the screen, you see the names of your callers. One says hold (the one who’s on hold, of course) and the other bears a time counter, which lets you know whom you’re actually speaking to.
Think how many TV and movie comedies have relied on the old “Whoops, I hit the wrong button and now I’m bad-mouthing somebody directly instead of behind his back!” gag. That can’t happen on the iPad.

You can swap calls by tapping swap or by tapping the hold person’s name or number.

- **Merge Calls** is dimmed on FaceTime calls. It, too, is useful only when you’re placing actual phone calls through an iPhone (page 122).

**Hold**

What’s that? You don’t see any button called Hold? Yet it’s there. Hold down the mute button for a couple of seconds. Now the button changes to say hold; neither you nor the other guy can hear anything. Tap again to resume the conversation.

As you could probably guess, this button ends the call. (If someone was on hold, you now drop back to that call.)

**FaceTime Video Calls**

Your iPad, as you’re probably aware, has two cameras—one on the back and one on the front. And that can mean only one thing: Video calling has arrived.

These are good video calls, with no sign-up or setup, with a single tap. The picture and audio are generally rock solid, with very little delay, and
it works the first time and every time. Now Grandma can see the baby, or you can help someone shop from afar, or you can supervise brain surgery from thousands of miles away (some medical training is recommended).

You can enjoy these Jetsons fantasies when calling between iPhones, iPads, iPod Touches, and Macs. They work over WiFi or cellular (if you have a cellular iPad). You just have to know the other person’s phone number or email address—and that person has to have a free Apple or iCloud account.

Being able to make video calls like a regular phone call is a huge convenience. Never again will you return home from the store and get scolded for buying the wrong size, style, or color.

In any case, FaceTime couldn’t be easier to fire up—in all the usual ways:

• **From Siri.** “FaceTime Mom,” “FaceTime Chris Taylor.”

• **When you’re already on a FaceTime audio call with someone.** This is a good technique when you want to ask first if the other guy wants to do video, or when you’ve been chatting and suddenly there’s some reason to do video. In any case, there’s nothing to it: Just tap the FaceTime icon that’s right on the screen. (With one tap, your buddy can either accept—and hang up the audio call in the process—or, if he just got out of the shower, decline.)
• **From the FaceTime app.** Tap *Video* at the top left of the screen, and then tap a name in the Recent Call list. Or tap the + button to find a name in Contacts. Or tap where it says *Enter name, email, or number,* and do so.

• **From Contacts.** In the Contacts app, tap ☐ next to a person’s name.

• **From Messages.** If you’re chatting away with somebody by text and you realize that typing is no longer appropriate for the conversation, then tap *Details* at the top of the screen. Tap ☐.

At this point, the other guy receives an audio and video message inviting him to a chat. If he taps *Accept,* then you’re on. You’re on each other’s screens, seeing and hearing each other in real time. (You appear on your own screen, too, in a little inset window. It’s spinach-in-your-teeth protection.)

Once the chat has begun, here’s some of the fun you can have:

• **Rotate the screen.** FaceTime works in either portrait (upright) or landscape (widescreen) view; just turn your tablet 90 degrees. Of course, if your calling partner doesn’t also turn her gadget, she’ll see your picture all squished and tiny, with big black areas filling the rest of the screen.

**TIP:** The ☐ (Lock Rotation) button described on page 38 works in FaceTime, too. That is, you can stop the picture from rotating when you turn the tablet—as long as you’re happy with full-time upright (portrait) orientation.

• **Snap a commemorative photo.** You can immortalize a chat by using the screenshot keystroke (*Sleep + Home*). You wind up with a still photo of your videocall in progress, safely nestled in the Camera Roll of your Photos app.

• **Mute the audio.** Tap ☐ to silence the audio that you’re sending. Great when you need to yell at the kids.

• **Mute the video.** When you leave the FaceTime app for any reason (press the *Home* button and then open a different program, if you like), the other guy’s screen goes black. He can’t see what you’re doing when you leave the FaceTime screen. He can still hear you, though.

This feature was designed to let you check your calendar, look something up on the Web, or whatever, while you’re still chatting. But it’s also a great trick when you need to adjust your clothing, pick at your...
teeth, or otherwise shield your activity from the person on the other end.

In the meantime, the call is, technically, still in progress—and a green banner at the top of the Home screen reminds you of that. Tap there, on the green bar, to return to the video call.

- **Show what’s in front of you.** Sometimes, you’ll want to show your friend what you’re looking at. That is, you’ll want to turn on the camera on the back of the iPad, the one pointing away from you, to show off the baby, the artwork, or the broken engine part.

That’s easy enough; just tap 📷 on your screen. The iPad switches from the front camera to the back camera. Now you and your callee can both see what you’re seeing.

Tap 📷 again to return to the front camera.

When you and your buddy have had quite enough, tap **End** to terminate the call. (Although it’s easy to jump from phone call to videochat, there’s no way to go the other direction.)

And marvel that you were alive to see the day.
Do Not Disturb

When you turn on Do Not Disturb, the iPad is quiet, dark, and still. It doesn’t ring, chirp, light up, or display messages. A icon appears on the status bar to remind you why it seems to be so uncharacteristically depressed.

Yes, Airplane mode does the same thing, but there’s a big difference: In Do Not Disturb mode, the tablet is still online. FaceTime calls, texts, emails, and other communications continue to chug happily away; they just don’t draw attention to themselves.

Do Not Disturb is what you want when you’re in bed each night. You don’t really want to be bothered with chirps for Facebook status updates and Twitter posts, but it’s fine for the tablet to collect them for the morning.

Bedtime is why Do Not Disturb comes with two fantastic additional settings: one that turns it on and off automatically on a schedule, so that the tablet goes dark each night at the same time you do, and another that lets you designate important people whose calls and texts are allowed to get through. You know—for emergencies.

Turning on Do Not Disturb

To turn on Do Not Disturb manually, you have three options:

• Tell Siri, “Turn on Do Not Disturb.”

• Swipe upward to open the Control Center, and tap the icon so that it turns white.

• Open Settings, tap Do Not Disturb, and tap Manual.

To set it up on a schedule, visit SettingsÆDo Not Disturb. Turn on Scheduled, and then tap the From/To block to specify starting and ending hours. (There’s no separate setting for weekends; Do Not Disturb will turn on and off for the same hours every day of the week.)

Allowing Special Callers Through

What if your child, your boss, or your elderly parent needs you urgently in the middle of the night? Turning the tablet off completely, or putting it into Airplane mode, would leave you unreachable in an emergency.

That’s why Apple built in the Allow Calls From option. When you open SettingsÆDo Not Disturb and then tap Allow Calls From, you’re offered options like Everyone (all FaceTime calls and texts come through) and No One (the tablet is still online, but totally silent).
You can also create an arbitrary group of people—just your mom and sister, just your boss and nephew, whatever. You have to create these address-book groups on your computer (or using an app like Groups by Qbix). Once you’ve done that, their names appear on the Allow Calls From screen under Groups. You can designate any one of them as the lucky exception to Do Not Disturb.

One More Safety Measure

The Do Not Disturb settings screen also offers something called Repeated Calls. If you turn this on, then if anybody tries to FaceTime call you more than once within 3 minutes, he’ll ring through.

The idea here is that nobody would call you multiple times unless she needed to reach you urgently. You certainly wouldn’t want Do Not Disturb to block somebody who’s trying to tell you that there’s been an accident, that you’ve overslept, or that you’ve just won the lottery.

Locked vs. Unlocked

The final option on the settings screen is the Silence option. If you choose Always, then Do Not Disturb works exactly as described above.

But if you choose Only while iPad is locked, then the tablet does ring when you’re using it. Because, obviously, if the tablet is awake, then so are you. It’s a great way to ensure that you don’t miss important FaceTime calls if you happened to have awakened early today and started working.

TIP: In iOS 8, Apple added FaceTime Call Waiting. If you’re on a FaceTime audio or video call, and someone else FaceTime calls you, your tablet rings—and you can either tap Decline or End & Accept. (Group FaceTiming will have to wait for iOS 9.)

Making Actual Phone Calls

You can now make and take actual cellular phone calls on your iPad—if you also have an iPhone. The iPhone, sitting anywhere nearby, can be the cellular module for your tablet—even if that iPhone is asleep and locked.
When a call comes in to your iPhone’s number, your *iPad* rings, and the screen lights up to show who it is or what the number is:

You can tap to answer it (or decline it); your iPad’s microphone and speaker become your speakerphone.

You can also *place* a call the same way: Just click any phone number you find on the iPad: in Contacts, in Safari, in an email message, and so on.

To make this work, the iPhone and the iPad must be on the same WiFi network. They both have to be signed into the same iCloud account. And you have to open the FaceTime settings on each device and make sure they’re both set to use the same iCloud account.

After that—it just works. You have exactly the same “Not now” buttons described on page 115 (*Remind Me* and *Leave a Message*). Even call waiting works—if a second call comes in, your iPad notifies you and offers you the chance to put the first one on hold.

Crazy.

**TIP:** If you own a bunch of Apple machines, it might drive you crazy that they all now ring at once when a call comes in. Fortunately, you can turn off the ringing on each device that you’d rather be peaceful.

To make one of your iPhones, iPads, or iPod Touches stop ringing, turn off *Settings* → *FaceTime* → *iPhone Cellular Calls*. To make a Mac stop ringing, open the FaceTime program; choose *FaceTime* → *Preferences* → *Settings*, and turn off *iPhone Cellular Calls*.

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**Contacts**

Contacts is your address book—your master phone book.

If your social circle is longer than one screenful, then you can navigate this list in any of three ways:

- **First**, you can savor the distinct pleasure of flicking through the left-side master list.

- **Second**, if you’re in a hurry to get to the T’s, use the A-to-Z index down the right edge of that column. Just tap the first letter of the last name you’re looking for. Alternatively, you can slide your finger up or down the index. The list scrolls with it.

- **Third**, you can tap inside the search box at the top left of the screen. The keyboard appears. As you type, Contacts pares down the list, hiding everyone whose first, last, or company name doesn’t match
what you’ve typed so far. It’s a really fast way to pluck one name out of a haystack.

(You can clear the search box by tapping the  at its right end, or restore the full list by tapping Cancel.)

In any case, when you see the name you want, tap it to open its “card” on the right side of the screen, filled with email addresses, phone numbers, and other info—and, of course, those handy ☎️ and 📞 buttons for placing phone or FaceTime calls.

Groups

Many computer address book programs, including OS X’s Contacts app, let you place your contacts into groups—subsets like Book Club or Fantasy League Guys. You can’t create or delete groups on the iPad, but at least the groups from your Mac, PC, Exchange server, or iCloud account get synced over to it. To see them, and to switch them all on or off at once, tap Groups at the top of the Contacts list.

Here’s where Groups come into play:

- If you can’t seem to find someone in the list, you may be looking in the wrong list. Tap Groups at the top-left corner to return to the list of accounts. Tap All Contacts to view a single, unified list of everyone your tablet knows about.
• If you’ve allowed your iPad to display your contacts from Facebook or Twitter, each of those lists is a group, too. (If your Contacts list seems hideously bloated with hundreds of people you never actually call, it’s probably your Facebook list. Pop into Groups and touch All Facebook to hide them all at once.)

• If you do use the Groups feature, remember to tap the group name you want before you create a new contact. That’s how you put someone into an existing group. (If not, tap All Contacts instead.)

Adding to the Contacts List

You don’t have to type in all your phone numbers and email addresses one at a time. Instead, the iPad sucks in the entire phone book from your Mac or PC, iCloud, and/or an Exchange server at work.

The iPad also makes it very easy to add someone’s contact information when she FaceTime calls, emails, or text messages you, thanks to a prominent Add to Contacts button.

But if, in a pinch, on the road, at gunpoint, you have to add, edit, or remove a contact manually, here’s how to do it.

Make sure you’ve selected the right Group or account, as described above. Now, on the Contacts screen, tap . You arrive at the New Contact screen, which teems with empty boxes.

It shouldn’t take you very long to figure out how to fill in this form: You tap in a box and type. But there are a few tips and tricks for the data-entry process:

• The keyboard opens automatically when you tap in a box. And the iPad capitalizes the first letter of each name for you.

• Phone numbers are special. When you enter a phone number, the iPad adds parentheses and hyphens for you. (You can even enter text phone numbers, like 1-800-GO-BROWNS; the iPad converts them to digits when it dials.)

If you need to insert a pause—for dialing access numbers, extension numbers, or voicemail passwords—type #, which introduces a 2-second pause in the dialing. You can type several to create longer pauses.

To change the label for a number (“mobile,” “home,” “work,” and so on), tap the label that’s there now. The Label screen shows you your choices.
If you scroll way down the Label screen, you’ll see that you can also create custom labels. You might prefer someone’s cellphone number to be identified as “cell” instead of “mobile,” for example. Or you might want to create a label that says “Skype,” “Google Voice,” “Line 2,” “Yacht Tablet,” or “Bat Tablet.” The secret: Tap Add Custom Label at the very bottom of the screen.

- **Expand-O-Fields mean you’ll never run out of room.** Almost every field (empty box) on a Contacts card is infinitely expanding. That is, the instant you start filling in a field, another empty box (labeled add phone or whatever) appears right below it, so you can immediately add another phone number, email address, URL, street address, or whatever. (The only non-expanding fields are First, Last, Company, Ringtone, and the oddball fields you add yourself.)

For example, when you first create a card for someone, the phone-number box is labeled “mobile.” If you start entering a phone number into it, a new, second empty phone-number box appears just below it (labeled “iPhone”—Apple’s wishful thinking!), so you’ll have a place to enter a second phone number for this person. When you do that, a third box appears. And so on.

There’s always one empty field, so you can never run out of places to add more phone numbers, addresses, and so on. (Don’t worry—the perpetual empty box doesn’t appear once you’re finished editing the person’s card.)
NOTE: Baffled by the + button that appears next to certain fields? It tells you that tapping that field (or the + itself) will add new lines to your Contact card. For example, tapping Add new address inserts a new name/street/city/state block. And tapping add field lets you add a new miscellaneous field, like Birthday or Department.

• **You can add a photo of the person, if you like.** Tap **add photo**. If you have a photo of the person already, tap **Choose Photo**. You’re taken to your photo collection, where you can find a good headshot (Chapter 8).

Alternatively, tap **Take Photo** to activate the iPad’s camera. Frame the person, and then tap the white camera button to snap the shot.

In any case, you wind up with the **Move and Scale** screen. Here you can frame up the photo so the person’s face is nicely sized and centered. Spread two fingers to enlarge the photo; drag your finger to move the image within the frame. Tap **Choose** to commit the photo to the address book’s memory. (Back on the Info screen where you started, a miniature version of the photo now appears. Tap **edit** if you want to change the photo, take a new one, adjust the Move and Scale screen, or get rid of the photo altogether.)

![Photo Setup Screen](image)

From now on, this photo will pop up whenever the person calls. It also appears next to the person’s name in your Favorites list (if you haven’t turned that feature off in Settings, of course).
• **Relatives are here.** There’s also the **social profile** field, where you can list somebody’s Twitter, LinkedIn, Flickr, Facebook, and even Myspace addresses. There’s an **instant message** field, too, where you can record addresses for chat networks like AIM or Yahoo Messenger.

And there’s **add related name.** Here’s where you can specify this person’s mother, father, spouse, partner, child, manager, sibling, and so on—or even type in a relationship that you make up (tap **Add Custom Label**).

**NOTE:** As you discovered in Chapter 3, Siri knows about all your relationships. You can tell her to “Call my mom” or “Text my boss.”

• **You can import photos from Facebook.** Here’s a wild guess: Most of the photo boxes in your copy of Contacts are empty. After all, who’s going to go to the trouble of hunting down headshots of 500 acquaintances, just for a fully illustrated Contacts list?

Fortunately, with one click, the iPad can harvest headshots from the world’s largest database of faces: Facebook.

Visit **Settings—Facebook.** Once you’ve signed in, you see the magical button: **Update All Contacts.** When you click it, the iPad goes online for a massive research mission. Using your contacts’ names and phone numbers as matching criteria, it ventures off to Facebook, finds the profile photos of everyone who’s also on your Contacts list, and installs them into Contacts automatically. (If you already have a photo for somebody, don’t worry; it doesn’t get replaced.)

As a handy bonus, this operation also adds the @facebook.com email addresses for the people you already had in Contacts.

**TIP:** Actually, there’s another side effect of this operation: It also adds all your Facebook friends’ names to your main Contacts list.

Now, you may not be crazy about this. Most of these Facebook folk you’ll never need to contact from your iPad—yet here they are, cluttering up the Contacts list.

Fortunately, the **Update All Contacts** button doesn’t **really** mix your Facebook friends in with your local Contacts list. It just subscribes to your Facebook address book—adds a new **group,** which you can turn off with one quick click; see page 125.

Even if you do choose to hide all their entries, you still get the benefit of the imported headshots and Facebook email addresses for the people you **do** want to see in Contacts.
• You can import Twitter addresses. In Settings→Twitter, the Update Contacts button awaits. Its purpose is to fill in the Twitter handles for everyone who’s already in your Contacts, matching them by phone number or email address.

• You can choose a ringtone. You can choose a different ringtone for each person in your address book. The idea is that you’ll know by the sound of the ring who’s calling you.

**NOTE:** It’s one tone per person, not per phone number. Of course, if you really want one ringtone for your buddy’s cellphone and another for his home phone, you can always create a different Contacts card for each one.

To choose a ringtone, tap Default. On the next screen, tap any sound in the Ringtones or Alert Sounds lists to sample them. (Despite the separate lists, in this context, these sounds are all being offered as ringtones.) When you’ve settled on a good one, tap Done to return to the Info screen where you started.

• You can also pick a text-message sound. Just as you can choose sounds for incoming calls, the text tone item lets you choose sounds for incoming text messages and FaceTime invitations.

• You can add new fields of your own. Very cool: If you tap add field at the bottom of the screen, then you go down the rabbit hole into Field Land, where you can add any of 15 additional info bits about the person whose card you’re editing: a prefix (like Mr. or Mrs.), a suffix (like M.D. or Esq.), a nickname, a job title, a birthday, an instant message address, a phonetic pronunciation for people with weird names, and so on.

When you tap one of these labels, you return to the Info screen, where you’ll see that the iPad has inserted the new, empty field in the most intelligent spot. For example, if you add a phonetic first name, that box appears just below the First Name box. The keyboard opens so you can fill in the blank.

• You can link and unlink Unified Contacts. As noted earlier, your tablet can sync up with different accounts. Your Contacts app might list four sets of names and numbers: one stored on your tablet, one from an iCloud account, one from Facebook, and a fourth from your corporate Exchange server at work. In the old days, therefore, certain names might have shown up in the All Contacts list two or three times—not an optimal situation.
Now, as a favor to you, the iPad displays each person’s name only once in that master All Contacts list. If you tap that name, you open up a unified information screen for that person. It includes all the details from all the underlying cards from that person.

**NOTE:** The iPad combines cards in the All Contacts list only if the first and last names are exactly the same. If there’s a difference in name, suffix, prefix, or middle name, no unifying takes place. Remember, too, that you see the unification only if you view the All Contacts list.

To see which cards the iPad is combining for you, scroll to the bottom of the card. There the Linked Contacts section shows you which cards have been unified.

Here you can tap a listing to open the card in the corresponding account. For that matter, you can manually link a card, too; tap Edit, tap link contacts, and then choose a contact to link to this unified card—even if the name isn’t a perfect match.

**NOTE:** It’s OK to link Joe Carnelia’s card with Joseph Carnelia’s card—they’re probably the same person. But don’t link up different people’s cards. Remember, the whole point is to make the iPad combine all the phone numbers, email addresses, and so on onto a single card—and seeing two sets on one card could get confusing fast.

This stuff gets complex. But, in general, the iPad tries to do the right thing. For example, if you edit the information on the unified card, you’re changing that information only on the card in the corresponding account. (Unless you add information to the unified card. In that case, the new data tidbit is added to all the underlying source-account cards.)

**NOTE:** To delete any info bit from a Contacts card, tap the – next to it, and then tap the red Delete button to confirm.

**Editing Someone**

To make corrections or changes, tap the person’s name in the Contacts list. In the upper-right corner of the Info card, tap Edit.

You return to the screens already described, where you can make changes. To edit a phone number, for example, tap it and change away. Or, to delete a number (or any other info bit), tap the button next to it, and then tap Delete to confirm.
After you tap **Done** (or **Cancel**), you can return to the Contacts list by swiping to the right.

**Deleting Someone**

Truth is, you’ll probably **add** people to your address book far more often than you’ll **delete** them. After all, you meet new people all the time—but you delete people primarily when they die, move away, or dump you.

To zap someone, tap the name in the Contacts list and then tap **Edit**. Scroll down, tap **Delete Contact**, and confirm by tapping **Delete Contact** again.

**Sharing a Contact**

There’s a lot of work involved in entering someone’s contact information. It would be thoughtful, therefore, if you could spare the next guy all that effort—by sending a fully formed electronic business card to him. It can be yours or that of anyone in your Contacts list.

To do that, open the contact’s card, find the bottom, and tap **Share Contact**. On the Share sheet, you’re offered a choice of **AirDrop**, **Message**, **Mail**, and **More**. (“**Message**” means an iMessage—page 125—if it’s a fellow Apple fan, or a text message otherwise. AirDrop is described on page 121. And **More** is a place for new apps to install their sharing options.)

Tap your choice, address the message (to an email address or, for a message, a cellphone number), and send it. The recipient, assuming he has a half-decent smartphone or address-book program on the receiving end, can install that person’s information with a single tap on the attachment.

**TIP:** Ever meet someone and wish you could just exchange business cards electronically, iPad to iPad? AirDrop is the answer.

**Bluetooth Accessories**

Bluetooth is a short-range **cable elimination** technology. It’s designed to untether you from equipment that would ordinarily require a cord.

On an iPad, Bluetooth is primarily useful for transmitting audio to a wireless speaker—and for sending your calls to Bluetooth car stereos and tiny wireless Bluetooth earpieces.

**NOTE:** This discussion covers **monaural** Bluetooth earpieces intended for phone calls. But the iPad can also handle Bluetooth **stereo** headphones, intended for music, as well as Bluetooth speakers. Details are on page 188.
Pairing with a Bluetooth Earpiece or Speaker

Pairing means “marrying” a phone or tablet to a Bluetooth earpiece or speaker so that each works only with the other. If you didn’t do this one-time pairing, then some other guy passing on the sidewalk might hear your conversation through his earpiece. And neither of you would be happy.

The pairing process is different for every tablet and every Bluetooth earpiece. Usually it involves a sequence like this:

1. **On the earpiece, turn on Bluetooth. Make the earpiece or speaker discoverable.** Discoverable just means that your iPad can “see” it. You’ll have to consult the gadget’s instructions to learn how to do so; it’s usually a matter of holding down some button or combination of buttons until the earpiece blinks.

2. **On the iPad, tap Settings → Bluetooth.** Turn Bluetooth on. The iPad immediately begins searching for nearby Bluetooth equipment. If all goes well, you’ll see the name of your earpiece or speaker show up on the screen.

3. **Tap the gadget’s name. Type in the passcode, if necessary.** The passcode is a number, usually four or six digits, that must be typed into the tablet within about a minute. You have to enter this only once, during the initial pairing process. The idea is to prevent some evildoer sitting nearby in the airport lounge, for example, to secretly pair his earpiece with your iPad.

The user’s manual for your earpiece should tell you what the passcode is (if one is even required).

**NOTE:** The trouble with Bluetooth has always been that it’s a battery hog. Now, though, there’s a new, better technology, alternately called Bluetooth LE (for “low energy”), Bluetooth Smart, or Bluetooth 4.0. Its very smart idea: It turns on only when necessary and then turns off again to save power.

When you’ve paired your iPad with a Bluetooth 4.0 gadget, you’ll see the Bluetooth logo on your status bar ((seconds) light up only when it’s actually exchanging data. Bluetooth LE has made possible a lot of smartwatches and fitness trackers.

As a handy bonus, Bluetooth LE devices don’t have to be paired in the iPad’s Settings app. Often, you can do the pairing right in the gadget’s companion app, which makes a lot more sense.
To make FaceTime calls using a Bluetooth earpiece (or speaker as a speakerphone), you **dial** using the iPad itself. You usually use the iPad’s own volume controls, too. You generally press a button on the earpiece or the speaker itself to answer an incoming call, to swap call-waiting calls, and to end a call.

If you’re having any problems making a particular gadget work, Google it. Type “iPad jambox mini,” for example. Chances are good that you’ll find a write-up by somebody who’s worked through the setup and made it work.

**Bluetooth Car Systems**

The iPad works beautifully with Bluetooth car systems, too. The pairing procedure generally goes exactly as described above: You make the car discoverable, enter the passcode on the iPad, and then make the connection.

Once you’re paired up, you can answer an incoming call by pressing a button on your steering wheel, for example. You hear your caller through the car’s speakers, and a microphone for your own voice is hidden in the rearview mirror or dashboard. You make calls either from the iPad or, in some cars, by dialing the number on the car’s own touchscreen.

**NOTE:** When Bluetooth is turned on but the earpiece isn’t, or when the earpiece isn’t nearby, the $ icon on your iPad’s status bar appears in gray. And when it’s connected and working right, the earpiece’s battery gauge appears on the iPad’s status bar.

Of course, studies show that it’s the act of driving while conversing that causes accidents—not actually holding a phone. So the hands-free system is less for safety than for convenience and compliance with state laws.
Once you’ve savored the exhilaration of making phone calls on the iPad, you’re ready to graduate to one of its fancier tricks: text messages. There are two kinds: traditional (for sending messages to cellphones) and Apple-flavored (for sending messages to other Apple equipment).

Of course, in order to send any kind of message, your iPad has to be online; it has to be in a WiFi hotspot or (if you have a cellular iPad) it has to have cell service.

**Text Messages (SMS)**

SMS stands for Short Messaging Service, but it’s commonly just called texting. A text message is a very short note (under 160 characters—a sentence or two) that you shoot from one device to another. What’s so great about it?

- Like a phone call, it’s immediate. You get the message off your chest right now.

- As with email, the recipient doesn’t have to answer immediately. The message waits for him even when his phone or tablet is turned off.

- Unlike a phone call, it’s nondisruptive. You can send someone a text message without worrying that he’s in a movie, a meeting, or anywhere else where holding a phone up to his head and talking would be frowned upon. (And the other person can answer nondisruptively, too, by sending a text message *back.*

- You have a written record of the exchange. There’s no mistaking what the person meant. (Well, at least not because of sound quality. Understanding the texting shorthand that’s evolved—“C U 2mrO,” and so on—is another matter entirely.)
• You can send pictures and videos in text messages, too. They’re sometimes called MMS, or multimedia messaging service.

It’s an unassailable fact: Your iPad doesn’t have its own phone number. Therefore, it shouldn’t be able to send and receive texts.

Fortunately, it can, using any of three methods:

• **iMessages.** Whenever your iPad is online, it can send and receive unlimited free messages to other Apple gadgets (iPhones, iPads, iPod Touches, Macs).

• **Via iPhone.** When your iPad is on the same WiFi hotspot as your iPhone, you can send real, actual SMS text messages to and from other phones of any brand. (It’s the same trick that you can use to make phone calls, as described on page 122.)

• **Using an app.** Certain apps give your iPad a phone number, so you can send and receive actual text messages whenever you’re online.

This chapter covers these three methods one at a time.

**iMessages**

This iOS feature should interest you—if it doesn’t, in fact, make you giggle like a schoolgirl.

An iMessage looks and works exactly like a text message, of the sort you might send on a cellphone. You send iMessages and receive them in the same app (Messages). They show up in the same window. You can send the same kinds of things: text, photos, videos, contacts, map locations, whatever. You send and receive them using exactly the same techniques.

The big difference? iMessages go exclusively between Apple products: iPads, iPhones, iPod Touches, and Macs.

So why would Apple reinvent the text-messaging wheel? Because iMessages offer some huge advantages over regular text messages:

• iMessages are free! You don’t have to pay for them. They look and work exactly like text messages, but they’re transferred over the Internet (WiFi or, on a cellular iPad, cellular) instead of your cell company’s voice airwaves.

• When you’re typing back and forth with somebody, you don’t have to wonder whether, during a silence, he’s typing a response to you or just ignoring you; when he’s typing a response, you see an ellipsis (...), as shown on the next page.
• You don’t have to wonder if the other guy has received your message. A tiny, light-gray word “Delivered” appears under each message you send, briefly, to let you know that the other guy’s device received it.

• You can even turn on a “read receipt” feature that lets the other guy know when you’ve actually seen a message he sent. He’ll see a notation that says, for example, “Read: 2:34 PM.”

• Your history of iMessages shows up on all your i-gadgets; they’re synchronized through your iCloud account. In other words, you can start a chat with somebody using your iPad and later pick up your Mac laptop at home and carry right on from where you stopped (in its Messages program).

As a result, you always have a record of your iMessages. You have a copyable, searchable transcript on your computer.

• In iOS 8, iMessages can be more than text. They can be little audio recordings, video recordings, or photos that you take on the spot, within the Messages app.

Sending an iMessage

iMessages happen automatically. All you do is open Messages and create a text message as usual. If your recipient is using an Apple gadget (with iOS 5 or later, or a Mac using OS X Mountain Lion or later)...and has an iCloud account...and hasn’t turned off iMessages, then your iPad sends your message as an iMessage automatically. It somehow knows.
You’ll know, too, because the light-gray text in the typing box says “iMessage.” And each message you send shows up in a blue speech bubble. The Send button is blue, too.

In fact, when you’re addressing the new text message, the names that appear in blue represent people with iMessages gadgets, so you know in advance who’s cool and who’s not (previous page). (The green names are those who do not have iMessage. The gray ones—well, your iPad doesn’t know yet.)

**Receiving an iMessage**

When you get an iMessage, the iPad plays a sound. It’s a shiny glockenspiel ding, unless you’ve changed the standard sound or assigned a different text tone to this specific person.

The iPad also displays the name of the sender and the message. Unless you’ve fooled around with the Notifications settings, the message appears at the top of the screen, disappearing momentarily on its own, so as not to interrupt what you’re doing. (You can also flick it up and away if it’s blocking something on your screen.)

Or, if the iPad was asleep, it lights up long enough to display the message right on its Unlock screen (below). You can unlock the iPad and jump directly to the message by swiping your finger right across the message on the Lock screen.

If you have changed the options in Notifications, then your text message might appear in a white bubble in the center of the screen, complete with Close and Reply buttons. If you turned off Show Preview (page 150), then you don’t see the message itself—only the name or number of the sender. And if you’ve turned off View in Lock Screen, then, sure enough, the text message does not appear on the Lock screen.
The Messages icon on the Home screen bears a little circled number “badge” letting you know how many new messages are waiting for you.

Once you tap a message notification to open, you see Apple’s vision of what a text-message conversation should look like. Incoming messages and your replies are displayed as though they’re cartoon speech balloons (page 137).

To respond to the message, tap in the text box at the bottom of the screen. The iPad keyboard appears. Type away, or dictate a response, and then tap **Send**.

If your buddy replies, then the balloon-chat continues, scrolling up the screen.

And now, a selection of juicy iMessage tips:

- The last 50 exchanges appear here. If you want to see even older ones, scroll to the very top (which you can do by tapping the top edge of the screens) and then drag downward.

  And by the way—if the keyboard is blocking your view of the conversation, swipe downward on the messages to hide it.

- Links that people send you in text messages actually work. For example, if someone sends you a Web address, tap to open it in Safari. If someone sends a street address, tap it to open it in Maps. And if someone sends an email address, tap it to open an outgoing message.

- Messages remembers the exact time that each text was sent or received. If you slide your finger leftward and hold it still, this hidden column of time stamps slides into view. Release your finger to snap them back.

**Five Clever Options**

In iOS 8, a new screen offers five options that you may find handy in the midst of a texting conversation. To see them, tap **Details** at the top of the screen. Here’s what you see now:

- **Call.** If all this fussy typing is driving you nuts, you can jump onto a phone or video call. On the Details screen, a little strip of icons awaits. They include 📞 (conclude the transaction by voice, with a FaceTime audio call), ☼ (place a FaceTime video call), and 📧 (open this person’s full Contacts card, loaded with different ways to call, text, or email).
• **Send My Current Location (now).** Hit this button to transmit a map to the other person, showing exactly where you are, so that person can come and pick you up, meet you for drinks, rescue you when your car doesn’t start, or whatever.

If your correspondent has an iPhone, iPad, or Mac, she can open the map you’ve sent in Maps, ready to guide her with driving directions. If she’s one of the unenlightened—she owns some non-Apple phone—then she gets what’s called a Location vCard, which she may be able to open into a mapping app on her own phone.

NOTE: If Location Services isn’t turned on (page 481), the iPad may ask you to turn it on now. After all, you can’t very well share your location if your phone has no idea where you are.

• **Share My Location (continuously).** If you’re moving around, and you have a cellular-model iPad, you may prefer this option. It sends your whereabouts to your correspondent—and keeps that location updated as you meander through the city, for a period of time that you specify (One Hour, Until End of Day, or Indefinitely). That’s great when you’re club-hopping, say, and trying to help some buddies catch up with you. As your location changes, the map you sent to your recipient updates itself.

At any time—even before the hour, day, or eternity is up—you can stop broadcasting your location to this person; just open the Details screen again and tap Stop Sharing My Location.

• **Do Not Disturb.** Otherwise known as “mute,” “enough already,” or “shut up.” It makes your tablet stop ringing or responding with every new message from this person or group. Handy when you’re trying to get work done, when you’re being bombarded by silly group chitchat, or when someone’s stalking you.

• **Attachments.** Crazy cool! Here are all the photos and other attachments you’ve ever exchanged with this texting correspondent, going back to forever.

You can tap one of these tiles to open it. Or, if you hold your finger down on it, you get choices like Copy, Delete, and More. (There’s usually nothing new under More except Save Image, which copies the texted photo into your Photos collection.)
The Text List

What’s cool is that the iPad retains all these exchanges. You can review them or resume them at any time by tapping Messages on the Home screen. A list of text message conversations appears; a blue dot indicates conversations that contain new messages (next page, right).

**TIP:** If you’ve sent a message to a certain group of people, you can address a new note to the same group by tapping the old message’s row here.

503 delete en masse

The truth is, these listings represent people, not conversations. For example, if you had a message exchange with Chris last week, then a quick way to send a new text message to Chris (even on a totally different subject) is to open that “conversation” and simply send a “reply.” The iPad saves you the administrative work of creating a new message, choosing a recipient, and so on.

**TIP:** Hey, you can search text messages! At the very top of the list, there’s a search box. You can actually find text inside your message collection.
If having these old exchanges hanging around presents a security (or marital) risk, you can delete them in either of two ways:

• **Delete an entire conversation.** *Swipe* away the conversation. At the list of conversations, swipe your finger *leftward* across the conversation’s name. That makes the *Delete* confirmation button appear.

Alternate method: Above the Messages list, tap *Edit*, tap to select (✓) the conversations you want to ditch, and then tap the *Delete* button.

• **Delete just one text.** Open the conversation so that you’re viewing the cascade of bubbles representing the texts back and forth.

Now, this technique is a little weird, but here goes: *Hold down your finger* on the individual message you want to delete (or double-tap it). When the little black bar of options appears, tap *More*.

Now you can delete all the exchanges simultaneously (tap *Delete All*) or vaporize only particularly incriminating messages. To do that, tap the selection circles for the individual balloons you want to nuke, putting checks (✓) by them; then tap the (-trash can) button to delete them all at once. Tap *Delete Message* to confirm.

**NOTE:** Interestingly, you can also *forward* some messages you’ve selected in this way. When you tap the Forward button (📧), a new outgoing text message appears, ready for you to specify the new recipient.
Mark All as Read

Here’s a handy new option in iOS 8: When you get off the plane, home from your honeymoon, you might see Messages bristling with notifications about messages you missed. Now you can mark them all as read at once, so the blue dots don’t distract you anymore.

To do that, on the message-list screen, tap Edit, then Read All.

Sending a New Message

If you want to text somebody you’ve texted before, the quickest way, as noted above, is simply to resume one of the “conversations” already listed in the Messages list.

You can also tap a person’s name in Contacts, or  next to a listing in Recents or Favorites, to open the Info screen; tap Send Message.

Actually, options to fire off text messages lurk all over the iPad—anytime you see the Share ( ) button, which is frequently. The resulting Share screen includes options like Email, Twitter, Facebook—and Message. Tapping Message sends you back to Messages, where the photo, video, page, or other item is ready to send. (More on multimedia messages shortly.)

In other words, sending a text message to anyone who lives in your iPad is only a couple of taps away.

**NOTE:** You can tap that + button to add another recipient for this same message. Repeat as necessary; they’ll all get the same message.

Yet another way to start: Tap the button at the top of the Messages screen.

In any case, the message composition screen is waiting for you now. You’re ready to type (or dictate) and send!

**TIP:** If you drag your finger down the screen, you hide the keyboard. Doing that makes much more of the screen available to display the text-message conversation.

**Picture, Audio, or Video Messages**

To send a photo or a video by iMessage, tap the  next to the box where you type your messages. Three useful options appear:

- **Recent photos.** First, you see a scrolling row of the most recent photos and videos added on your iPad. This new iOS 8 feature is incredibly smart; it should be obvious that most of the time, the photo you
want to send by text is one of the last ones you took. Tap a photo here—or more than one—and tap Send 1 Photo (or whatever the number is.)

**TIP:** You can scroll these photo miniatures to the left to see the older ones.

• **Photo Library.** To transmit a photo or video that’s already on your iPad (but **not** one of the most recent), you can tap Photo Library; your Photos app opens automatically, showing all your photos and videos, as described in Chapter 8. Tap the one you want, and then tap Choose.

• **Take Photo or Video** opens the Camera app so that you can take a new picture or snag a video clip. It’s just like the Camera app described in Chapter 8, except that only two modes are available: Video and Photo.

Once you’ve captured the shot (or the clip), you can choose either Retake (if the result was no good) or Use Photo (if you want to send it). Then hit Send.

You now return to your message conversation in progress—but now that photo or video appears inside the Send box. Type a caption or a comment, if you like. Then tap Send to fire it off to your buddy.
Capturing Messages and Files

In general, text messages are fleeting; most people have no idea how they might capture them and save them forever.

Some of the stuff in those text messages is easy to capture, though. For example, if you’re on the receiving end of a photo or a video, tap the small preview in the speech bubble. It opens at full-screen size so you can have a better look at it—and if it’s a video, there’s a ▶ button so you can play it. Either way, if the picture or video is good enough to preserve, tap the 📸 button. You’re offered a Save Image or Save Video button; tap to add the photo or video to your iPad’s collection.

If someone sends you contact information (a phone number, for example), you can add it to your address book. Just tap inside that bubble and then tap either Create New Contact or Add to Existing Contact.

If you’d like to preserve the actual text messages, you have a few options:

• **Copy them individually.** Double-tap a text bubble, and then tap Copy. At this point, you can paste that one message into, for example, an email message.

• **Forward them.** Double-tap a message to make the button bar appear. Tap More, and then tap the selection dots beside all the messages you want to pass on. Now you can tap the Forward () button. All the selected messages go along for the ride in a single consolidated message to a new text-message addressee.

• **Save the iMessages.** If you have a Mac, then your iMessages (that is, notes to and from other Apple gadgets) show up in the Messages chat program. You can save them or copy them there.

**TIP:** Behind the scenes, the Mac stores all your chat transcripts in a hidden folder, as special text files. To get there, press the Option key as you open the Go menu; choose Go→Library. The transcripts are in date-stamped folders in the Messages→Archive folder.

• **Use an app.** There’s no built-in way to save regular text messages in bulk. There are, however, apps that can do this for you, like DiskAid (for Windows) or iBackup Viewer (free for the Mac). They work from the invisible backup files that you create when you sync your phone with iTunes.
Instant Audio, Video, and Photos

In iOS 8, some new controls are available whenever you’re exchanging iMessages. As in super-popular apps like WhatsApp, they let you quickly exchange audio, video, or still pictures as easily as you’d type something.

Yes, of course, you’ve always been able to send multimedia goodies while texting. The difference in iOS 8 is the convenience of doing so; you can record and send a picture, video, or audio clip with a single slide of your thumb. It’s so effortless that the process is transformed.

It goes like this.

Audio Texting: The New Walkie-Talkie

Hold your finger down on the button at the right end of the Messages text box. At the sound of the ding, say something—and then slide your finger upward to the button. What you said is instantly transmitted to your buddy as an audio recording. You don’t have to fuss with a bunch of Start, Stop, or Send buttons.

It’s a whole new form of quick exchanges—something that combines the best of a walkie-talkie (instant audio) with the best of text messages (you can listen and reply at your leisure).

Sometimes, an audio recording is just better than a typed message, especially when music, a child, an animal, or a lot of emotion in your voice is involved. You could probably argue that audio texting is also better than typed texting when you’re driving, jogging, or operating industrial machinery.
Now then: That business about holding down the 📻 button, talking, and then sliding up is probably how you’ll always do it—once you become friends with this feature. But, at the outset, you can proceed more cautiously.

If, after speaking, you simply lift your finger from the glass, you can tap ▶ to review your recording before sending it. Or you can tap the ✖️ to cancel the whole thing.

But, really, it’s that hold down/speak/slide up business that makes audio transmissions so much fun.

**TIP:** Audio eats up a lot more space on your tablet than text. If you do a lot of audio messaging, then, over time, those audio snippets can fill up your storage.

That’s why iOS 8 comes set to **delete** every audio message 2 minutes after you send or receive it. If that prospect worries you, then visit **Settings**→**Messages**. You can tap **Expire** and change that setting to **Never**.

Even if you don’t change this setting, you’re free to preserve especially good audio messages forever; just tap the tiny **Keep** button that appears below each one.

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**Video Messaging**

To the left of the typing box, there’s a little 📹 icon. If you tap it, you’re offered the chance to take a photo or choose an existing one.

But if you **hold your finger down** on this 📹, the recording palette appears, and you can take a video clip and send it instantly. In slow motion, the process goes like this:

1. **Hold your finger down on the 📹.** When the recording palette appears, you can lift your finger.

**NOTE:** In iOS 8.1, the recording palette appears only when the iPad is upright (in portrait orientation)—not when you’re holding it sideways (landscape).

2. **Tap the ● button.** Now you’re recording video. Tap ● to stop.

**TIP:** If you prefer, you can just hold down the ● for as long as you want to record; stop by lifting your finger.

3. **Tap the ▶ to play back your video for review, or tap ✅ to send it.**
Now, all of that is the slow, timid way to send a video. Once you get the hang of it, you can do it all with a single finger motion, like this:

Hold your finger down on the 📹. Without lifting your finger, slide onto the ⬆️ to record video. Still without lifting, slide onto the ⬇️ and release. The phone sends the freshly recorded video.

That method is so smooth and continuous that it makes video snippets a seamless part of the texting conversation. It also puts you in a better position to capture video of things that happen suddenly and instantly—a plane landing in the Hudson River, say.

**NOTE:** Like audio snippets, video clips consume a lot of phone storage. So here again, iOS 8 ordinarily deletes video messages 2 minutes after you send or receive them. You can, if you prefer, tap Settings ➔ Messages ➔ Expire and change that setting to Never.

Even if you don’t change the setting, you can always hang onto certain video messages; tap the tiny Keep button that appears below them.

### Photo Messaging

You already know what happens when you tap the 📸 button: The iPad lets you take, or choose, a photo to send.

But if you hold your finger down on that button, you can take and transmit photos with a single finger swipe, too. Once again, here’s the slow version:

1. **Hold your finger down on the 📸.** When the recording palette appears, you can lift your finger.
2. Aim the camera, and then tap 📸. The phone snaps the picture and sends it, all at once.

As you get better, you can do it all in one quick motion: Hold your finger on the 📸, aim the camera, slide up to the 🔄 button, and let go. Snap and send.

**TIP:** The 📸 on the recording palette doesn’t give you the chance to review the photo before you snap it. If you prefer that method, then tap the 📸 icon instead of holding it down, and proceed as described on page 143.

### iMessage Settings

If you tap **Settings→Messages**, you’ll stumble upon some intriguing messaging options:

- **iMessage.** This is the on/off switch for the entire iMessages feature. It’s hard to imagine why you wouldn’t want this feature available, but you know—whatever floats your boat.

- **Send Read Receipts.** When you turn this option on, your iMessage correspondents will know when you’ve seen their messages. A tiny word “Read” will appear beneath each sent message that you’ve actually seen. Turn this off only if it deprives you of the excuse for not responding promptly (“Hey, I never even saw your message!”).

- **Send & Receive.** Tap here to specify what cellphone numbers and email addresses you want to register with iMessages. (Your laptop, iPad, and iPod Touch do not have phone numbers, which is why iMessages gives you the option of using an email address.)

  When people send iMessages to **you**, they can use any of the numbers or addresses you turn on here. That’s the only time these numbers and addresses matter. **You** see the same messages exactly the same way on all your Apple gadgets, no matter what email address or phone number the sender used for you.

  (If you scroll down on this screen, you’ll see the **Start new conversations from** options. This is where you specify which number or address others will see when **you** initiate the message. It really doesn’t make much difference which one you choose.)

- **Keep Messages.** How long do you want your messages to hang around on your phone? This is a question of privacy, of storage, and of your personality. In any case, here’s where you get a choice of **30 Days**, **1 Year**, or **Forever**.
• **Expire.** As noted on page 147, iOS 8 ordinarily deletes audio and video messages a couple of minutes after they arrive, to avoid filling up your iPad with old, no longer relevant audio and video files. The two Expire controls here let you turn off that automatic deletion (by choosing *Never*).

**Bonus Settings in a Place You Didn’t Expect**

Apple has stashed a few important text-messaging settings in *Settings → Notifications → Messages*:

• **Allow Notifications.** If, in a cranky burst of sensory overload, you want your iPad to stop telling you when new texts come in (with a banner or sound, for example), then turn this off.

• **Show in Notification Center.** How many recent text messages should appear in the Notification Center (page 42)?

• **Notification Sound.** Tap here to choose a sound for incoming texts to play. (You can also choose a different sound for *each person* in your address book, as described on page 129.)

• **Badge App Icon.** Would you like a little number like this 📩 to appear on the Message app’s icon, showing how many you’ve missed?

• **Show on Lock Screen.** Do you want received text messages and iMessages to appear on the screen when it’s locked? If yes, then you can sneak reassuring glances at your tablet without turning it fully on. If no, then you maintain better protection against snoopers who find your iPad on your desk.

• **Alert Style When Unlocked.** See page 46 for a description of the different banner styles.

• **Show Preview.** Usually, when a message arrives, it wakes up your iPad and shows the message contents. Which is great, as long as the message isn’t private and the tablet isn’t lying on the table where everyone can see it. If you turn off **Show Preview**, though, you’ll see who the message is from but not the actual text of the message (until you tap the notification banner or bubble).

• **Show Alerts from.** This option is designed to give you some control over the flood of attention-getting bubbles that appear on your screen. If you choose **My Contacts**, then you won’t get that chime and bubble when total strangers send iMessages to you.

• **Repeat Alerts.** If someone sends you a text message but you don’t tap or swipe to read it, the iPad waits 2 minutes, and then plays the
notification sound again. That second chance really helps when, for example, you were in a noisy place and missed the original chime.

But for some people, even one additional reminder isn't enough. Here you can specify that you want to be re-alerted Twice, 3 Times, 5 Times, or 10 Times. (Or Never, if you don’t want repeated alerts at all.)

**Regular Text Messages**

Most iPads, most of the time, never send anything but iMessages. They never communicate with any devices except Apple’s.

It is possible, however, for your iPad to exchange regular SMS text messages with regular phones—if you also own an iPhone. Once again, your iPhone acts as a relay station between the cellular world and your iPad.

Here’s how to set it up. First, as usual, the iPad and the phone must be on the same WiFi network and signed into the same iCloud account. Next, on the iPhone, open Settings→Messages. Turn on Text Message Forwarding next to your iPad’s name.

On the iPad, open Messages; a code appears. You’re supposed to type into the corresponding box on your phone:

This same code appears right now on any iPad, Mac, or iPod Touch you own. They, too, will be able to send and receive texts, with your iPhone doing the relaying.

All of this is to prove, really and truly, that you’re the owner of both devices. You wouldn’t want some bad guy reading your text messages, would you?

That’s it—your gadgets are paired. You can now use Messages to send standard text messages to any cellphone. You can also tap and hold on a phone number wherever it appears—in Contacts, in a Spotlight search result, in Safari, in Mail—and choose Send Message from there. And when
a text message comes in, a standard iPad notification bubble appears at top right.

The beauty of all this is that your back-and-forths are kept in sync between the iPad and the phone. You can jump between them and continue the texting conversation. (You’ll note that, as usual, the bubbles containing your utterances are green. Blue is reserved for iMessages—that is, messages to other people with iCloud accounts.)

Text Messages Using Apps

OK, so what if you want to send text messages from your iPad to normal phones (not just iPhones)—and you don’t have an iPhone to use as a relay station? You’re still not out of luck.

There are all kinds of sneaky apps that let you send SMS texts for free that 

*don’t* require your correspondents to have an Apple device. Here are a couple of examples:

- **Textfree with Voice.** It’s an app that gives your iPad its own phone number just for free text or picture messages, so you can send and receive all you want without paying a cent. Incoming voice calls are free, too; you can buy minutes for outgoing calls.

- **Google Voice.** This free service has a million great features. But one of the best is that it lets you send and receive free text messages. You can do that from your computer (an amazingly useful feature, actually) at [voice.google.com](http://voice.google.com), or by using the free Google Voice app).
If you were told that the iPad was an easy tablet for a disabled person to use, you might spew your coffee. The thing has almost no physical keys! How would a blind person use it? Lots of features require swiping across the screen or holding something down. How would someone with motor-control challenges work it?

But it’s true. Apple has gone to incredible lengths to make the iPad usable for people with vision, hearing, or other physical impairments. As a handy side effect, these features also can be fantastically useful to people whose only impairment is being under 10 or over 40.

If you’re blind, you can actually turn the screen off and operate everything—do your email, surf the Web, adjust settings, run apps—by letting the iPad speak what you’re touching. It’s pretty amazing (and it doubles the battery life).

You can also magnify the screen, reverse black for white (for better-contrast reading), and convert stereo music to mono (great if you’re deaf in one ear).

Some of these features are useful even if you’re not disabled—in particular, the LED flash and zooming. The kiosk mode is great for kids; it prevents them from exiting whatever app they’re using. And if you have aging eyes, you might find the Large Text option especially handy.

Here’s a rundown of the accessibility features in iOS 8. To turn on any of the features described here, open Settings → General → Accessibility. (And don’t forget about Siri, described in Chapter 3. She may be the best friend a blind person’s iPad ever had.)

**TIP:** You can turn many of the iPad’s accessibility features on and off with a triple-click on the Home button. See page 172 for details.
VoiceOver

VoiceOver is a screen reader—software that makes the iPad speak everything you touch. It’s a fairly important feature if you’re blind.

On the VoiceOver settings pane, tap the on/off switch to turn VoiceOver on. Because VoiceOver radically changes the way you control your iPad, you must dismiss a warning to confirm that you know what you’re doing. Immediately, you hear a female voice begin reading the names of the controls she sees on the screen.

You can adjust the Speaking Rate of the synthesized voice.

Now you’re ready to start using the iPad in VoiceOver mode. There’s a lot to learn, and practice makes perfect, but here’s the overview:

• **Touch something to hear it.** Tap icons, words, even status icons at the top; as you go, the voice tells you what you’re tapping. “Messages.” “Calendar.” “Mail—14 new items.” “45 percent battery power.” You can tap the dots on the Home screen, and you’ll hear “Page 3 of 9.”

Once you’ve tapped a screen element, you can also flick your finger left or right—anywhere on the screen—to “walk” through everything on the screen, left to right, top to bottom.

**TIP:** A thin black rectangle appears around whatever the voice is identifying. That’s for the benefit of sighted people who might be helping you.

• **Double-tap something to “tap” it.** Ordinarily, you tap something on the screen to open it. But since single-tapping now means “speak this,” you need a new way to open everything. So: To open something you’ve just heard identified, double-tap anywhere on the screen. (You don’t have to wait for the voice to finish talking.)

**TIP:** Or do a split tap. Tap something to hear what it is—and with that finger still down, tap somewhere else with a different finger to open it.

There are all kinds of other special gestures in VoiceOver. Make the voice stop speaking with a two-finger tap; read everything, in sequence, from the top of the screen with a two-finger upward flick; scroll one page at a time with a three-finger flick up or down; go to the next or previous screen (Home, Stocks, and so on) with a three-finger flick left or right; and more.
Or try turning on Screen Curtain with a *three-finger triple-tap*; it blacks out the screen, giving you total privacy as well as a heck of a battery boost. (Repeat to turn the screen back on.)

On the VoiceOver settings screen, you’ll find an expanded wealth of options for using the iPad sightlessly. For example:

- **Speak Hints** makes the iPad give you additional suggestions for operating something you’ve tapped. For example, instead of just saying, “Safari,” it says, “Safari. Double-tap to open.”

- **Use Pitch Change** makes the iPad talk in a higher voice when you’re entering letters and a lower voice when you’re deleting them. It also uses a higher pitch when speaking the first item of a list and a lower one when speaking the last item. In both cases, this option is a great way to help you understand where you are in a list.

- **Use Sound Effects** helps you navigate by adding little clicks and chirps as you scroll, tap, and so on.

- **Speech** is where you choose a voice for VoiceOver’s speaking. If you have a recent iPad model (with at least 900 megabytes of free space), you can now install Alex, the very realistic male voice that’s been happily chatting away on the Mac for years.

- **Braille.** The iPad can accept input from a Bluetooth Braille keyboard—but that’s not new. In iOS 8, you can type in Braille, too.

  Braille, of course, is the system that represents letters as combinations of dots on a six- or eight-cell grid. Blind people can read Braille by touching embossed paper with their fingers. But thanks to iOS 8, they can type in Braille, too. For many, that may be faster than trying to type on the onscreen keyboard and more accurate than dictation.

On this Settings screen, you specify, among other things, whether you want to use the six- or eight-dot system.

When you’re ready to type, you use the Rotor (shown on the next page) to choose Braille Screen Input, which is usually the last item on the list. If the iPad is flat on a table (“desktop mode”), then the six “keys” for typing Braille are arrayed in a loose, flattened V pattern.

If you’re holding the iPad, you grip it with your pinkies and thumbs, with the screen facing away from you (“Screen away” mode).

- **The Rotor** is a brilliant solution to a thorny problem. If you’re blind, how are you supposed to control how VoiceOver reads to you? Do you have to keep burrowing into Settings to change the volume, speaking speed, punctuation verbosity, and so on?
Not anymore. The Rotor is an imaginary dial. It appears when you twist two fingers on the screen as if you were turning an actual dial.

And what are the options on this dial? That’s up to you. Tap Rotor to get a list of options: Characters, Words, Speech Rate, Volume, Punctuation, Zoom, and so on.

Once you’ve dialed up a setting, you can get VoiceOver to move from one item to another by flicking a finger up or down. For example, if you’ve chosen Volume from the Rotor, you make the playback volume louder or quieter with each flick up or down. If you’ve chosen Zoom, then each flick adjusts the screen magnification.

The Rotor is especially important if you’re using the Web. It lets you jump among Web page elements like pictures, headings, links, text boxes, and so on. Use the Rotor to choose, for example, images—then you can flick up and down from one picture to the next on that page.

• **Typing Style.** iOS 8 offers new options when you’re trying to type. In Standard Typing, you drag your finger around the screen until VoiceOver speaks the key you want—and then simultaneously tap anywhere with a second finger to type the letter.

In Touch Typing, you can slide your finger around the keyboard until you hear the key you want; lift your finger to type that letter.

Now there’s Direct Touch Typing, which is a faster method intended for people who are more confident about typing. If you tap a letter, you type it instantly. If you hold the key down, VoiceOver speaks its name but doesn’t type it, just to make sure you know where you are.

• **Phonetic Feedback** refers to what VoiceOver says as you type or touch each keyboard letter. Character means that it says the letter’s name. Phonetics refers to the pilot’s alphabet: “Alpha,” “Bravo,” “Charlie,” and so on.
• **Typing Feedback** governs how the iPad helps you figure out what you’re typing. It can speak the individual letters you’re striking, the words you’ve completed, or both.

• **Always Speak Notifications** makes the iPad announce, with a spoken voice, when an alert or update message has appeared. (If you turn this off, then VoiceOver announces only incoming text messages.)

• **Navigate Images.** As VoiceOver reads to you what’s on a Web page, how do you want it to handle pictures? It can say nothing about them (**Never**), it can read their names (**Always**), or it can read their names and whatever hidden **Descriptions** savvy Web designers have attached to them for the benefit of blind visitors.

• **Large Cursor.** This option fattens up the borders of the VoiceOver “cursor” (the box around whatever is highlighted) so you can see it better.

VoiceOver and Braille input take practice and involve learning a lot of new techniques. If you need these features to use your iPad, then visit the more complete guide at [http://support.apple.com/kb/HT3598](http://support.apple.com/kb/HT3598).

Or spend a few minutes (or weeks) at [applevis.com](http://applevis.com), a site dedicated to helping the blind use Apple gear.

**TIP:** VoiceOver is especially great at reading your iBooks out loud. Details are on page 313.

### Zooming

Compared with a computer, an iPad’s screen is fairly small. Every now and then, you might need a little help reading small text or inspecting those tiny graphics.

The Zoom command, delightfully overhauled in iOS 8, is just the ticket; it lets you magnify the screen whenever it’s convenient, up to 500 percent.

Of course, at that point, the screen image is too big to fit the physical glass of the iPad, so you need a way to scroll around on your virtual jumbo screen. That’s where iOS 8’s clever new features come in.

To begin, turn on the master Zoom switch in **Settings ➔ General ➔ Accessibility**. Nothing visible has happened yet.
Now look at the **Zoom Region** control. If it’s set to **Window Zoom**, then zooming will produce a movable rectangular magnifying lens (below). If it’s set to **Full Screen Zoom**, then zooming magnifies the entire screen. (And that, as many Apple Genius Bar employees can tell you, freaks out a lot of people who don’t know what’s happened.)

![Zoom Region Control](image)

All right; you’re ready to zoom. Next time you need to magnify things, do this:

- **Start zooming** by *double-tapping the screen with three fingers.* You’ve either opened up the magnifying lens or magnified the entire screen. The magnification is 200 percent of original size. (Another method: Triple-press the Home button, and then tap **Zoom**.)

  **TIP:** You can move the rectangular lens around the screen by dragging the white oval handle on its lower edge.

- **Pan around inside the lens (or pan the entire virtual giant screen)** by dragging with three fingers.

- **Zoom in more or less** by double-tap/dragging with three fingers. It’s like double-tapping, except that you leave your fingers down on the second tap—and drag them upward to zoom in more (up to 500 percent) or down to zoom out again.

  Once again, you can lift two of your three fingers after the dragging has begun. That way it’s easier to see what you’re doing.
There’s also a **Resize Lens** command in the Zoom menu, described next.

• **Open the Zoom menu** by *tapping the white handle* on the magnifying lens. Up pops a black menu of choices like **Zoom Out** (puts away the lens and stops zooming), **Full Screen Zoom** (magnifies the entire screen, hides the lens), **Resize Lens** (adds handles so you can change the lens’s shape), **Choose Filter** (lets you make the area inside the lens grayscale or inverted colors, to help people with poor vision), and **Show Controller** (the joystick described below). There’s also a slider that controls the degree of magnification, which is pretty handy.

That’s the big-picture description of Zoom. But back in **Settings Æ General Æ Accessibility Æ Zoom**, a few more new controls await:

• **Follow Focus.** When this option is turned on, the image inside the magnifying lens scrolls automatically when you’re entering text. Your point of typing is always centered.

• **Zoom Keyboard.** Do you want the onscreen keyboard to be magnified, too? Most of the time, probably not.

• **Show Controller.** The controller is this weird little onscreen joystick:

  You can drag it with your finger to move the magnifying lens, or the entire magnified screen, in any direction. (It grows when you’re touching it; the farther your finger moves from the center, the faster the scrolling.) It’s an alternative to having to drag the magnified screen with three fingers, which isn’t precise and also blocks your view.
• **Maximum Zoom Level.** This slider controls just how magnified that lens, or screen, can get.

**Tip:** When VoiceOver is turned on, three-finger tapping has its own meaning—"jump to top of screen." Originally, therefore, you couldn’t use Zoom while VoiceOver was on.

You can these days, but you have to add an *extra* finger or tap for VoiceOver gestures. For example, ordinarily, double-tapping with three fingers makes VoiceOver stop talking, but since that’s the "zoom in" gesture, you must now *triple-*tap with three fingers to mute VoiceOver.

And what about VoiceOver’s existing triple/three gesture, which turns the screen off? If Zoom is turned on, you must now *triple-*tap with *four* fingers to turn the screen off.

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**Invert Colors and Grayscale**

By reversing the screen’s colors black for white, like a film negative, you create a higher-contrast effect that some people find is easier on the eyes (facing page, left). To try it out, go to **Settings**→**General**→**Accessibility** and turn on **Invert Colors**. The other colors reverse, too—red for green and so on.

The Grayscale option, new in iOS 8, removes all color from the screen. Everything looks like a black-and-white photo. Once again, it’s designed to help people with poor vision.
Speech

Your iPad can read to you aloud: an email message, a Web page, a text message—anything. Your choices here go like this:

- **Speak Selection** puts a *Speak* command into the button bar that appears whenever you highlight text in any app. Tap that button to make the iPad read the selected text.

- **Speak Screen**, new in iOS 8, simply reads everything on the screen, top to bottom, when you swipe down from the top of the screen with two fingers. Great for hearing an ebook page or email read to you.

- **Speak Auto-Text.** You know how the iPad suggests a word as you type? This option makes the iPad *speak* each suggestion. That effect has three benefits. First, of course, it helps blind people know what they’re typing. Second, you don’t have to take your eyes off the keyboard, which is great for speed and concentration. Third, if you’re zoomed in, you may not be able to see the suggested word appear under your typed text—but now you still know what the suggestion is.
How to De-Sparsify iOS 8’s Design

When Apple introduced the sparse, clean design of iOS 7 (which carries over into iOS 8), thousands blogged out in dismay. “It’s too lightweight! The fonts are too spindly! The background is too bright! There aren’t rectangles around buttons—we don’t know what’s a button and what’s not! The Control Center is transparent—we can’t read it! You moved our cheese—we hate this!”

Well, Apple may not agree with you about the super-lightweight design. But at least it has given you the options to “fix” it. You can make the type bigger and bolder, the colors heavier, the background dimmer. You can restore outlines around buttons. And so much more.
All of these options await in **Settings ➔ General ➔ Accessibility**.

### Larger Text

This option is the central control panel for iOS’s Dynamic Type feature. It’s a game-changer if you, a person with several decades of life experience, often find type on the screen too small.

Using the slider, you can choose a larger type size for all text the iPad displays in apps like Mail, iBooks, Messages, and so on. This slider doesn’t affect all the world’s *other* apps—until their software companies update them to make them Dynamic Type–compatible. That day, when it comes, will be glorious. One slider to scale them all.

**TIP:** The switch at the top, **Larger Accessibility Sizes**, unlocks an even longer slider. That is, it makes it possible for you to make the text in all the Dynamic Type–compatible apps even larger.

### Bold Text

In iOS 8, the system font, Helvetica Neue Light, is fairly light. Its strokes are very thin; in some sizes and lighting conditions, it can even be hard to read.

But if you turn on **Bold Text** (and then tap **Continue** in the confirmation box), your iPad restarts—and when it comes to, the fonts everywhere are slightly heavier: at the Home screen, in email, everywhere. And much easier to read with low light or aging eyesight.

It’s one of the most useful features in iOS 8—and something almost nobody knows about.

### Button Shapes

Among the criticisms of the new iOS design: You can’t tell what’s a **button** anymore! Everything is just words floating on the screen, without border rectangles to tell you what’s tappable!
That’s not quite true; any text in blue type is a tappable button. But never mind that; if you want shapes around your buttons, you shall have them—when you turn on this switch (below, right).

### Increase Contrast

There are three switches in here. **Reduce Transparency** adds opacity to screens like the Control Center and the Notification Center. Their backgrounds are now solid, rather than slightly see-through, so that text on them is much easier to read. (You can see the before and after here.)

![Before and after comparison of Control Center and Notification Center](image)

**Darken Colors** makes type in some spots a little darker and heavier. You notice it in the fonts for buttons, in the Calendar, and in Safari, for example. Finally, **Reduce White Point** tones down the whiteness of iOS 8’s screens, making them slightly dimmer and less harsh.

### Reduce Motion

What kind of killjoy would want to turn off the subtle “parallax motion” of the Home screen background behind your icons, or the zooming-in animation when you open an app?

In any case, you can if you want, thanks to this button.
On/Off Labels

The Settings app teems with little tappable on/off switches, including this one. When something is turned on, the background of the switch is green; when it’s off, the background is white.

But if you’re having trouble remembering that distinction, turn on this option. Now the background of each switch sprouts visible symbols to help you remember that green means on (you see a | marking) and white means off.

Hearing Assistance

The next options in Settings → General → Accessibility are all dedicated to helping people with hearing loss.

Hearing Aids

This settings panel lets you “pair” your iPad with a “Made for iPad” hearing aid. These wireless hearing aids are designed to sound great and not drain the battery.

Mono Audio

If you’re deaf in one ear, then listening to any music that’s a stereo mix can be frustrating; you might be missing half the orchestration or the vocals. When you turn on the Mono Audio option in Settings → General → Accessibility, the iPad mixes everything down so that the left and right channels contain the same monaural playback. Now you can hear the entire mix in one ear.

Tip: This is also a great feature when you’re sharing an earbud with a friend, or when one of your earbuds is broken.

Balance Slider

The L/R slider lets you adjust the iPad’s stereo mix, in case one of your ears has better hearing than the other.
Media (Subtitle Options)

These options govern Internet videos that you play in the iPad’s Videos app (primarily those from Apple’s own iTunes store.)

- **Subtitles & Captioning.** The iPad’s Videos app lets you tap the button to see a list of available subtitles and captions. Occasionally, a movie also comes with specially written Subtitles for the Deaf and Hard of Hearing (SDH). Tap **Subtitles & Captioning → Closed Captions + SDH** if you want that menu to list them whenever they’re available.

  The **Style** option gives you control over the font, size, and background of those captions, complete with a preview. (Tap the button to view the preview, and the sample caption, at full-screen size.) The **Custom** option even lets you dream up your own font, size, and color for the type; a new color and opacity of the caption background; and so on.

- **Video Descriptions.** This new option is for Internet movies that come, or may someday come, with a narration track that describes the action for the blind.

Guided Access (Kiosk Mode)

It’s amazing how quickly even tiny tots can master the iPad—and how easily they can muck things up with accidental taps.

Guided Access solves that problem rather tidily. It’s kiosk mode. That is, you can lock the tablet into one app; the victim cannot switch out of it. You can even specify which features of that app are permitted. Never again will you find your Home screen icons accidentally rearranged or text messages accidentally deleted.

Guided Access is also great for helping out people with motor-control difficulties—or teenagers with self-control difficulties.

To turn on Guided Access, open **Settings → General → Accessibility → Guided Access**; turn the switch On.

Now a **Passcode Settings** button appears. Here’s where you protect Guided Access so the little scamp can’t shut it off—at least not without a four-digit password (**Set Guided Access Passcode**) or your fingerprint (**Touch ID**, a new option in iOS 8).

You can also set a time limit for your kid’s Guided Access. Tap **Time Limit** to set up an alarm or a spoken warning when time is running out.
Finally, the moment of truth arrives: Your kid is screaming for your iPad. Open whatever app you’ll want to lock in place. Press the Home button three times fast. The Guided Access screen appears. At this point, you can proceed in any of three ways:

- **Declare some features off limits.** With your finger, draw a circle around each button, slider, and control you want to deactivate. The iPad converts your circle to a tidy rectangle; you can drag its corners to adjust its size, drag inside the rectangle to move it, or tap the ‒ to remove it if you change your mind or want to start again.

Once you enter Guided Access mode, the controls you’ve enclosed appear darkened. They no longer respond—and your iPad borrower can’t get into trouble.

- **Change settings.** If you tap Hardware Buttons, you get additional controls. You can prevent your little urchin from pressing the Sleep/Wake Button or the Volume Buttons when in Guided Access mode, or from getting a response when rotating or shaking the iPad (Motion) or opening the Keyboards. If you want to hand the iPad to your 3-year-old in the back seat to watch baby videos, you’ll probably want to disable the touchscreen altogether (turn off Touch) and prevent the picture from rotating when the iPad does (turn off Motion).
Here, too, is the **Time Limit Options** button, new in iOS 8. Tap to view hours/minutes dials. At the end of this time, it’s no more fun for Junior.

- **Begin kiosk mode.** Tap **Start**.

Later, when you get the iPad back and you want to use it normally, triple-press the Home button again; enter your four-digit password or offer your fingerprint. At this point, you can tap **Options** to change them, **Resume** to go back into kiosk mode, or **End** to return to the iPad as you know it.

### Switch Control

Suppose your physical skills are limited to very simple gestures: puffing on an air pipe, pressing a foot switch, blinking an eye, or turning the head, for example. A hardware accessory called a **switch** lets you operate certain gadgets this way.

When you turn on Switch Control, the iPad warns you that things are about to get very different. Tap **OK**.

Now the iPad sequentially highlights one object on the screen after another; you’re supposed to puff, tap, or blink at the right moment to say, “Yes, **this** one.”

If you don’t have a physical switch apparatus, you can use one nature gave you: your head. The iPad’s camera can detect when you turn your head left or right and can trigger various functions accordingly.

If you’d like to try it out, open **Settings**Æ**General**Æ**Accessibility**Æ**Switch Control**. Tap **Switches**Æ**Add New Switch**Æ**Camera**Æ**Left Head Movement**.

On this screen, you choose what a left head-turn will mean to your iPad. The most obvious option is **Select Item**, which you could use in conjunction with the sequential highlighting of controls on the screen. But you can also make it mean “Press the Home button,” “Activate Siri,” “Adjust the volume,” and so on.

Once you’ve made your selection, repeat that business for **Right Head Movement**.

When you return to the Switch Control screen, turn on **Switch Control**. Now your iPad is watching you; whenever you turn your head left or right, it activates the control you set up. Pretty wild.
The controls here let you specify how fast the sequential highlighting proceeds, whether or not it pauses on the screen’s first item, how many times the highlighting cycles through each screenful, and so on.

To turn off Switch Control, tap the on/off switch again. Or, if you’re using some other app, triple-press the Home button to open the Accessibility shortcut panel. If you had the foresight to add Switch Control to its options (page 172), then one tap does the trick.

Switch Control is a broad (and specialized) feature. To read more about it, open the Accessibility chapter of Apple’s iPad User Guide: http://help.apple.com/ipad/8/.

AssistiveTouch

If you can’t even hold the iPad, you might have trouble shaking it (a shortcut for “Undo”); if you can’t move your fingers, just adjusting the volume might be a challenge.

This feature is Apple’s accessibility team at its most creative. When you turn AssistiveTouch on, you get a new, glowing white circle near a corner of the screen.
You can drag this magic white ball anywhere on the edges of the screen, though; it remains onscreen all the time.

When you tap it, the white ball expands into the special palette shown on the previous page. It’s offering six ways to trigger motions and gestures on the iPad screen without requiring hand or multiple-finger movement. All you have to be able to do is tap with a single finger—or even a stylus held in your teeth or foot:

- **Siri.** Touch here when you want to speak to Siri. If you do, in fact, have trouble manipulating the iPad, Siri is probably your best friend already. This option, as well as the “Hey, Siri” voice command, mean that you don’t even have to hold down the Home button to start her up.

- **Notification Center, Control Center.** As far as most people know, the only way to open the Notification Center is to swipe down the screen from the top; the only way to open the Control Center is to swipe up from the bottom. These buttons, however, give you another way—one that doesn’t require any hand movement. (Tap the same button again to close whichever center you opened.)

- **Home.** You can tap here instead of pressing the physical Home button. (That’s handy when your Home button gets sticky, too.)

- **Device.** Tap this button to open a palette of six functions that would otherwise require you to grasp the iPad or push its tiny physical buttons (previous page). There’s **Rotate Screen** (you can tap this instead of turning the iPad 90 degrees), **Lock Screen** (instead of pressing the Sleep switch), **Volume Up** and **Volume Down** (instead of pressing the volume keys), and **Mute/Unmute** (instead of flipping the small Mute switch on the side, on iPads that have one).

If you tap **More**, you get some bonus buttons. They include **Shake** (does the same as shaking the iPad to undo typing), **Screenshot** (as though you’d pressed the Sleep and Home buttons together), **Multitasking** (brings up the app switcher, as though you’d double-pressed the Home button), and **Gestures**.

That **Gestures** button opens up a peculiar palette that depicts a hand holding up two, three, four, or five fingers. When you tap, for example, the three-finger icon, you get three blue circles on the screen. They move together. Drag one of them (with a stylus, for example), and the iPad thinks you’re dragging three fingers on its surface. Using this technique, you can operate apps that require multiple fingers dragging on the screen.
• **Favorites.** Impressively enough, you can actually define your own gestures. On the AssistiveTouch screen, tap **Create New Gesture** to draw your own gesture right on the screen, using one, two, three, four, or five fingers.

For example, suppose you’re frustrated in Maps because you can’t do the two-finger double-tap that means “zoom out.” On the Create New Gesture screen, get somebody to do the two-finger double-tap for you. Tap **Save** and give the gesture a name—say, “2 double tap.”

From now on, “2 double tap” shows up on the Favorites screen, ready to trigger with a single tap by a single finger or stylus.

**TIP:** Apple starts you off with one predefined gesture in Favorites: pinch. That’s the two-finger pinch or spread gesture you use to zoom in and out of photos, maps, Web pages, PDF documents, and so on. And now you can trigger it with only one finger; just drag either one of the two handles to stretch them apart. Drag the connecting line to move the point of stretchiness.
Home-Click Speed

If you have motor-control problems of any kind (sleep deprivation and overdoing it at the bachelor party come to mind), you might welcome this enhancement. It’s an option to widen the time window for registering a double-press or triple-press of the Home button. If you choose Slow or Slowest, the iPad accepts double- and triple-presses spaced far and farther apart, rather than interpreting them as individual presses a few seconds apart.

Accessibility Shortcut

Burrowing all the way into the SettingsÆGeneralÆAccessibility screen is quite a slog when all you want to do is flip some feature on or off. Therefore, you get this handy shortcut: a fast triple-press of the Home button.

That action produces a little menu, in whatever app you’re using, with on/off switches for the iPad’s various accessibility features.

It’s up to you, however, to indicate which ones you want on that menu. That’s why you’re on this screen—to turn on the features you want to appear on the triple-press menu. Your options are VoiceOver, Invert Colors, Grayscale, Zoom, Switch Control, and AssistiveTouch.

TIP: If you choose only one item here, then triple-pressing the Home button won’t produce the menu of choices. It will just turn that one feature on or off.
Of all the iPad’s talents, its iPodishness may be the most successful. This function, after all, gets the most impressive battery life. There’s enough room on your iPad to store thousands of songs. And iTunes Radio means that you’ll never run out of music to listen to—and you’ll never have to pay a penny for it.

To enter iPod Land, open the Music app. On a new iPad, it’s at the lower-right corner of the screen.

**TIP:** There’s another way to get to iPod mode. Just swipe upward from the bottom of the screen. That opens the Control Center, whose central feature is the music playback controls and a volume control.

The Music program begins with lists—lots of lists. The icons at the bottom of the screen represent your starter lists: Radio, Playlists, Artists, Songs, Albums, Genres, Compilations, and Composers. Here’s what they all do.

### iTunes Radio

Your iPad includes an amazing gift: your own radio station. Your own empire of radio stations, in fact.

The iTunes Radio service lets you listen to exactly the kind of music you want to hear. It doesn’t just distinguish among genres like jazz or rock—your choices are more like “upbeat male vocals with driving brass section” versus “slow lovesick ballads with lots of strings.”

You don’t get to choose the exact songs or singers you hear; you have to trust iTunes Radio to choose songs based on a song, singer, or music genre that you specify as a “seed.” For example, if you choose Billy Joel as your “seed,” you’ll hear a lot of Billy Joel, but also a lot of other music that sounds more or less like his.
Here’s something you can’t do when you listen to real radio: skip past a song you don’t like. When you tap the button, iTunes Radio instantly skips to the next song it would have played. In fact, you can even tell it **Play More Like This** or **Never Play This Song** to shape your radio station’s future.

In exchange for all this magic, you have to listen to the occasional ad between songs. Unless you subscribe to iTunes Match (page 443), that is, in which case you never hear any ads.

The idea of a “seed song”-based radio service isn’t new, of course. It’s the same idea as Pandora, a Web site and app that has offered precisely the same features for years. But iTunes Radio is built in, it’s incorporated with Siri and the Control Center, and it’s so nice to use. It’s also part of Apple’s larger ecosystem; that is, you can see your same set of “radio stations” on your Mac or PC (in the iTunes app), iPhone, and Apple TV.

### Playing iTunes Radio

The first time you open the Music app, you see a Welcome screen. Tap **Start Listening** to arrive at the main iTunes Radio app. (You may be asked to enter your Apple ID and password. And if you’re not in a WiFi hotspot, the app either lets you know—or offers to use a cellular connection, if you have that kind of iPad.)

Across the top, you get a horizontally scrolling set of “album covers.” They represent ready-made “radio stations” that Apple has supplied for you. Tap the one called **iTunes Top 50: Pop**, for example, and your iPad instantly begins playing the biggest current pop hits.

Below these, you see similar “album covers” for stations you’ve created yourself, as described below. Don’t forget to scroll down to see them all.

### The Now Playing Screen

As a station plays, you see a screen like the one shown on page 178. It displays the cover picture for the song’s album, the name of the song, the band, and the album name.

Here’s what the controls do:

- **. Returns to the Start screen, where you can choose a different radio station.
- **. Opens the Info panel, described below.
- ** Price. Of course, Apple would be thrilled if you came across a song you liked so much you wanted to buy it. That’s why the price button (**$1.29**, for example) is so prominent. When you tap it, the price changes to say **Buy Song**; tap again to download the song directly to
your iPad. Now you can listen to it again, on command, without being subject to the randomness of iTunes Radio.

- **Progress bar.** You can’t fast-forward or rewind within a Radio song. This strip is just a graph that shows you where you are in the song. The numbers on either side show you how far you are into the song and how much is left to play.

- ★. Tap to find the Play More Like This and Never Play This Song buttons, which let you fine-tune your “radio station,” tailoring it precisely to your tastes.

The third button, Add to iTunes Wish List, means, “I like this song; maybe I’ll buy it later.” When you get home to your Mac or PC, open the iTunes program, click Store at the top right, and then click My Wish List (in the list at right). Here’s the list you’ve been quietly building with your taps on the Add to iTunes Wish List button. You can listen to 1-minute previews, buy the complete songs, or delete them from the list if you’ve changed your mind.

**TIP:** You can also take a look at your Wish List right on the iPad. On the main Radio screen, tap History, then Wish List.
• II/▶. Yeah, here’s another thing you can’t do with regular radio: pause.

• ▶. This button doesn’t actually mean “fast-forward.” It means “skip.” You immediately hear the next song.

**NOTE:** You’re allowed to skip up to six songs per hour per station. When you reach that limit, the ▶ is dimmed.

• Volume slider. Of course, you can also press the buttons on the right side of the iPad.

**TIP:** While the music is playing, you can switch off the iPad. The music keeps playing, with the screen off to save battery power. What’s cool is that if you tap the Sleep switch again, the Lock screen looks like the Now Playing screen. That is, it has II/▶, ◀, and ▶ buttons, so you can manage the playback without even having to fully wake the iPad.

### Make Your Own Station

You can set up a new “radio station” of your own in either of two ways: by choosing one of Apple’s canned, ready-to-use stations or by typing in a song or performer you like.

• Prefab stations. On the Radio screen, tap New. Boom: There’s a huge list of music genres—Blues, Christian, Classical, Indie Rock, and so on. Tap one to see a list of prefab radio stations, ready to hear.

If you tap Jazz, for example, the options include Bop, Early Jazz, Jazz Rock, Latin Jazz, and The Big Band Era. Tap a name to listen a little bit. If you like what you hear, tap the tiny ≠ button to its right. You’ve just added a new “radio station” to the iTunes Radio main screen.

• Type in a “seed.” Tap in the search box at the top; the keyboard appears. Type in—or tap the ß and speak—the name of a singer, band, song, or kind of music (show tunes or a cappella, for example).

On the results screen, tap the entry that looks most promising (“A Cappella Radio,” for example). You’ve just created a new station, and it begins instantly.

As your stations build up, they require more scrolling down the main iTunes Radio screen to find. But the New Station button (to create a new station) is always there, always at the very bottom.
The Info Screen

If you tap the button above the Now Playing screen, you’re offered some options that give you more control over whatever’s assaulting your ears:

- **.** This button opens the full list of songs from the album you’re hearing right now. Each, of course, has a price button so that you can buy it. You can also read the album’s reviews (Reviews) and see what other albums its fans have bought (Related).

- **Price.** Tap to buy the song and download it to your iPad.

- **New Station from Artist, New Station from Song.** If a song comes on that you especially like, these buttons instantly create a new station that will play more music that sounds like this performer or this song. In effect, you get to branch your original station into one that’s more finely tuned to a particular taste.
• **Tune This Station** (available for stations you’ve created). Do you want iTunes Radio to feed you the most popular songs within the category you’ve chosen? Or is it OK for it to play weirder, more obscure songs that you might not have heard before? Make your choice by adjusting this slider, from **Hits** (more mainstream) to **Discovery** (more out-there).

• **Add to My Stations** (available for Apple’s suggested stations). Turns the current, Apple-selected station into one of your own.

• **Allow Explicit Tracks.** Turn this switch on if you’re not easily offended by raunchy lyrics.

• **Share Station.** If you’ve created and fine-tuned a station so that it’s truly amazing, you can bestow your superior taste on your friends by sending them a link to your station. Tap this button to produce the standard Share sheet; you can send a station by AirDrop, text message, email, Twitter or Facebook.

Tap outside the info panel to close it.
Deleting or Editing a Station

On the main Radio screen, in the My Stations row, tap Edit. Tap the name of the station you want to mangle or obliterate.

Now you can rename your station or share it. Using the Play More Like This and Never Play This sections, you can add performers, songs, or genres that you do or don’t want to be part of this station anymore.

Finally, if you scroll to the bottom, you can tap Delete Station to vaporize this ill-begotten station for good.

History

At the top of the main Radio screen, the History button opens a list of every song you’ve heard on each of your stations. It’s an amazing way to find out the name of some great song whose name you didn’t catch.

This list also, of course, includes a Buy button for each of those songs.

Siri and iTunes Radio

One of the best ways to control iTunes Radio is by barking orders at it. Luckily, Siri comes equipped to recognize a whole slew of commands pertaining to iTunes Radio.

Here’s a sampler; you don’t have to use these precise wordings.

• Play the radio.

• What song is this?

• Play more like this.

• Don’t play this song again.

• Pause the music; resume the music; skip this song.

• Play Billy Joel Radio or Play some Kelly Clarkson. (These must refer to stations you’ve already created.)

• Add this song to my Wish List.

• Stop the radio.
Playlists

A *playlist* is a group of songs you’ve placed together, in a sequence that makes sense to you. One might consist of party tunes; another might hold romantic dinnertime music; a third might be drum-heavy workout cuts.

In the olden days, you could create playlists only in the iTunes software. (And you still can. After you sync the iPad with your computer, your playlists appear here.) These days, however, you can also create playlists right on the iPad; read on.

Creating Playlists on the iPad

In the Music app, tap Playlists; tap New Playlist (below, left). Type a name for your new playlist (below, bottom), and then tap Save.

Now tap one of the icons at the bottom—Songs, Artists, Albums, and so on—and you’ll find that every song has a + button (below, right). Tap that button, or tap directly on a song’s name, to add to the new playlist. Tap Done when you’ve added all the songs you want.
You arrive at the details screen for this playlist (facing page), where you can inspect or edit your handiwork. Tap **Edit** to rearrange the playlist songs or to delete some. Or tap **Playlists** to back out to the list of playlists, where your newly minted playlist is nestled.

**TIP:** The 🎵 icon means that you own this song, but it’s not currently on your iPad. You can still play it, but only when you’re connected to the Internet. Tap the 🎵 to download it to the iPad for offline playback, or tap **Download All** to download all the online songs.

Whatever playlists you create (or edit) on the iPad will wind up back on your computer, in iTunes, the next time you sync.

**Using Playlists**

To see what songs or videos are in a playlist, tap its name. (The ➔ symbol in a Music menu always means “Tap to see what’s in this list.”) Or swipe rightward across its name.

Here you can use a standard iOS convention: Anywhere you’re asked to drill down from one list to another—from a playlist to the songs inside, for example—you can backtrack by **swiping from the left edge** of the iPad into the screen.

Or do it the long way: Tap ⬅ at the upper-left corner of the screen (or swipe that word to the left). That button’s name always tells you what screen you just came from (Playlists, for example).

You now arrive at a Playlist details screen, where your tracks are listed for your inspection. To start playing a song in the Playlist list, tap it.

Tap **Edit**, if you like, to drag the songs into a new sequence or to delete some of them. Tap **Clear** if you want to choose a different set of songs within this playlist name, or tap **Delete** to get rid of the playlist altogether. (Tapping **Shuffle** starts them playing right now, in a random order.)

**Genius Playlists**

Apple’s Genius playlist feature is supposed to analyze all your music and then, at the click of a button, create a playlist containing other songs from your library that “sound great” with one particular “seed” song. (Basically, it clumps songs by their degree of rockiness: soft-rock songs, harder rock, and so on.)
If you’ve used this feature in iTunes on your Mac or PC, and you’ve built up a Genius playlist or two, you’ll also find those playlists on your iPad. But you can make a Genius playlist right on the tablet.

Creating one of these playlists, however, involves submitting to Apple the contents of your music library, which creeps some people out. To confirm that you’re fine with that, you must begin in Settings → Music, turn on Genius, and accept the legalese.

Then, back in the Music app, on any of its screens, tap the song you want to be the “seed”—the one you want the playlist to sound the most like. It starts to play.

Now tap Create at the top of the screen, and then tap Genius Playlist. Suddenly there’s a new playlist on your Playlists screen called Genius Playlist. It contains a bunch more songs that “go well” with your seed songs. You’re listening to your new Genius playlist.

**NOTE:** That is, if you have enough music on the iPad. If you don’t have a lot of music, you may get the “This song does not have enough related songs” error message. Tap OK and then try a different song. Or just spend $500 on music.

If you consider this batch worth saving, tap Save (top of the Genius Playlist screen). The new playlist now appears among your others on the Playlists screen, named after your seed song, bearing the ∏ logo to remind you that the iPad created that wicked mix.

You can also tap Refresh to make the iPad take another stab at building a similar group of songs, or Delete to get rid of the playlist.

Next time you sync, this playlist will return to the mother ship: iTunes.

If you spot a song you can’t stand, swipe left across it and then tap Remove to delete it from the Genius playlist.

**TIP:** There’s another entity called a Genius mix. Unlike a Genius playlist, a mix is a never-ending “radio station.” You have to create it in iTunes on your computer and then sync it to your iPad. Once you do that, a new Genius button (∏) appears in the Music app on your iPad, providing access to your mixes.
Artists, Songs...

The other icons across the bottom of the Music screen include these:

- **Artists.** This list identifies all the bands, orchestras, or singers in your collection. Even if you have only one song from a certain performer, it shows up here. Once again, you drill down to the list of individual songs by tapping an artist’s name. At that point, tap any song to begin playing it.

- **Songs.** Here’s an alphabetical list of every song on your iPad. Scroll or flick through it; use the index at the right side of the screen to jump to a letter of the alphabet; or scroll all the way to the top and type a song name, album name, podcast name, or band name into the search box. Tap anything to begin playing it.

**TIP:** At the bottom of any of these lists, you’ll see the total number of items in that list: “76 Songs,” for example. At the top of the screen, you may see the Now Playing button, which opens up the playback screen of whatever is playing.

Best of all, if you drag all the way downward on any list—Music, Podcasts, whatever—you’ll see that a search box has been hiding from you, up off the top of the screen. It lets you search your audio stash by name (title, band, or album).

- **Albums.** That’s right, it’s a list of all the CDs or downloaded albums from which your music collection is derived, complete with miniature pictures of the album art. Tap an album’s name to see a list of songs that came from it; tap a song to start playing it.

- **Genres.** Tap this item to sort your collection by musical genre: Pop, Rock, World, Gospel, or whatever.

- **Compilations.** A compilation is one of those albums that’s been put together from many different performers. You know: “Zither Hits of the 1600s,” “Kazoo Classics,” and so on. You’re supposed to turn on the Compilation checkbox manually, in iTunes, to identify songs that belong together in this way. Once you’ve done that, all songs that belong to compilations you’ve created show up in this list.

- **Composers.** Here’s your whole music collection sorted by composer—a crumb the iPad creators have thrown to classical-music fans.

**NOTE:** There used to be entries here for podcasts and iTunes U (lectures, lab reports, movies, and other educational materials supplied to the world by universities). They’re gone now, because Apple would prefer that you use its dedicated Podcasts and iTunes U apps.
Other Lists

If you’ve turned on Home Sharing (page 192), the icons at the bottom of the Music app—usually Radio, Playlists, Artists, Songs and so on—shift around.

A More button appears here, replacing the Composers button. If you tap More, the More screen appears, listing two ways to view your collection: by Composers and by Shared. (Shared lists music that’s sitting on a computer elsewhere in your house, as described later in this chapter.)

Customizing List Land

But what if you’ve turned on Home Sharing, so your Composers button has moved into the More screen—but you like seeing your list of composers? Are you really expected to open up the More screen every time you want to see your list sorted that way?

Nope. You can add Composers to the bottom of the main Music screen, replacing any of the starter categories (Radio, Playlists, Artists, Songs, and so on).

To renovate the starter icons, tap More and then Edit. You arrive at the “Drag the icons to organize tabs” screen.

Drag an icon from the top half of the screen downward, directly onto the existing icon you want to replace. It lights up to show the success of your drag. When you release your finger, the new icon has replaced the old one. Tap Done.

Oh, and while you’re on the Edit screen: You can take this opportunity to rearrange the seven icons at the bottom. Drag them around with your finger. Fun for the whole family!

Playback Control: Now Playing

Whenever a song is playing, the top left of the screen offers all the controls you need to control music playback—some obvious and some not so obvious.

TIP: Here’s a non-obvious one: If the iPad is asleep, press the Home button (or tap the Sleep switch). Why, look—playback controls, right on the Lock screen! You don’t even have to wake or unlock the iPad.
• **Now Playing.** Tap to see a huge version of the cover art, nearly filling the screen. Playback controls and song information are still available.

At the top-left corner of that screen, the ⬅️ means “Return to the list whence this song came.” It takes you back to the list of songs in this album, playlist, or whatever.

• **Album list.** At the top-right corner, the ☐️ icon seems to say “list.” Tap it to view a list of the other songs on this song’s album (next page), where you can jump directly to another cut by tapping its name.

**TIP:** You can double-tap the big album art picture to open the track list, too. It’s a bigger target.

• **Album art.** Most of the screen is filled with a bright, colorful shot of the original CD’s album art. (If none is available—if you’re listening to a song you wrote, for example—you see a big gray generic musical-note picture. You can drag or paste in an album-art graphic—one you found on the Web, for example—in iTunes.)

• **Song info.** Center top: the artist name, track name, and album name.

• **Rating.** If you tap the song’s name, it disappears. It’s replaced by a row of five light-gray dots.

This is your opportunity to rate the song, by tapping one of the five dots at the top edge of the screen. If you tap dot number three, for example, the first three dots all turn into stars. You’ve just given that song three stars. When you next sync your iPad with your computer, the ratings you’ve applied magically show up on the same songs in iTunes. (Tap the album cover to restore the song info and hide the rating.)

• **Scrubber.** This slider reveals two useful statistics: how much of the song you’ve heard, in minutes and seconds (at the left end) and how much time remains (at the right end).

To operate the slider, drag the tiny, vertical-line handle with your finger. You can jump to any spot in the song this way. (Tapping directly on the spot you want to hear doesn’t work.)
TIP: This is very cool: You can control the **speed** of the scrubbing, using this highly secret trick:

Drag the little handle *upward or downward*; the song title changes to show you the new scrubbing speed. As your finger slides farther from the handle, it says “Hi-Speed Scrubbing,” then “Half-Speed Scrubbing,” then “Quarter-Speed Scrubbing,” then “Fine Scrubbing.” The point is to get finer control over your scrubbing, making it easier to locate a specific spot in the tune.

- **Play/Pause button.** The Pause button beneath the album photo looks like this **II** when the music is playing. If you do pause, then the button turns into the Play button (****).
If you’re wearing Apple earbuds, then pinching the microphone clicker serves the same purpose: It’s a Play/Pause control. Incidentally, when you plug in headphones, the iPad’s built-in speaker turns off, but when you unplug the headphones, your music pauses instead of switching abruptly back to the speaker.

**TIP:**

- **Previous, Next (↵, ▶).** These buttons work exactly as they do on an iPod: Tap ↵ to skip to the beginning of this song (or, if you’re already at the beginning, to the previous song). Tap ▶ for the next song.

**TIP:**

- **Volume.** You can drag the round handle of this slider (bottom of the screen) to adjust the volume—or you can use the volume buttons on the right side of the iPad.

**TIP:**

- **Repeat.** If you really love a certain album or playlist, you can command the iPad to play it over and over again, beginning to end. Just tap the Repeat button.

Now you’re offered three looping options: Repeat Off (stop repeating), Repeat Song (loop this song endlessly), and Repeat All (repeat these songs over and over; it might instead say Repeat Album, Repeat Artist, or Repeat Playlist).

**TIP:**

- **Create.** And voilà: Another pop-up list of options. There’s Genius Playlist (create a Genius playlist based on the song you’re listening to, as described on page 181; New Station from Artist; and New Station from Song. These create new iTunes Radio “stations,” as described earlier in this chapter.
• **Shuffle.** Ordinarily, the iPad plays the songs in an album sequentially, from beginning to end. But if you love surprises, tap here so it changes to say **Shuffle All.** Now the album plays in random order.

By the way, there’s nothing to stop you from turning on **Repeat and Shuffle**, meaning that you’ll hear the songs on the album played endlessly, but never in the same order twice.

**Multi(music)tasking**

Once you’re playing music, it keeps right on playing, even if you press the Home button and move on to do some other work on the iPad. After all, the only thing more pleasurable than surfing the Web is surfing it with a Beach Boys soundtrack.

If you’ve got something else to do—like jogging, driving, or performing surgery—tap the Sleep/Wake switch to turn off the screen. The music keeps playing, but you’ll save battery power.

**TIP:** Even with the screen off, you can still adjust the music volume (use the volume buttons on the earbud clicker or the buttons on the side of the iPad), pause the music (pinch the earbud clicker once), or advance to the next song (pinch it twice).

**Speakers and Headphones**

The iPad’s speaker is pretty darned good for such a tiny machine. But the world is full of better speakers—black-and-white Bluetooth wireless speakers, car stereo systems, hi-fi TVs, and fancy headphones. The iPad is especially easy to use with them.

**Bluetooth Wireless**

You can buy amazingly small, powerful Bluetooth stereo speakers that receive your iPad’s music from as far as 20 or 30 feet away—made by Jawbone, Bose, and others.

There are also Bluetooth **headphones.** But when you shop, make sure the headphones say “A2DP stereo”; the headsets for making office iPad calls and so on don’t play **music** over Bluetooth.

Once you’ve bought your headphones or speakers, you have to introduce them to the iPad—a process called **pairing.**
From the Home screen, tap **Settings → Bluetooth**. Turn Bluetooth on (below, top); you see the Searching animation as the iPad wirelessly hunts for your headphones or speakers.

Grab them, turn them on, and start the pairing procedure, as described in the manual. Usually that means holding down a certain button until a tiny light starts flashing. At that point, the headphones’ or speaker’s name appears on the iPad’s screen (below, bottom).

**TIP:** If the headphones or speakers require a one-time passcode—it’s usually 0000, but check the manual—then the iPad’s keyboard appears, so you can type it in.

A couple of seconds later, it says Connected; at this point, any sound that the iPad would ordinarily play through its speakers or earbuds now plays through the wireless ‘phones or speakers. Not just music—which, in general, sounds amazing—but chirps, game sounds, and so on. Oh, and FaceTime calls.

If your headset has a microphone, too, you can even answer and make calls wirelessly. (There’s an Answer button right on the headphones.)

Using Bluetooth wireless stereo does eat up your battery charge faster. But come on: listening to your music without wires, with the iPad still in your bag? How cool is that?
AirPlay
There’s another way to transmit audio wirelessly from the iPad (and video, too). Apple came up with a technology called AirPlay; you can buy AirPlay speakers, amplifiers, and TV sets. The Apple TV is the best-known AirPlay machine.

AirPlay is described on page 190, because most people use it to transmit video, not just audio. But the steps for transmitting to an AirPlay audio gadget are the same.

Switching Among Speakers
When your iPad has a connection to a wireless sound source—a Bluetooth speaker or AirPlay receiver, for example—you need some way to direct the music playback to it.

The answer is the button. It’s on the Control Center (previous page). When you tap it, the iPad offers a button for each speaker (lower right); to switch, tap the one you want.

Instantly, the sound begins flowing from your other sound source. Use the same method to switch back to the iPad’s speakers when the time comes.

Familiar iPod Features
The iPad has a long list of traditional iPod features for music playback. Most of these options await in SettingsÆMusic. (Shortcut: Tell Siri, “Open Music settings.”)

Sound Check
This feature smooths out the master volume levels of tracks from different albums, helping to compensate for differences in their recording levels. It doesn’t deprive you of peaks and valleys in the music volume, of course—it affects only the baseline level.

EQ (Equalization)
Like any good music player, the iPad offers an EQ function: a long list of presets, each of which affects your music differently by boosting or throttling various frequencies. One might bring out the bass to goose up your hip-hop tunes; another might emphasize the midrange for clearer vocals; and so on. “Late Night” is especially handy; it lowers the bass so it thuds less. Your downstairs neighbors will love it.)
Volume Limit

It’s now established fact: Listening to a lot of loud music through earphones can damage your hearing. Pump it up today, pay for it tomorrow.

Portable music players can be sinister that way, because in noisy places like planes and city streets, people turn up the volume much louder than they would in a quiet place, and they don’t even realize how high they’ve cranked it.

That’s why Apple created this volume slider. It lets you limit the maximum volume level of the music.

In fact, if you’re a parent, you can even lock down this control on your child’s iPad; it can be bypassed only with a password. Set the volume slider here, and then, in Settings → General → Restrictions, turn on Volume Limit, as described on page 191.

Group By Album Artist

Suppose you’ve bought a movie soundtrack album or compilation album with a different band on each track.

In iTunes, you can see all these songs listed in a group, thanks to a text field called Album Artist. (There you see the unifying title—the movie name, for example.)

When you turn on this option, the Music app consolidates all those artist names into a single new album-name entry in your Artists list. For example, you’ll see an entry for “Apocalypse Now Soundtrack,” which you can tap to see the individual ’60s songs within it; the individual bands are no longer scattered alphabetically through the Artists list.

TIP: Many soundtrack albums come with their Album Artist identified only as “Various Artists,” and that’s how your iPad will group them. In iTunes, however, you can select all the songs on the album, choose File → Get Info, and change the Album Artist to something more descriptive, like the movie title. When you sync the results back to your iPad, the album will show up in the proper spot in the Artists list.

Show All Music

Ordinarily, the Music app lists all your songs, whether they’re on your iPad or stored online, in your iTunes Store “locker.” (Any song you’ve ever bought on any Apple gadget is available to play or download at any time.)
Because, ordinarily, that’s what you’d want: the option to see all your music, no matter where it’s stored.

If you turn off **Show All Music**, the iPad lists only songs that are actually on it—not the online stuff.

**Genius**

Here’s the master switch for permitting Genius playlists, as described above.

**Playing Music from Your Computer**

Here’s a trick you weren’t expecting: You can store many terabytes of music on your Mac or PC upstairs—and play it on your iPad in the kitchen downstairs.

This nifty bit of wireless magic is brought to you by Home Sharing, a feature of the iTunes program. To set it up, make sure your iPad and computer are on the same WiFi network.

Then, in iTunes on the Mac or PC, open **Preferences**. Click **Sharing**, and turn on “Share my library on my local network.” (You can share only certain playlists, if you like.) Turn on **Require password** and enter your Apple account (iCloud) password. Click **OK**.

Now pick up your iPad. In **Settings**→**Music**, log into Home Sharing using the same Apple ID and password. Finally, open the Music app on the iPad. Tap **More**, tap **Shared**, and tap the name of your computer’s iTunes library. (Later, when you want to return to listening to the stuff on the iPad itself, tap that same **Shared** button, but this time tap the name of your iPad.)

**The iTunes Store**

Just as you can buy apps using the App Store app, you can also browse, buy, and download songs, TV shows, and movies using the iTunes Store app. Anything you buy gets autosynced back to your computer’s copy of iTunes when you get home. Whenever you hear somebody mention a buy-worthy song, for example, you can have it within a minute.

To begin, open the iTunes Store app. The store you see here is modeled on the App Store described in Chapter 9. This time, the buttons at the bottom of the screen include **Music**, **Movies**, **TV Shows**, **Audiobooks**, and so on.

When you tap one of those buttons, the screen offers further drilling-down buttons. For Music, for example, the scrolling horizontal rows of options might include **New Releases**, **Recent Releases**, **Singles**, and **Pre-Orders**.
(Beneath each list is a Redeem button, which you can tap if you’ve been given an iTunes gift certificate or a promo code; a Send Gift button, which lets you buy a song or video for someone else; and an Apple ID button, which can show you your current credit balance.)

**TIP:** You can’t buy TV shows or movies on the cellular network—just in WiFi hotspots. That’s your cell company’s way of saying, “We don’t want you jamming up our precious cellular network with your hefty video downloads, bucko.”

Note, by the way, that you can rent movies from the store instead of buying them outright. You pay only $3, $4, or $5 to rent (instead of $10 to $16 to buy). But once you start watching, you have only 24 hours to finish; after that, the movie deletes itself from your iPad. (If you like, you can sync it to your Mac or PC to continue watching in iTunes—still within 24 hours.)

To search for something in particular, tap Search (top right). The keyboard appears. Type what you’re looking for: the name of a song, movie, show, performer, or album, for example. At any time, you can stop typing and tap the name of a match to see its details. You can use the buttons across the top to restrict the search to one category (just songs or albums, for example).

All these tools eventually take you to the details page of an album, song, or movie. It closely resembles the details page of an app in the App Store—you get an Info page, a page of customer ratings and reviews, and a Related tab that suggests similar masterpieces.

For a song, tap its name to hear a 90-second preview (tap again to stop). For a TV show or movie, tap ▶ to watch the ad or the sneak preview.

If you’re sold, tap the price button to buy the song, show, or album (and tap BUY to confirm). Enter your Apple ID password when you’re asked. (For movies, you can choose either Buy or Rent, priced accordingly.) At this point, your iPad downloads the music or video you bought.

**Purchased Items**

Anything you buy from the iTunes Store winds up in the appropriate app on your iPad. Open the Videos app to see your TV shows and movies or the Music app to see your songs.

You can also inspect them from within the Music app; at the bottom, tap Purchased.
If you do that (and then tap the relevant category, like Music or Movies), you get a pair of tabs:

- **All.** Here’s a list of everything you’ve bought from iTunes, on your iPad or any other Apple machine.

- **Not on This iPad.** This is the cool part. Here you see not just the files on the iPad in your hand, but things you’ve bought on other Apple gadgets—an album you bought on your iPhone, for example, or a song you downloaded to your iPod Touch. (This assumes that you’re using the same Apple ID on all your gizmos.)

The beauty of this arrangement, of course, is that you can tap the name of something that’s Not on This iPad—and then download it. No extra charge.

**TIP:** If you prefer, you can direct your iPad to download those purchases that you make on other gadgets automatically, without your having to tap Not on This iPad. Visit Settings → iTunes & App Store, and turn on the switches for Music, Apps, and/or Books under Automatic Downloads. If you also turn on Use Cellular Data, then your cellular iPad will do this auto-downloading when you’re in any 3G or LTE cellular Internet area, not just in a WiFi hotspot.
So you’ve downloaded one of the store’s millions of songs, podcasts, TV shows, music videos, ringtones, or movies directly to your iPad. Next time you sync, that song will swim *upstream* to your Mac or PC, where it will be safely backed up in iTunes. (And if you lost your connection before the iPad was finished downloading, your Mac or PC will finish the job automatically. Cool.)

The Videos App

The iPad has a separate app for playing TV shows, movies, and other videos. It’s called, of all things, Videos.

If you can’t figure out how to operate this app, then you shouldn’t be allowed to have an iPad. Its tabs are Movies, TV Shows, and Music Videos (or whatever video types you actually have).

**NOTE:** If you’ve turned on Home Sharing (page 192), a tab appears here called Shared. It’s where you see your computers listed so that you can view the videos contained on them instead of on your iPad.

Tap to see the thumbnails of your videos; tap a video to see its plot summary, year of release, and so on. If it’s a TV series, tap an episode in that series, if necessary. Either way, tap ▶ to begin watching.

**NOTE:** If you see a X icon on this screen, it means that this bought or rented movie is not actually on your iPad. If you have a good WiFi signal, you can watch it right now by streaming it (instead of downloading it to your iPad); tap the movie poster to open it, and then tap ▶. Or download it to your iPad by tapping ☐.

If you don’t see that icon, then an Edit button appears instead. Tap it, and then tap the ✖ to delete it.

When you’re playing video, anything else on the screen is distracting, so Apple hides the video playback controls. Tap the screen once to make them appear and again to make them disappear.

Here’s what they do:

- **Done.** Tap this button, in the top-left corner, to stop playback and return to the master list of videos.

- **Scroll slider.** This progress indicator (top of the screen) is exactly like the one you see when you’re playing music. You see the elapsed time, the remaining time, and a white, round handle that you can drag to jump forward or back in the video.
Drag your finger farther (up or down) from the handle to choose a faster or slower scrubbing speed.

• **Zoom/Unzoom.** In the top-right corner, a little + or − button appears if the video’s shape doesn’t exactly match your screen. Tap it to adjust the zoom level of the video, as described on page 198.

• **Play/Pause (▶/■).** These buttons (and the earbud clicker) do the same thing to video as they do to music: alternate playing and pausing.

• **Previous, Next (⏪, ⏯).** Hold down your finger to rewind or fast-forward the video. The longer you hold, the faster the zipping. (When you fast-forward, you even get to hear the sped-up audio.)

If you’re watching a movie from the iTunes Store, you may be surprised to discover that it comes with predefined chapter markers, just like a DVD. Internally, it’s divided up into scenes. To see them, stop playback (tap Done); on the movie page, tap Chapters. Tap a chapter name to skip to that chapter marker—or tap ▶ to return to your original spot.

If you’re wearing the earbuds, you can pinch the clicker twice to skip to the next chapter, or three times to go back a chapter.
• **Volume.** You can drag the round handle of this slider (bottom of the screen) to adjust the volume—or you can use the volume buttons on the right side of the iPad.

• **Language (_LANGUAGE_.)** You don’t see this button often. But when you do, it summons subtitle and alternate-language soundtrack options, just like a DVD player.

• **AirPlay (AIRPLAY).** This symbol appears if you have an Apple TV (or another AirPlay-compatible electronic). Tap it to send your video playback to the TV, as described on page 199.

• **Movie, Special Features, Related.** These days, some movies come with what would once have been called DVD Extras: featurettes, alternate endings, “making of” documentaries, and the like. If your iTunes Store movie came with these extras, the **Special Features** button offers them to you. (**Movie** takes you back to the movie.) And **Related** shows you other movies that Apple thinks you might like because they’re similar to **this** movie.

**TIP:** To delete a video, swipe leftward across its name in the Videos list; tap **Delete** to confirm. (You can always re-download it, of course.)
Zoom/Unzoom

The iPad’s screen is bright, vibrant, and stunningly sharp. Sometimes, however, it’s not the right shape for videos.

Pre-HDTV shows are squarish, not rectangular. So when you watch older TV shows on a rectangular screen, you get black letterbox columns on either side of the picture.

Movies have the opposite problem. They’re usually too wide for the iPad screen. So when you watch movies, you may wind up with horizontal letterbox bars above and below the picture.

Some people are fine with that. After all, HDTVs have the same problem. At least when letterbox bars are onscreen, you know you’re seeing the complete composition of the scene the director intended.

Other people can’t stand letterboxing. You’re already watching on a pretty small screen; why sacrifice some of that precious area to black bars?

Fortunately, the iPad gives you a choice. If you double-tap the video as it plays, you zoom in, magnifying the image so it fills the entire screen. Or, if the playback controls are visible, you can also tap ⬇️ or ⬆️.

Of course, now you’re not seeing the entire original composition. You lose the top and bottom of old TV scenes, or the left and right edges of movie scenes.
Fortunately, if this effect chops off something important—some text, for example—the original letterbox view is just another double-tap away.

(Of course, no zooming happens if the source material is already a perfect fit for the iPad’s screen shape.)

**TV Output**

When you crave a bigger screen, you can play your iPad’s videos on a regular TV. All you need is the right cable: the Apple Digital AV Adapter. It carries both audio and video over a single cable (an HDMI cable).

It *mirrors* what’s on the iPad: your Home screen, email, Safari, and everything else. (Photos and presentations appear on your TV in pure, “video outputted” form, without any controls or other window clutter.)

**AirPlay**

Your iPad also offers wireless projection, thanks to a feature called AirPlay. It transmits music or hi-def video (with audio) from your iPad to an Apple TV (or another AirPlay-equipped receiver) across the room. It’s a fantastic way to send slideshows, movies, presentations, games, FaceTime calls, and Web sites to your TV for a larger audience to enjoy. Whatever’s on the screen gets transmitted.

AirPlay receivers include the Apple TV (version 2 or later), plus speakers, stereos, and audio receivers from Denon, Marantz, JBL, iHome, and other companies.

The iPad and the AirPlay receiver must be on the same WiFi network. Then, when you’re playing a video or music, open the Control Center (page 37), and tap  to see a list of available AirPlay receivers, as illustrated on the next page. If you have an Apple TV, tap its name, then turn its Mirroring switch *On*.

That’s it! Everything on the iPad screen now appears on the TV or sound system. (The iPad’s status bar displays the  icon, so you don’t wander off and forget that every move you make is visible to the entire crowd in the living room.)
You can even turn a Mac into an AirPlay receiver. A $13 program called Reflector (reflectorapp.com) lets you view the iPad’s live image on the Mac’s screen—and hear its sound. There’s also a Record command, so you can create a movie of whatever you’re doing on the iPad.

Reflector is great for trainers, teachers, or product demonstrators. And if you have a projector connected to the Mac, it’s a fantastic way to project your iPad onto a screen that’s even bigger yet.

Oh—and if you have a Mac running OS X Yosemite or later, a free trick awaits. Connect the iPad to the Mac with its white USB cable. Open QuickTime Player. Choose File→New Movie Recording. From the little menu next to the button, choose your iPad’s name.

Now you’re seeing the iPad’s screen on your Mac—and you can record it, project it, or screen-capture it for future generations!
It’s natural and easy and joyful to take pictures with your phone. But an iPad is a big honker. Holding it up blocks your view of your subject—and, often, the view of anyone behind you. Plenty of people heap ridicule on anyone who takes pictures with a tablet, or at least point and snicker at them.

But Apple pretends not to notice. With each new version of the iPad, Apple keeps making the tablet’s camera better. There’s no optical zoom; there’s no flash; and the iPad’s camera isn’t as good as the iPhone’s. But the photos can look every bit as good as what you’d get from a pocket camera. And the hi-def videos are indistinguishable from what you’d get out of a camcorder.

This chapter is all about the iPad’s ability to display photos, take new ones with its camera, and capture videos.

The Camera App

The little hole on the back of the iPad, in the upper-left corner, is its camera.

On the latest iPads, it’s pretty impressive, at least for a tablet cam. The iPad Air 2, for example, has manual exposure control, can shoot 10 shots a second, and does amazingly well in low light.

The earlier iPad models’ cameras aren’t quite as good, but they’re still fine as long as your subject is still and well lit. Action shots may come out blurry, and dim-light shots may come out grainy.

Now that you know what you’re in for, here’s how it works.

Firing Up the Camera

Photographic opportunities are frequently fleeting; by the time you fish the iPad from your backpack, wake it up, slide your finger to unlock it,
press the Home button, find the Camera app, and wait for it to load, the magic moment may be gone forever.

Fortunately, there’s a much quicker way to get to the Camera app when the iPad is asleep:

1. **Press the Home button or Sleep switch to wake the iPad.**
   
   A faint ⬆️ button appears at the lower-right corner of the screen.

2. **Flick the ⬆️ button upward.**

   The Camera app opens directly. This trick shaves an unbelievable amount of time off the old get-to-the-camera method.

   **TIP:** This Camera shortcut bypasses the “enter password” screen (if you’ve put a password or fingerprint restriction on your iPad). Any random stranger who picks up your iPad can jump directly into picture-taking mode.

   That stranger can’t do much damage, though. She can take new photos, or delete the new photos taken during her session—but the photos you’ve already taken are off limits, and the features that could damage your reputation (editing, emailing, and posting photos) are unavailable in the Camera app. You have to open the Photos app to get to those—and that requires the iPad password.

The first time you use the camera, you may be asked if it’s OK to geotag your shots (record where you were when you took them). Unless you’re a burglar or are having an affair, tap OK.

**TIP:** Of course, there’s a hands-free way to fire up the Camera app, too: Tell Siri, “Open camera.”

### The Six Modes of Camera

The Camera app in iOS 8 has been thoroughly made over. By swiping your finger vertically, you switch among its modes. (They’re listed on the right, but you can swipe anywhere on the screen.)
From top to bottom, these are the modes:

- **Time-Lapse.** This mode, new in iOS 8, speeds up your video, yet somehow keeps it stable. You can reduce a 2-hour bike ride into 20 seconds of superfast playback.

- **Slo-Mo** (iPad Air 2). Wow, what gorgeousness! You get a video filmed at 120 frames a second—so it plays back at one-quarter the speed, incredibly smoothly. Fantastic for sports, tender smiles, and cannonballs into the pool.

- **Video.** Here’s your basic camcorder mode.

- **Photo.** This is the primary mode for taking pictures.

- **Square.** You might wonder why Apple would go to the trouble of designating a whole special camera mode to taking square, not rectangular, pictures. Answer: Instagram, the crazy-popular app that takes square pictures and was sold to Facebook for $1 billion.

- **Pano.** Choose this mode to capture super-wide-angle panoramic photos.

All of these modes are described in this chapter, but in a more logical order: still photos first, then video modes.
Photo Mode

Most people, most of the time, use the Camera app to take still photos. It’s a pretty great experience. The iPad’s screen is a huge digital-camera viewfinder. You can turn it 90 degrees for a wider or taller shot, if you like.

Tap the Exposure Point

All right: You’ve opened the Camera app, and the mode is set to Photo. See the yellow box that appears briefly on the screen?

It’s telling you where the iPad will focus, the area it examines to calculate the overall brightness of the photo (exposure), and the portion that will determine the overall white balance of the scene (that is, the color cast).

If you’re taking a picture of people, the iPad’s software tries to lock in on a face—up to 10 faces, actually—and calculate focus and exposure so that they look right.

Tap the sky to make it correctly exposed, even if the beach is now too dark.

Tap the dark beach to brighten it up, although that also brightens up the sky.
But sometimes, there are no faces—and dead center may not be the best place for the iPad to determine the exposure. The cool thing is that you can tap somewhere else in the scene to move that white square—to recalculate the exposure and white balance.

Here’s when you might want to do this tapping:

• **When the whole image looks too dark or too bright.** If you tap a dark part of the scene, the whole photo brightens up; if you tap a bright part, the whole photo darkens a bit. You’re telling the camera, “Redo your calculations so this part has the best exposure; I don’t really care if the rest of the picture gets brighter or darker.” At that point, you can override the iPad’s exposure decision, as described below.

• **When the scene has a color cast.** If the photo looks, for example, a little bluish or yellowish, tap a different spot in the scene—the one you care most about. The iPad recomputes its assessment of the white balance.

• **When you’re in macro mode.** If the foreground object is very close to the lens—4 to 8 inches away—the iPad automatically goes into macro (super closeup) mode. In this mode, you can do something really cool: You can defocus the background. The background goes soft, slightly blurry, just like the professional photos you see in magazines. Just make sure you tap the foreground object.
Adjust Exposure

New in iOS 8: exposure control!

When you tap the screen to set the exposure point, a new control appears: a little yellow sun slider. That’s your exposure control. Slide it up to brighten the whole photo, down to make things darker—a first on the iPad’s built-in camera software.

Often, just a small adjustment is all it takes to add a little splash of light to a dim scene, or to dial the details back into a photo that’s bright white.

To reset the slider to the iPad’s original proposed setting, tap the screen somewhere else, or just aim the iPad at something different for a second.

The point is that the Camera app now lets you fuss with the focus point and the exposure level independently for the first time.

Focus Lock/Exposure Lock

The iPad likes to focus and calculate the exposure before it shoots. Yeah—cameras are funny that way.

That tendency, however, can get in your way when you’re shooting something that moves fast. Horse races, divers. Pets. Kids on merry-go-rounds, kids on slides, kids in your house. By the time the camera has calculated the focus and exposure, which takes about a second, you’ve lost the shot.

Therefore, Apple provides an advanced feature that’s common on professional cameras but rare on tablets: Auto-Exposure Lock and Autofocus Lock. They let you set up the focus and exposure in advance so that there’s zero lag when you finally snap the shot.
To use this feature, point the camera at something that has the same distance and lighting as the subject-to-be. For example, focus at the base of the merry-go-round that’s directly below where your daughter’s horse will be. Or point at the bottom of the water slide before your son is ready to go.

Now hold down your finger on that spot on the iPad’s screen until you see the yellow square blink twice. When you lift your finger, the phrase “AE/AF Lock” appears to tell you that you’ve now locked in exposure and autofocus. (You can tap again to unlock it if you change your mind.)

At this point, you can drag the yellow sun slider to adjust that locked exposure, if you like.

Now you can snap photos, rapid-fire, without ever having to wait while your iPad rethinks focus and exposure.

**Zooming In**

The iPad has a zoom, which can help bring you “closer” to the subject—but it’s a digital zoom. It doesn’t work like a real camera’s optical zoom, which actually moves lenses to blow up the scene. Instead, it basically just blows up the image, making everything bigger, and slightly degrading the picture quality in the process.
To zoom in like this, *spread two fingers* on the screen. As you spread, a zoom slider appears; you can also drag the handle in the slider, or tap + or −, for more precise zooming.

Sometimes, getting closer to the action is worth the subtle image-quality sacrifice.

**The “Rule of Thirds” Grid**

The Rule of Thirds, long held as gospel by painters and photographers, suggests that you imagine a tic-tac-toe grid superimposed on your frame. Then, as you frame the shot, you should position the important parts of the photo on those lines or, better yet, at their intersections.

According to the Rule of Thirds, this setup creates a stronger composition than putting everything in dead center, which is most people’s instinct.

Now, it’s really a *Guideline* of Thirds, or a *Consideration* of Thirds; plenty of photographs are, in fact, strongest when the subject is centered.

But if you want to know where those magic intersections are so that you can at least *consider* the Rule of Thirds, you have to duck into the Settings→Photos & Camera screen to turn it on. Scroll down; turn on *Grid*.

From now on, the iPad displays the tic-tac-toe grid on your viewfinder, for your composition pleasure. (It’s not part of the photo.) You turn it off the same way.
High Dynamic Range (HDR)

Cameras have come a long way, but in one regard, they’re still pathetic: Compared with the human eye, they have terrible dynamic range.

That’s a reference to the scale of bright and dark spots in a single scene. If you see someone standing in front of a bright window, you can probably make out who it is. But in a photo, that person will be a solid black silhouette. The camera doesn’t have enough dynamic range to handle both the bright background and the person standing in front of it.

Sure, you could adjust the exposure so that the person’s face is lit—but in the process, you’d brighten the background into a nuclear-white rectangle.

Until the world’s cameras are as sensitive as our eyes, we can make do with HDR (high dynamic range) photography. That’s when the camera takes three photos (or even more)—one each at dark, medium, and light exposure settings. Then software combines the best parts of all three, bringing details to both the shadows and the highlights.

Believe it or not, your iPad has a built-in HDR feature. It’s not as amazing as what an HDR guru can do in Photoshop—for one thing, you have zero control over how the images are combined, how many are combined, or how much of each is combined. And sometimes the HDR version of the photo looks worse than the original.

**TIP:** Should the iPad save a standard shot in addition to the HDR shot? That’s up to you. In Settings→Photos & Camera, you’ll find the on/off switch for Keep Normal Photo.
But often, an HDR photo does indeed show more detail in both bright and dark areas than a single shot would. In the iPad shot on the previous page, the sky is blown out—pure white. In the half at right, the HDR feature brings back the lost streaks of color.

To use HDR, tap the HDR button at the top of the screen. It has three settings: HDR On, HDR Off, and HDR Auto. The Auto setting, new in iOS 8, means “Use your judgment, iPad. If you think this is a scene with bright brights and dark darks, and would therefore benefit from your own HDR feature, please use HDR automatically.” Take your best shot.

When you inspect your photos later in the Photos app, you’ll know which ones were taken with HDR turned on; when you tap the photo, you’ll see the HDR logo at the upper-left corner.

**Taking the Shot**

All right. You’ve opened the Camera app. You’ve set up the focus, exposure, grid, HDR, and zoom. If, in fact, your subject hasn’t already left the scene, you can now take the picture.

You can do that in any of three ways:

- Tap the shutter (○) button.
- Press either of the physical volume buttons on the right edge of the iPad.

  Pressing a physical key feels more natural than, and doesn’t shake the camera as much as, tapping the onscreen ○ button. Unfortunately, the volume keys are at the top left edge if you’re holding the iPad sideways (in landscape orientation).

- Press a volume button on your earbuds clicker (if you bought earbuds)—a great way to trigger the shutter without jiggling the iPad in the process, and a more convenient way to take “selfies.”

Either way, if the iPad isn’t muted, you hear the snap! sound of a picture successfully taken.

You get to admire your work for only about half a second—and then the photo slurps itself into the thumbnail icon at the lower-right corner of the screen. To review the photo you just took, tap that thumbnail icon.

At this point, to look at other pictures you’ve taken, tap All Photos at the top of the screen.

This is your opportunity to choose a photo (or many) for emailing, texting, posting to Facebook, and so on; tap Select, tap the photos you want, and then tap the Share button (). See page 228.
Burst Mode (iPad Air 2)

Every iPad snaps photos over and over if you keep your finger pressed on the button or a volume key.

But the iPad Air 2 takes them quickly—10 shots a second. That’s a fantastic feature when you’re trying to study something that happens very fast: a golf swing, a pet trick, a toddler sitting still.

All you have to do is keep your finger pressed on the or the volume key. A counter rapidly increments, showing you how many shots you’ve fired.

Better yet, the iPad helps you clean up the mess afterward—the hassle of hand-inspecting all 230 photos you shot, trying to find the ones worth keeping.
Tap the lower-right thumbnail to view your burst shot. To help keep you sane, the iPad depicts it as a single photo, with the phrase “Burst (72 photos)” (or whatever) in the corner of the screen. (In the Camera Roll, its thumbnail bears multiple frames, as though it’s a stack of slides.)

Here’s where it gets cool.

If you tap Select, you see all frames of the burst in a horizontally scrolling row. Underneath, you see an even smaller “filmstrip” of them—and a few of them are marked with dots.

These are the ones the iPad has decided are the keepers. It does that by studying the clarity or blur of each shot, examining how much one frame is different from those around it, and even skipping past shots where somebody’s eyes are closed. Tap the marked thumbnails to see if you approve of the iPad’s selections.

Whether you do or not, you should work through the larger thumbnails in the burst, tapping each one you want to keep. (The small circle in the corner sprouts a blue checkmark.)

When you tap Done, the iPad asks: “Would you like to keep the other photos in this burst?” Tap Keep Everything to preserve all the shots in the burst, so you can return later to extract a different set of frames; or Keep Only 2 Favorites (or whatever number you selected) to discard the ones you skipped.

**TIP:** In iOS 8, the front-facing camera can capture burst mode, too.

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**Self-Portraits (the Front Camera)**

The iPad has a second camera, right there on the front, above the screen. The point, of course, is that you can use the screen itself as a viewfinder to frame yourself, experiment with your expression, and check your teeth.

To activate the front camera, open the Camera app and then tap the ✖️. Suddenly, you see yourself on the screen. Frame the shot, and then tap the ◎ button to take the photo.

Now, don’t get your expectations too high. The front camera is not the back camera. It’s much lower resolution. But when your goal is a well-framed self-portrait that you’ll use on the screen—in an email or on a Web page, for example, where high resolution isn’t very important—then having the front camera is better than not having it.

**The Self Timer**

A self-timer is an extremely useful camera feature. It’s essential when you want to be in the picture yourself; you can prop the iPad on something and
then run around to join the group photo. It’s also a great way to prevent camera shake (which produces blurry photos), because your finger won’t jostle the iPad in the process of pressing the shutter button.

As of iOS 8, you no longer have to download a self-timer app. Just tap the 🕒 icon, and then tap 3s (a 3-second countdown) or 10s (a 10-second countdown).

Now, when you tap ⌚ or press the volume key, a huge countdown appears on the screen. After the countdown, the iPad takes the picture all by itself. (If the sound is on, you’ll hear the shutter noise.)

Correction: The iPad takes 10 pictures, in burst mode. The iPad logically assumes that if you’re using the self-timer, then you’re not there to help frame the shot and know when everybody’s eyes are open. So it takes 10 shots in a row; you can weed through them later to find the best shot.

**TIP:** The self-timer is available for both the front and back cameras. In other words, it’s also handy for selfies.

**Square Mode**

No longer do you have to download a special app (*cough* Instagram *cough*) just to take perfectly square photos, the way all the cool kids do these days. Just swipe across the screen until you enter Square mode.
In Square mode, the photos the Camera app takes are square instead of rectangular (4 × 3 proportions). Otherwise, everything you’ve read in this chapter, and will read, is exactly the same in Square mode.

**Pano Mode**

Here’s one of the best camera features of the iPad: panoramic photographs. The iPad lets you capture a 240-degree, ultra-wide-angle, 30-megapixel photo by swinging the iPad around you in an arc. The iPad creates the panorama in real time (you don’t have to line up the sections yourself).
Next time you’re standing at the edge of the Grand Canyon—or anything else that requires a really wide or tall angle—keep this feature in mind.

Once you’ve opened the Camera app, swipe upward until you reach Pano mode.

**TIP:** The big white arrow tells you which way to move the iPad. But you can reverse it (the direction) just by tapping it (the arrow) before you begin.

Tap (or press a volume key). Now, as instructed by the screen, swing the iPad around you—smoothly and slowly, please. You have to hold the iPad upright (portrait orientation) to swing around you horizontally. You can also turn it sideways to swing vertically (to capture something very tall).

As you go, the screen gives you three kinds of feedback:

- It says “Slow down” if you start swinging too fast. Truth is, as far as the iPad is concerned, the slower the better.

- It says “Move up” or “Move down” if you’re not keeping the iPad level. Use the big white arrow itself like a carpenter’s level; you’ll leave the center line if you’re not staying level as you move your arm.

- The preview of your finished panorama builds itself as you move. That is, you’re seeing the final product, in miniature, while you’re still taking it.

You’ll probably find that 240 degrees—the maximum—is a really wide angle. You’ll feel twisted at the waist like taffy. But in fact you can end the panorama at any stage, just by tapping the button.

When you do finally tap, you’ll find that the iPad has taken a very wide, amazingly seamless photograph at very high resolution. If a panorama is too wide, you can crop it, as described later in this chapter.

If you snap a real winner, you can print it out at a local graphics shop, frame it, and hang it above the entire length of your living-room couch.
Video Mode

You can record video as well as still photos. It’s smooth (30 frames per second), sharp, colorful video that does surprisingly well in low light. It’s probably the best-looking video a tablet can take.

The video is the best flavor of high definition (1080p)—and it’s even stabilized to prevent hand jerkiness, just like a real camcorder is. You can also use a gorgeous, 120-frames-per-second slow-motion mode that turns even frenzied action into graceful, liquidy visual ballet.

Using video is almost exactly like taking stills. Open the Camera app. Swipe up until you’ve selected Video mode. You can hold the iPad either vertically or horizontally, although most people on the Internet will spit on you for capturing tall-and-thin videos (because they don’t fit horizontal screens well, including YouTube, laptops, and TVs).

TIP: When you switch from still-photo mode to video, you may notice that the video image on the screen suddenly jumps bigger, as though it’s zooming in. And it’s true: The iPad is oddly more “zoomed in” in camcorder mode than in camera mode.

Tap to compute focus, exposure, and white balance, as described on the previous pages. (You can even hold your finger down to trigger the exposure and focus locks, or drag the tiny yellow sun to adjust exposure manually, as described earlier.)

Then tap Record (●)—or press a volume key on the edge of the iPad—and you’re rolling! As you film, a time counter ticks away at the top.
Things to Do While You’re Rolling

Once you’ve begun capturing video, don’t think your work is done. You can have all kinds of fun during the recording. For example:

- **Change focus.** You can change focus while you’re filming, which is great when you’re panning from a nearby object to a distant one. Refocusing is automatic, just as it is on regular camcorders. But you can also force a refocusing (for example, when the iPad is focusing on the wrong thing) by tapping in your “viewfinder” to specify a new focus point. The iPad recalculates the focus, white balance, and exposure at that point, just as it does when you’re taking stills.

- **Zoom in.** You can zoom in while you’re filming, up to 3x actual size. Just spread two fingers on the screen, like you would to magnify a photo. Pinch two fingers to zoom out again.

**TIP:** Once you start to zoom, a zoom slider appears on the screen. It’s much easier to zoom smoothly by dragging its handle than it is to use a two-finger pinch or spread.

So here’s a smart idea: Zoom in slightly before you start recording, so that the zoom slider appears on the screen. Then, during the shot, drag its handle to zoom in, as smoothly as you like.

When you’re finished recording, tap 🎬. The iPad stops recording and plays a chime; it’s ready to record another shot.

There’s no easier-to-use camcorder on earth. And, man, what a lot of capacity! Each individual shot can be an hour long—and on the 128-gigabyte iPad, you can record 68 hours of video. Which ought to be just about long enough to capture the entire elementary-school talent show.

The Front Camera

You can film yourself, too. Just tap 📹 before you film to make the iPad use its front-mounted camera. The resolution is lower than the back camera’s, but it’s still high definition.

Slo-Mo Mode

If you have an iPad Air 2, you’re a lucky duck: Your Camera app has an additional mode called Slo-Mo. (Swipe down until Slo-Mo is selected.)

Capturing video in this mode is exactly like capturing video the regular way—but behind the scenes, the iPad is recording 120 frames a second instead of the usual 30.
When you open the captured movie to watch it, you’ll see something startling and beautiful: The clip plays at full speed for 1 second, slows down to one-quarter or one-eighth speed, and, for the final second, accelerates back to full speed. It’s a great way to study sports action, cannonball dives, and shades of expression in a growing smile.

What you may not realize, however, is that you can adjust where the slow-motion effect begins and ends in the clip. When you open the video for playback, a strange kind of ruler track appears above it. Drag the vertical handles inward or outward to change the spot where the slow motion begins and ends. (Use the thick white vertical bar in the “filmstrip” at top to scrub through the clip to see where you are.)

**Time-Lapse Mode**

Whereas Slo-Mo mode is great for slowing down fast scenes, the new Time-Lapse mode speeds up slow scenes: flowers growing, ice melting, candles burning, and so on.

Actually, this mode might better be called hyperlapse. Time-lapse implies that the camera is locked down while recording. But in a hyperlapse video, the camera is moving. This mode works great for bike rides, hikes, drives, plane trips, and so on; it compresses even multihour events down to under a minute of playback, with impressive smoothness.
So how much does the Time-Lapse mode speed up the playback? Answer: it varies. The longer you shoot, the greater the speed-up. The app accelerates every recording enough to play back in 20 to 40 seconds, whether you film for 1 minute, 100 minutes, or 1,000 minutes.

If you film for less than 20 seconds, your video plays back at 15 times original speed. But you can film for much, much longer, like 30 hours or more. Time-Lapse mode speeds up the result from 15x, 240x, 960x—whatever it takes to produce a 20- to 40-second playback.

**Trimming a Video**

To review whatever video you’ve just shot, tap the thumbnail icon at the lower-right corner of the screen. You’ve just opened up the video playback screen. Tap ▶ to play back the video.

What’s really cool, though, is that you can edit this video right on the iPad. You can trim off the dead air at the beginning and the end.

To do that, tap the screen to make the scroll bar appear at the top (if you don’t already see it). Then drag the ( and ) markers (currently at the outer ends of the little filmstrip) inward so that they turn yellow. Adjust them, hitting ▶ to see the effect as you go.
TIP: You can drag the playback cursor—the vertical white bar that indicates your position in the clip—with your finger. That’s the closest thing you get to Rewind and Fast-Forward buttons. (In fact, you may have to move it out of the way before you can move the end handles for trimming.)

When you’ve positioned the handles so that they isolate the good stuff, tap Trim.

Finally, tap either Trim Original (meaning “shorten the original clip permanently”) or Save as New Clip (meaning “leave the original untouched, and spin out the shortened version as a separate video”).

iMovie for iPad

Of course, there’s more to editing than just snipping dead air from the ends of a clip. That’s why Apple made iMovie for iPad. It’s free on a new iPad or $5 if it didn’t come with your iPad.

The Photos App

Once you’ve taken some photos, or copied them to your iPad from your computer (see Chapter 14), you’ll have some pictures ready to view. Presenting them, sharing them, editing them, and slideshowing them is the job of the Photos app.

TIP: The Photos app is fully rotational. That is, you can turn the iPad 90 degrees. Whether you’re viewing a list, a screen full of thumbnails, or an individual photo, the image on the screen rotates, too, for easier admiring. (Unless, of course, you’ve turned on Lock Rotation.)

At the bottom of the Photos app screen, three tabs lie in wait: Photos, Shared, and Albums. The next few sections explain what they do.
The Photos Tab

In the olden days, the Photos app displayed all your photos—thousands of them—in one endless, scrolling mass. If you were hunting for a particular shot, you had to study the thumbnails with an electron microscope.

Now, though, iOS groups them intelligently into sets that are easy to navigate. Here they are, from smallest to largest:

- **Moments.** A *moment* is a group of photos you took in one place at one time—for example, all the shots at the picnic by the lake. The iPad even uses its own GPS to give each moment a name: “San Francisco, California (Union Square),” for example.

  **TIP:** If you tap a Moment’s name, a map opens up; little photo thumbnails show exactly where these pictures were taken. Slick!
• **Collections.** Put a bunch of moments together, and what do you get? A collection. Here again, the iPad tries to study the times and places of your photo taking—but this time, it puts them into groups that might span a few days and several locations. You might discover that your entire spring vacation is a single collection, for example.

• **Years.** If you “zoom out” of your photos far enough, you wind up viewing them by year: 2014, 2015, and so on.

To “zoom in” from larger groupings to smaller ones (**Years**→**Collections**→**Moments**), just tap each pile of thumbnails. If you tap a thumbnail on the Moments screen, you open that photo for viewing.

**TIP:** When you first open a photo, it appears on a white background. Tap the photo to change the background to black, which often makes your photos’ colors look better.

To “zoom out” again, tap the grouping name at top left (**Years**, for example).

**TIP:** If you’ve opened a single photo for examination, you can retreat to the *moment* it came from by pinching with two fingers.

The last technique worth knowing is the Finger Browse. Whenever you’re looking at a tiny grid of tiny thumbnail images (in a Year or Collection), hold your finger down within the batch. A larger thumbnail sprouts from your finger, as on this sunset shot here—

—and you can slide your finger around within the mosaic to find a particular photo, or a batch of them.
The Albums Tab

(The second tab is actually the Shared tab, but we’re skipping over it for now; see page 250.)

The Albums tab, completely redefined in iOS 8, is a scrolling list of special-
ized photo “folders” like these:

• **Camera Roll** means “pictures you’ve taken with the iPad” (as opposed to “pictures you’ve imported from your computer”). If you see All Photos instead, it’s because you’ve turned on iCloud Photo Library (page 255).

• **My Photo Stream** holds the last 1,000 pictures you’ve taken or imported on any of your Apple gadgets; see page 246.

• **Favorites.** This folder gives you quick access to your favorite photos. And how does the iPad know? Easy: You’ve told it which photos are your favorites. You’ve tapped the ❤️ icon above a photo, anywhere within the Photos app. (Favorites must be photos you’ve taken with the iPad, not transferred from your computer.)

• **Panoramas, Videos, Slo-Mo, Time-Lapse, Bursts.** As a convenience to you, these categories give you one-tap shopping for everything you’ve captured using the Camera app’s specialized picture and video
modes. Super handy when you’re trying to show someone your latest time-lapse masterpiece, for example; you know where to look for it.

- **Events** means all the photos you’ve selected to copy from your Mac or PC. (You don’t see Events if you haven’t copied any over.)

- **Faces.** Both iPhoto and Aperture, Apple’s Mac photography programs, have features that let you identify, by name, the people whose faces are in your photos. Once you’ve given the software a running start, it can find those people in the rest of your photo collection automatically. That’s handy every now and then—when you need photos of your kid for a school project, for example.

Here you’ll find a list of everyone whose faces you identified on your Mac—and every picture of that person. (Again, Faces doesn’t appear if you don’t use that feature.)

- **Albums.** Here you get a list of albums—whatever you’ve copied to the iPad from your Mac or PC (if any).

- **Recently Deleted.** iOS 8 offers you a new safety net. Even after you think you’ve deleted a photo or video from your iPad, you have 30 days to change your mind. Deleted pictures and videos sit in this folder, quietly counting down to their own doomsdays.

If you wind up changing your mind, you can open Recently Deleted, tap the photo you’d condemned, and tap Recover. It pops back into its rightful place in the Photos app, saved from termination.

On the other hand, you can also zap a photo into oblivion before its 30-day countdown is up. Tap to open it, tap Delete, and then confirm with Delete Photo. If you tap Select, you can also hit Delete All or Recover All.

As you’d guess, you can drill down from any of these groupings to a screen full of thumbnails, and from there to an individual photo.

**TIP:** If you hold your finger down on the photo or even its thumbnail, a Copy button appears. That’s one way to prepare for pasting a single photo into an email message, an MMS (picture or video) message to a phone, and so on.
**Hide a Photo**

Here’s a quirky new iOS 8 feature: It’s now possible to hide a photo from the Photos tab (Moments, Collections, and Years), so that it appears only on the Albums tab (in your albums and in a special Hidden folder).

Apple noticed that lots of people use their iPads to take screenshots of apps, pictures of whiteboards or diagrams, shots of package labels or parking-garage signs, and so on. These images aren’t scenic or lovely; they’re not really memories; they don’t look good (or serve much purpose) when they appear nestled in with your shots-to-remember in Moments, Collections, and Years. (Hidden photos don’t appear in slideshows, either.)

To hide a picture, hold your finger down (either on its thumbnail or its opened image). On the button bar, tap **Hide**. To confirm, tap **Hide Photo**.

Whatever photos you hide go to a new folder on the Albums tab—called, of course, **Hidden**, so that you can find them easily. From here, you can un-hide a shot by holding your finger down on it and tapping **Unhide**.

**Flicking, Rotating, Zooming, Panning**

Once a photo is open at full size, you have your chance to perform the four most famous and most dazzling tricks of the iPad: flicking, rotating, zooming, and panning a photo.

- **Flicking** right to left is how you advance to the next picture or movie in the batch. (Flick from left to right to view the previous photo.)

- **Rotating** is what you do when a horizontal photo or video appears on the upright iPad, which fills most of the screen with blackness. Just turn the iPad 90 degrees in either direction. Like magic, the photo itself rotates and enlarges to fill its new, wider canvas. No taps required. (This doesn’t work when the iPad is flat on its back—on a table, for example. It has to be more or less upright. It also doesn’t work when Portrait Orientation is locked.)

  This trick also works the other way: You can make a **vertical** photo fit better by turning the iPad upright.

- **Zooming** a photo means magnifying it, and it’s a blast. One quick way is to double-tap the photo; the iPad zooms in on the portion you tapped, doubling its size.

  Another technique is to use the two-finger spread, which gives you more control over what gets magnified and by how much.
Once you’ve spread a photo bigger, you can then pinch to scale it down again. Or just double-tap to restore the original size. (You don’t have to restore a photo to original size before advancing to the next one, though; if you flick enough times, you’ll pull the next photo onto the screen.)

- **Panning** means moving a photo around on the screen after you’ve zoomed in. Just drag your finger to do that; no scroll bars are necessary.

**TIP:** When the iPad is rotated, all the controls and gestures reorient themselves. For example, flicking right to left still brings on the next photo, even if you’re now holding the iPad the wide way.

**Finding Photos**

Yep, there’s now a search feature in the iOS 8 Photos app. Which might seem odd. How can you search for a blob of pixels? How does the iPad know what’s in a picture?

It doesn’t. All you can search for is the data associated with a photo: time, place, album name.

To try it out, tap the \( \text{Q} \) at the top of the Photos or Albums screens. Right off the bat, the iPad offers some one-tap canned searches based on location (like *Nearby* and *Home*) and dates (like *February 2015*). Tap to see the photos that match.
Or you can type in a place, date, name, or album. Try typing **september**, or **tucson**, or **bay area**, or **2014**, for example. As you type, iOS 8 displays all the photo groupings that match what you’ve typed so far.

Tap that grouping to see the photo thumbnails within.

**Deleting Photos**

If some photo no longer meets your exacting standards, you can delete it. But this action is trickier than you may think.

- **If you took the picture using the iPad**, no sweat. Open the photo; tap 🗑️. When you tap **Delete Photo**, that picture is gone. Or, rather, it’s moved to the **Recently Deleted** folder described on page 224; you have 30 days to change your mind.

- **If the photo was synced to the iPad from your computer**, you can’t delete it right on the iPad. Instead, delete it from the original album on your computer (which does **not** mean deleting it from the computer altogether). The next time you sync the iPad, the photo disappears from it, too.

**Photo Controls**

Once you’ve opened a photo, some useful controls appear. (Tap anywhere to hide them and summon a black background, for more impressive photo presentation.)
• **Album name.** The name in the upper-left corner specifies which group this photo came from. Tap there to return to that batch.

• **Date and time.** The top of the screen says “September 13, 12:52 pm,” for example, letting you know when this photo was taken.

• **Edit.** This button is the gateway to the iPad’s photo-editing features, described in the following pages.

• **Share icon.** Tap in the lower left if you want to do something more with this photo than just stare at it. You can use it as your iPad’s wallpaper, print it, copy it, text it, send it by email, use it as somebody’s headshot in your Contacts list, post it on Twitter or Facebook, and so on. These options are all described later in this chapter.

• **Favorite icon.** When you find a picture you really love—enough that you might want to call it up later to show people—tap the new button above it. This photo or video now appears in the Favorites folder (in the Albums tab of the Photos app, described earlier), so that it’s easy to find with your other prize-winners. (The appears only on photos you’ve taken with the iPad—not pictures you’ve imported from computers or other cameras.)

### Editing Photos

Yes, kids, it’s true: You can crop and edit your pictures right on the iPad. The tools Apple gives you aren’t exactly Photoshop, but they’ve been substantially beefed up in iOS 8.

To edit a photo, tap its thumbnail (anywhere in the Photos app) to open it. Tap **Edit** in the upper right.

Now you get four buttons, plus **Cancel** and **Done**. Their names aren’t shown, but their functions (from top) are **Auto-Enhance**, **Crop/Straighten**, **Filters**, **Adjust Color**, and (sometimes) **More**. Read on.

**NOTE:** All the changes described on these pages are **nondestructive**. That is, the Photos app never forgets the original photo. At any time, hours or years later, you can return to the Edit screen and undo the changes you’ve made (tap **Revert**). You can recrop the photo back to its original size, for example, or turn off the Auto-Enhance button. In other words, your changes are never really permanent.
**Auto-Enhance (🔧)**

When you tap this magical button, the iPad analyzes the relative brightness of all the pixels in your photo and attempts to “balance” it. After a moment, the app adjusts the brightness and contrast and intensifies dull or grayish-looking areas. Usually, the pictures look richer and more vivid as a result.

You may find that Auto-Enhance has little effect on some photos, only minimally improves others, and totally rescues a few. In any case, if you don’t care for the result, you can tap the 🛠️ button again to turn Auto-Enhance off.

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**Crop/Straighten (unwrap)**

In iOS 8, this button opens a crazy new editing screen. Here you adjust the size, shape, and angle of the photo.

When you tap � проведи, something magical happens: iOS 8 analyzes whatever horizontal lines it finds in the photo—the horizon, for example, or the roof line of a building—and uses it as a guide to straighten the photo automatically. It’s very smart, as you can see in the example on the next page at top.

See how the photo has been tilted slightly—and enlarged slightly to fill the frame without leaving triangular gaps?
You can reject the iPad’s proposal (tap **RESET**). Or you can tilt the photo more or less (drag your finger vertically to the right of the photo), up to 90 degrees.

If you want to rotate the photo more than 90 degrees— for example, if the camera took it sideways—tap as many times as necessary to turn the picture upright.

The other work you can do in this mode is **cropping**.

Cropping means shaving off unnecessary portions of a photo. Usually, you crop a photo to improve its composition—adjusting where the subject appears within the frame of the picture. Often, a photo has more impact if it’s cropped tightly around the subject, especially in portraits. Or maybe you want to crop out wasted space, like big expanses of background sky. If necessary, you can even chop a former romantic interest out of an otherwise perfect family portrait.

Cropping is also very useful if your photo needs to have a certain **aspect ratio** (length-to-width proportion), like $8 \times 10$ or $5 \times 7$.

To crop a photo you’ve opened, tap , if it’s not already selected. A white border appears around your photo. Drag inward on any edge or corner. The part of the photo that the iPad will eventually trim away is darkened.
You can re-center the photo within your cropping frame by dragging any part of the photo, inside or outside the white box. Adjust the frame and drag the photo until everything looks just right.

Ordinarily, you can create a cropping rectangle of any size and proportions, freehand. But if you tap the select button, you get a choice of eight canned proportions: Square, 3 × 2, 3 × 5, 4 × 3, and so on. They make the app limit the cropping frame to preset proportions.

This aspect-ratio feature is especially important if you plan to order prints of your photos. Prints come only in standard photo sizes: 4 × 6, 5 × 7, 8 × 10, and so on. But unless you crop them, the iPad’s photos are all 3 × 2, which doesn’t divide evenly into most standard print photograph sizes. Limiting your cropping to one of these standard sizes guarantees that your cropped photos will fit perfectly into Kodak prints. (If you don’t constrain your cropping this way, then Kodak—not you—will decide how to crop them to fit.)

**TIP:** The Original option here maintains the proportions of the original photo even as you make the grid smaller.

When you tap one of the preset sizes, the cropping frame stays in those proportions as you drag its edges. It’s locked in those proportions unless you tap the select button and choose a different setting.
Adjust Color (ıldığı)

The people have spoken: They want control over color, white balance, tint, and so on. In iOS 8, you get it—in spades.

When you tap ⌘, you’re offered three adjustment categories: **Light**, **Color**, and **B&W**.

When you tap one of these categories, you see a “filmstrip” beside your photo. You can drag your finger across it, watching the effect on your photo.

**TIP:** Actually, when you’re making any of the adjustments described on these pages, you don’t have to drag across the filmstrip. You can drag your finger left or right across the **photo itself**—a bigger target.

As it turns out, each of these sliders controls a handful of variables, all of which it’s changing simultaneously. For example, adjusting the Light slider affects the exposure, contrast, brights, and darks all at once (below).
Intriguingly, you can tap to see how the master slider has affected these qualities—or even adjust these sub-sliders yourself. For example:

- **Light.** When you drag your finger along the **Light** filmstrip, you’re adjusting the exposure and contrast of the photo. Often, a slight tweak is all it takes to bring a lot more detail out of the shot.

For much finer control, tap . You open your “drawer” of additional controls: **Exposure** (adjusts the brightness of all pixels), **Highlights** (pulls lost details out of very bright areas), **Shadows** (pulls lost details out of very dark areas), **Brightness** (like Exposure, but doesn’t brighten parts that are already bright), **Contrast** (heightens the difference between the brightest and darkest areas), **Black Point** (determines what is “black”; shifts the entire dark/light range upward or downward). Once again, you drag your finger along the “film strip” (or the photo itself) to watch the effect on your photo above.

- **Color.** The **Color** filmstrip adjusts the tint and intensity of the photos’ colors. Here again, just a nudge can sometimes liven a dull photo or make blue skies “pop” just a little more.

Tap to see the three sliders that make up the master **Color** control. They are **Saturation** (intensity of the colors—from vivid fake-looking Disney all the way down to black and white), **Contrast** (deepens
the most saturated colors), and Cast (adjusts the color tint of the photo, making it warmer or darker overall).

• B&W stands for black and white. The instant you touch this filmstrip, your photo goes monochrome, like a black-and-white photo. It’s hard to describe exactly what happens when you drag your finger—you just have to try it—except to note that the app plays with the relative tones of blacks, grays, and whites, creating variations on the black-and-white theme.

Tap to see the component sliders: Intensity (the strength of the lightening/darkening effect), Neutrals (brightness of the middle grays), Tone (intensifies the brightest and darkest areas), and Grain (simulates the “grain”—the texture—of film prints; the farther you move the slider, the higher the “speed of the film” and the more visible the grain).

TIP: You can perform all of these adjustments with the iPad held either horizontally or vertically. The filmstrip jumps to the right side of the screen accordingly.

At any point, you can back out of what you’re doing by tapping an adjustment heading. For example, if you’re fiddling with one of the Color sub-sliders (Contrast or Saturation, for example), tap Light, Color, or B&W to exit the sub-slider.

And, of course, you can tap Cancel (and then Discard Changes) to abandon your editing altogether, or Done to save the edited photo and close the editing controls.

It might seem odd trying to perform these Photoshop-like tweaks on a tablet, but the power is here if you need it.

Filters (.Filter)
Square photos weren’t the only influence that Apple felt from the popularity of Facebook’s Instagram app. It also became clear that the masses want filters, special effects that degrade the color of your photo in artsy ways. (They can affect either square or regular photos.) You, too, can make your pictures look old, washed-out, or oversaturated.

To view your options, tap the Filter icon. You see a strip of eight color filters (and black-and-white filters); None is always at the top.

Tap a filter thumbnail to try it on for size. In essence, each filter turns your photo into a variation of black-and-white or plays with its saturation (color intensity, dialing it up or down). Finish by tapping Done (if you like the change) or Cancel (if you don’t).
By the way, you can return to a photo even months later to remove the filter; tap \( \text{Filter} \) again and tap None.

(Don’t these filters more or less duplicate the effects of the Light, Color, and B&W sliders described already? Yes. But filters produce canned, one-tap, instant changes that don’t require as much tweaking.)

**Handing Off to Other Editing Apps**

OK, Apple: Who are you, and what have you done with the company that used to believe in closed systems?

In iOS 8, for the first time, there’s an option to hand off a photo you’re editing to another company’s editing app! Maybe you’re a fan of Camera Plus,
Fragment, or some other photo app. Now its tools can seem as though they’re built right into the Photos app!

Here’s the drill: Open a photo in Photos. Tap Edit. Tap ☰. Now you see the icons of all apps on your iPad that have been updated to work with this iOS 8 Exensibility feature. (If you don’t have any such apps, the ☰ button doesn’t appear.)

When you tap the app you want, the photo opens immediately in that app, with all of its editing features available. You can freely bounce back and forth between Apple’s editor and its competitors’.

**Saving Your Changes**

Once you’ve rotated, cropped, or auto-enhanced a photo, tap the Done button. You’ve just made your changes permanent.

Actually, you’ve made them **temporarily** permanent. You can return to an edited photo at any time to undo the changes you’ve made (in Edit mode, tap Revert). When you send the photo off the iPad (by email, to your computer, whatever), that copy freezes the edits in place—but the copy on your iPad is still revert-able.

**Tip:** If you sync your photos to iPhoto or Aperture on the Mac, they show up in their edited condition. Yet, amazingly, you can undo or modify the edits there! The original photo is still lurking behind the edited version. You can use your Mac’s Crop tool to adjust the crop, for example. Or you can use iPhoto’s Revert to Original command to throw away all the edits you made to the original photo while it was on the iPad.

**753 Ways to Use Photos and Videos**

Once you’ve taken a picture, you can **do** something with it right away. Mail it, text it, post it to Facebook or Twitter—all right from the iPad (if it’s online, of course).

That’s all useful when you’re out shopping and want to seek your spouse’s opinion on something you’re about to buy. It’s handy when you want to remember the parking-garage section where you parked (“4 South”). It’s great when you want to give your Twitter fans a glimpse of whatever hell or heaven you’re experiencing at the moment.

In iOS 8, the world of ways you can send pictures or videos has exploded; now you can hand one off either to an online entity (Facebook, Twitter, Flickr, and so on) or to another app on your iPad. Want to see? Read on.
Choose the Photos

Before you can send or post a photo or a video, you have to tell iOS which one (or ones) you want to work with.

To send just one, well, there’s no big mystery; tap its thumbnail, and then tap 📷.

But you can also send a bunch of them in a group. How you do so, however, depends on where you start:

- **A Moment.** You can’t choose batches of photos when you’re looking at a Year or a Collection. But every Moment bears a Share button next to its name. Tap it.

  If there aren’t many photos in the Moment, you get a choice: Share this moment (send the entire batch) or Share some photos (you’re offered a page of thumbnails, so you can choose only a lucky few). If there are too many photos in the Moment to send in one batch, you go directly to the thumbnail page; choose only the ones worth sending, and then tap Share.

- **Photos from the Albums tab.** If you begin instead on a page of thumbnails from the Albums tab, you can tap Select and then individually select the photos you want to send. With each tap, a ☑️ appears, meaning, “OK, this one will be included.” (Tap again to remove the checkmark.) Then tap 📷.

Either way, the next thing you see is the Share sheet described below.

Starting from the Albums tab gains you a couple of additional options, by the way:

- **Delete a batch.** The ☞ button lets you delete a bunch of photos at once. (You can delete only photos or videos you’ve taken with the iPad—not ones you transferred from your computer.)

- **Create or delete albums.** Add To lets you put the selected photos into one of your albums—a great way to organize a huge batch you’ve shot on vacation, for example.

  You’re now offered an Add to Album screen. Tap the album into which you want to move these pictures. (If albums are dimmed, that’s because they’ve been synced from your Mac or PC. You’re not allowed to mess with them. The canned specialty-photo folders, like Panorama and Time-Lapse, are also dimmed, because only iOS can put things into those folders.)

  This list also includes a New Album button; you’re asked to type out the name you want for the new album and then tap Save.
NOTE: These buttons don’t actually move photos out of their original albums. You’re creating *aliases* of them—pointers to the original photos. If you edit or delete a photo from one album, it’s edited or deleted from all of them.

To delete an album you created on the iPad, start on the main Albums tab. Tap **Edit**, and then tap the — button next to the album you want to delete.

**Preparing to Send**

Once you’ve opened a photo (or selected a few), tap ![1].

Now you have a huge array of “send my photo here” options, displayed in three rows. Two of them scroll horizontally.

All right then. Here’s an overview of the options available on the Share screen.

**AirDrop**

So very cool: You can shoot a photo, or several, to any nearby iPad, iPhone, iPod Touch, or Mac—wirelessly, securely, conveniently, and instantly. See page 455 for the step-by-steps.

**Message**

You can also send a photo or video to another Apple gadget as an iMessage (or, if you also own an iPhone, to any cellphone number; see page 122).

Address your message, type a little note, tap **Send**, and off it goes. All of this is described in Chapter 5.

NOTE: If you’re sending a video, the iPad compresses it first so that it’s small enough to send as a text-message attachment (smaller dimensions, lower picture quality). Then it attaches the clip to an outgoing text message; it’s your job to address it.

**Mail**

The iPad automatically compresses, rotates, and attaches your photos or video clips to a new outgoing message. All you have to do is address it and hit **Send**.

If it’s a really big file (from a pro SLR camera, for example), you may be asked how much you want the photo **scaled down** from its original size, since many email systems reject attachments larger than 5 megabytes.
Taking Photos, Shooting Videos

Tap **Small, Medium, Large, or Actual Size**, using the megabyte indicator as a guide.

(Any video clip you send by email gets compressed—smaller, lower quality—for the same reason.)

**TIP:** Using the steps on page 237, you can send up to five photos at once. The Mail icon doesn’t appear at all if you’ve selected more than that; it’s too big for one attachment.

**iCloud Photo Sharing**

You can share batches of photos or videos with other people, either directly to their Apple gadgets or to a private Web page. What’s more, they can (at your option) contribute their **own** pictures to the album.

This is a big topic, though, so it gets its own write-up on page 250.

**Twitter, Facebook, Flickr**

If you’ve told your iPad what your name and password are (in **Settings**→**Twitter** or **Settings**→**Facebook** or **Settings**→**Flickr**), then posting a photo from your iPad to your Twitter feed, Facebook feed, or Flickr collection is ridiculously simple.
You’re offered the chance to type a message that accompanies your photo, as shown below. (As usual with Twitter, you have a maximum of 140 characters for your message. Fewer, actually, because some of your characters are eaten up by the link to the photo.) You can also tap Add Location if you want Twitterites or Facebookers to know where the photo was taken.

NOTE: The Add Location option is available only if you’ve permitted Twitter or Facebook to use your location information, which you set up in Settings → Privacy → Location Services.

If you’re posting to Facebook or Flickr, you can also indicate whom you’re sharing this item with—just your friends, everyone, and so on—by tapping Audience beneath the photo thumbnail. Flickr also offers a chance to specify which of your Flickr photo sets you want to post to.

When you tap Send or Post, your photo, and your accompanying tweet or post, zoom off to Twitter, Facebook, or Flickr for all to enjoy.

**YouTube, Vimeo**

And you were alive to see the day: Film a movie, edit out the boring parts, and then upload it to YouTube—right from the iPad.

Call up the video, if it’s not already on the screen before you. Tap 📹. The Share sheet offers these video-specific buttons:

- **YouTube.** The iPad asks for your Google account name and password (Google owns YouTube). Next it wants a title, description, and tags (searchable keywords like “funny” or “babies”).
It also wants to know if the video will be in standard definition or high definition (and it gives the approximate size of the file). You should also pick a **Category** (Autos & Vehicles, Comedy, Education, or whatever).

Finally, choose from **Public** (anyone online can search for and view your video), **Unlisted** (only people who have the link can view this video), or **Private** (only specific YouTubers can view). When everything looks good, tap **Publish**.

After the upload is complete, you’re offered the chance to see the video as it now appears on YouTube, or to **Tell a Friend** (that is, to email the YouTube link to a pal). Both are excellent ways to admire your masterful cinematography.

• **Vimeo**. You’re supposed to have set up your name and password in Settings for Vimeo (a video site a lot like YouTube, but classier, with a greater emphasis on quality and artistry).

  If you’ve done that, then all you have to do, when posting a video, is to specify a caption or a description, and then tap **Details** to choose a video size and who your audience is (public, private, and so on). Once you tap **Post**, your video gets sent on to the great cinema on the Web.

**More**

In the new, improved, extendable iOS, you can hand off a photo to **other** apps and services—beyond the set that Apple provides. If you tap **More**, you get this screen:
This screen is basically a setup headquarters for the row of “where you can send photos” icons. Here you can rearrange them (put the ones you use most often at the top by dragging the ⦿ handle); add to the list (turn on the switches for new, non-Apple photo-sharing apps you’ve installed); or hide the services you don’t use (turn off the switches). (You can’t turn off the switches for Message, Mail, and iCloud Photo Sharing.)

**Copy**

The Copy button, on the bottom row of sharing options, puts the photo(s) onto the Clipboard, ready for pasting into another app (an outgoing Mail message, for example). Once you’ve opened an app that can, in fact, accept pasted graphics, double-tap to make the Paste button appear.

**Slideshow**

A slideshow is a great way to show off your photos and videos. The catch: The Slideshow button appears only on an entire album of photos—no other grouping. If you want some arbitrary batch of pictures in your slideshow, then put them into an album first.

You have a surprising amount of control over your slideshow, too. But beware: The controls are split up between two locations. Some of them appear when you first tap Slideshow:

- **TV or iPad.** Where do you want the slideshow? On your iPad or on your TV? (This option appears only if you have an Apple TV.)

- **Transitions.** What kind of crossfade or special effect do you want the iPad to create in the blend from one photo to the next? You’re offered five choices—Dissolve, Cube, Ripple, Wipe Across, Wipe Down. (Dissolve is the least tacky one.)

- **Play Music.** Would you like tunes with that? If you want background music, turn this switch on.

- **Music.** Finally, tap the Music pop-up menu to choose a song from your music collection.

The other set of controls is buried in *SettingsÆPhotos & Camera*:

- **Play Each Slide For.** You can specify how many seconds each photo hangs around.

- **Repeat.** Makes the slideshow play over and over again until you stop it manually.

- **Shuffle.** Randomizes the sequence of photos within the chosen album.
While the slideshow is going on, tapping the screen stops the show, freezing it on the current photo. If you open the Share sheet and tap *Slideshow* again, you resume the slideshow.

You must let each video play to its conclusion if you want the show to continue. (Or tap to interrupt a particularly boring video, swipe to the next photo or video, and start the slideshow again from there.)

You can feel free to turn the iPad 90 degrees to accommodate landscape-orientation photos as they come up; the slideshow keeps right on going.

**AirPlay**

This button offers a list of nearby AirPlay gadgets—the only one you’ve probably heard of is Apple TV—so that you can display the current photo on your TV or another screen.

**Save Image**

Suppose you’re looking at a photo that you didn’t take with the iPad. Maybe someone texted or emailed it to you, for example. This button saves it into your own photo collection, so you’ll be able to cherish it for years.
**Assign to Contact**

If you’re viewing a photo of somebody who’s listed in Contacts, then you can use it (or part of it) as her headshot. After that, her photo appears on your screen every time she calls. Just tap **Assign to Contact**.

Your address book list pops up. Tap the name of the person who goes with this photo.

Now you see a preview of what the photo will look like when that person calls. This is the **Move and Scale** screen. You want to crop the photo and shift it in the frame so only **that person** is visible (if it’s a group shot)—in fact, just the face.

Start by enlarging the photo: Spread your thumb and forefinger against the glass. As you go, **shift** the photo’s placement in the round frame with a one-finger drag. When you’ve got the person correctly centered, tap **Choose**.

**Use as Wallpaper**

**Wallpaper**, in the world of iOS, refers to the background photo that appears in either of two places: the Home screen (plastered behind your app icons) or the Lock screen (which appears every time you wake the iPad).

You can replace Apple’s standard photos with one of your photos or with a different one of Apple’s. You go at this task in either of two ways:

- **Start in Settings.** Tap **Settings**→**Wallpaper**.

  Now you see miniatures of the two places you can install wallpaper—the Lock screen and the Home screen (facing page, top). Each shows what you’ve got installed there as wallpaper at the moment.

  **TIP:** You can tap either screen miniature to open a Set screen, where you can adjust the current photo’s size and positioning.

When you tap **Choose a New Wallpaper**, you’re shown a list of photo sources you can use as backgrounds. Under **Apple Wallpaper**, you get two categories worth noticing.

The **Dynamic** wallpapers all look like soft-focus bubbles against solid-color backgrounds. Once you’ve installed the wallpaper, these bubbles actually **move**, rising and falling on your Lock screen or on your Home screen behind your icons. Yes, animated wallpaper has come to the iPad.
The Stills category is a bunch of lovely nature photography. It doesn’t move.

Scroll down a little, and you’ll find your own photos, in the form of the Camera Roll, Photo Stream, Panoramas, and Albums categories, as described earlier in this chapter.

All these pictures show up as thumbnail miniatures; tap one to see what it looks like at full size. If it looks good, tap Set.

**TIP:** Complicated, “busy” photos may make it harder to read icons and icon names on the Home screen.
Now the iPad wants to know which of the two places you want to use this wallpaper; tap **Set Lock Screen, Set Home Screen, or Set Both** (if you want the same picture in both places).

- **Start in the Photos app.** The task of applying one of your own photos to your Home or Lock screen can also begin in the Photos app. Open one of your photos, as described in the previous pages. Tap ‡, and then tap **Use as Wallpaper**.

You’re now offered the Move and Scale screen so you can fit your photo within the wallpaper “frame.” Pinch or spread to enlarge the shot; drag your finger on the screen to scroll and center it.

Finally, tap **Set**. Here again, you specify where you want to use this wallpaper; tap **Set Lock Screen, Set Home Screen, or Set Both** (if you want the same picture in both places).

**Print**

You can print a photo easily enough, provided that you’ve hooked up your iPad to a compatible printer. Once you’ve opened the photo, tap the ‡ button and then tap **Print**. The rest goes down as described on page 210.

**More**

Once again, iOS 8 now offers a way to rearrange the Share buttons (this time, the second row)—or to add new buttons. They appear automatically when you install certain apps that have photo-sharing capabilities.

**My Photo Stream**

iCloud is Apple’s free suite of online services. It’s described in Chapter 15—but for an iPad shutterbug, its most interesting feature by far is My Photo Stream.

The concept is simple: Every time a new photo enters your life—when you take a picture with your iPad or import one onto your computer—it gets added to your Photo Stream. From there, it appears automatically on all your other Apple machines.

**NOTE:** Even if you have a cellular iPad, Photo Stream syncs only when you’re in a WiFi hotspot.

Using Photo Stream means all kinds of good things:

- Your photos are always backed up. Lose your iPad? No biggie—when you buy a new one, your latest 1,000 photos appear on it automatically.
• Any pictures you take with your iPad appear automatically on your computer. You don’t have to connect any cables or sync anything yourself.

**TIP:** Actually, there’s one exception. Suppose you take a photo and then delete it while you’re still in the Camera app; that photo will never become part of your Photo Stream.

A similar rule holds true with edits: If you edit a photo you’ve just taken, those edits become part of the Photo Stream copy. But if you take a photo, leave the Camera app, and *later* edit it, then the Photo Stream gets the original copy only.

Here’s a sneaky one: You can drag favorite photos into your Photo Stream from your computer’s photo stash—a quick, easy way to get pictures from your computer onto your iPad.

To get started with Photo Stream on your iPad, you have to turn **on** My Photo Stream, which you do in **Settings**→**iCloud**. (You should also turn it on using the iCloud control panel on your computer. That’s in System Preferences on your Mac, or in the Control Panel of Windows.) Give your iPad some time in a WiFi hotspot to form its initial slurping-in of all your most recent photos.

Once Photo Stream is up and running, here’s how to use it.
On the iPad

Open your Photos app. Tap the tab at the bottom called Albums; in the list of albums, tap My Photo Stream. Inside are the 1,000 photos that have entered your life most recently.

Now, your i-gadget doesn’t have nearly as much storage available as your Mac or PC; you can’t yet buy an iPad with 750 gigabytes of storage. That’s why, on your iPad/iPhone/iPod, your My Photo Stream consists of just the last 1,000 photos. (There’s another limitation, too: The iCloud servers store your photos for 30 days. As long as your gadgets go online at least once a month, they’ll remain current with the Photo Stream.)

Ordinarily, the oldest of the 1,000 photos in your Photo Stream scroll away forever as new photos come in. But you can rescue the best ones from that fate—by saving them onto your iPad, where they’re free from the risk of automatic deletion.

To rescue a bunch at a time, open My Photo Stream so you’re looking over the thumbnails. Tap Select, and then tap the thumbnails of the photos you want to preserve. Once they’re selected, tap Add To (and then choose one of your iPad’s albums); or tap the P button and tap Save Images.

Or, if you’re viewing one open picture in My Photo Stream, tap the P button; on the Share sheet, tap Save to Camera Roll.

That’s it. Now the photos you rescued appear in both your Photo Stream, where they will eventually disappear, and in your albums, where they’re safe until you delete them manually.

On the Mac or PC

In iPhoto or Aperture (Mac), your Photo Stream photos appear in a new monthly album called, of course, Photo Stream. On a Windows PC, you get a Photo Stream folder in your Pictures folder.

On the computer, you don’t have to worry about that 30-day, 1,000-photo business. Once pictures appear here, they’re here until you delete them.

This, in its way, is one of the best features in all of iCloudland, because it means you don’t have to sync your iPad over a USB cable to get your photos onto your computer. It all happens automatically, wirelessly over WiFi.
You can also drag photos into your Photo Stream from your computer. That’s a quick, easy way to get them onto your iPad wirelessly. On the Mac, drag the photos into the Photo Stream album (within iPhoto or Aperture), and choose whether you want them dropped into your main Photo Stream or one of your shared ones. In Windows, drag them into the Photo Stream Uploads folder, which you designate in the iCloud Control Panel.

On the Apple TV

When you’re viewing your photos on an Apple TV, an album appears there called Photo Stream. There they are, ready for showing on the big plasma. You can use your Photo Stream in an Apple TV screen saver, too.

Deleting Photos from the Photo Stream

You can’t choose what photos go into the Photo Stream. Every picture you take with the iPad goes into it. Every photo you bring in from your computer goes into it. Every photo you save on your iPad from an app like Twitter goes into it. Every screenshot you make goes into it.

And, remember, the same 1,000 photos appear on all your Apple gadgets (assuming you’ve turned on Photo Stream on each one). You might think you’re taking a private picture with your iPad, forgetting that your spouse or parent will see it seconds later on that person’s iPhone. It’s only a matter of time before Photo Stream gets some politician in big trouble.

Even if you delete a photo from your iPad’s Camera Roll, it’s too late. The Photo Stream version is already out there, replicated across all your i-gadgets and computers.

Fortunately, you can delete photos from your Photo Stream. Just select the thumbnail of the photo you want to delete, and then tap the Trash icon (📜). The confirmation box warns you that you’re about to delete the photo from all your Apple machines (and, for shared streams, the machines of everyone who’s subscribed to your photographic output).

If you haven’t saved it to a different album or roll, it’s gone for good when you tap Delete Photo.

If you use iPhoto or Aperture, don’t forget that these programs offer an Auto-Import feature in their Preferences. That is, any photo that appears in the Photo Stream album automatically gets imported into the program’s permanent collection. In the event of an Embarrassing Photo Stream Mistake, don’t forget to delete that auto-imported copy of the incriminating photos, too.
iCloud Photo Sharing

The term “iCloud Photo Sharing,” new in iOS 8, is what used to be called a shared Photo Stream. It lets you send photos or videos to other people’s gadgets. After a party or some other get-together, you could send your best shots to everyone who attended; after a trip, you could post your photographic memories for anyone who might care.

The lucky recipients can post comments about your pix, click a “like” button to indicate their enthusiasm, or even submit pictures and videos of their own. It’s like having a tiny Instagram network of your very own, consisting solely of people you invite.

In designing this feature, Apple had quite a challenge. There’s a lot of back-and-forth among multiple people, sharing multiple photos, so iCloud Photo Sharing can get a little complicated. Stay calm and keep your hands and feet inside the tram at all times. Here’s how it works.

**TIP:** Well, here’s how it works if your equipment meets the requirements. Photo Albums can show up on an i-gadget with iOS 7 or later; on a Mac with OS X Mavericks (10.9) or later and iPhoto 9.5 or Aperture 3.5 or later; on a PC with Windows 7 or later and the iCloud Control Panel 3.0; or on an Apple TV (2nd Generation) with Software Update 6.0 or later.

You also have to turn on the Photo Album feature. On an iOS gadget, the switch is in SettingsÆiCloudÆPhotos; turn on iCloud Photo Sharing. On the Mac, open System PreferencesÆiCloud. Make sure Photos is turned on; click Options and confirm that Photo Sharing is on, too. On a Windows PC, it’s in the iCloud Control Panel for Windows (a free download from Apple’s Web site).

Create a Shared Photo Album

To share some of your masterpieces with your adoring fans, proceed like this:

1. **Create the empty album.** Open the Photos app. On the Shared tab, scroll to the bottom of the list (if necessary) and tap New Shared Album.

2. **Name the new album.** In the Shared Album box, name the Photo Album (“Bday Fun” or whatever). Tap Next.

3. **Specify the audience.** You’re now asked for the email addresses of
your lucky audience members; enter their addresses in the “To:” box just as you would address an outgoing email. For your convenience, a list of recent sharees appears below the “To:” box.

When that’s done, tap Create. You return to the list of shared albums, where your newly named album appears at the top. It is, however, completely empty.

4. **Pour some photos or movies into the album.** Tap your new, empty album’s name. Then, on the empty next screen, tap the + button to burrow through your photos and videos—you can use any of the three tabs (Photos, Shared, Albums)—to select the material you want to share. Tap their thumbnails so that they sprout checkmarks, and then tap Done.

A little box appears so that you can type up a description.

5. **Type a description of the new batch.** In theory, you and other people can add to this album later. That’s why you’re offered the chance to caption each new batch.

Once that’s done, tap Post.

The thumbnails of the shared photos and videos appear before you—and the + button is there, too, in case you want to add more pictures later.

**TIP:** You can easily remove photos from the album, too. On this screen of thumbnails, tap Select; tap the thumbnails you want to nuke; tap ；; confirm by tapping Delete Photo.

### Adjusting an Album’s Settings

Before you set your album free, tap People at the top of the screen. Here are a few important options to establish for this album:

- **Invite People.** This list identifies everyone with whom you’ve shared the album. To add a new subscriber, tap Invite People. To delete a subscriber, tap the name and then (at the bottom of the contact card) tap Remove Subscriber.

- **Subscribers Can Post.** Your subscribers can contribute photos and videos to your album. That’s a fantastic feature when it contains pictures of an event where there was a crowd: a wedding, show, concert, picnic, badminton tournament. Now all the people who were there can enhance the gallery with shots taken from their own points of view with their own iPads or cameras.

- **Public Website.** If you turn on Public Website, then even people who aren’t members of the Apple cult will be able to see these photos. The
invitees will get an email containing a Web address. It links to a hidden page on the iCloud Web site that contains your published photos.

When you turn this switch on, the Web address of your new gallery appears in light-gray type. Tap Share Link for a selection of methods for sending the link to people: by Message, Mail, Twitter, Facebook, AirDrop, and so on.

What they’ll see is a mosaic of pictures, laid out in a grid on a single sort of Web poster. Your fans can download their favorites by clicking the U button. (You can’t add comments or “like” photos on the Web, however.)

TIP: If you click one of these medium-sized photos, you enter slideshow mode, in which one photo at a time fills your Web browser window. Click the arrow buttons to move through them.

• Notifications. If this switch is on, then your iPad will show a banner each time someone adds photos or videos to your album, clicks the “Like” button for a photo, or leaves a comment.

• Delete Shared Album. That’s right: If the whole thing gets out of hand, you can slam the door in your subscribers’ faces by making the entire album disappear.
Read on to see what it’s like to be the person whose email address you entered.

**Receiving a Photo Album on Your Gadget**

When other people share Photo Albums with you, your iPad makes a little warble, and a notification banner appears: “[Your buddy’s name] invited you to join '[name of shared photo batch]'.”

Simultaneously, a badge like (②) appears on the Photos app icon and on the Shared tab within Photos, letting you know how many albums have come your way.

As you’d guess, you can tap the new album’s name to see what’s inside it; tap Accept if you want to join.

Once you’re subscribed, you view the photos and movies as you would any album—with a couple of differences. First, you can tap Add a comment to make worshipful or snarky remarks, or tap the Like smiley to offer your silent support.
You can also snag a copy of somebody’s published photo or video for yourself. With the photo before you, tap the button to see the usual sharing options—and tap Save Image. Now the picture or video isn’t some virtual online wisp—it’s a solid, tangible electronic copy in your own photo pool.

If your buddy has turned on Subscribers Can Post for this album, you can send your own photos and clips into the album; everybody who’s subscribed to it (and, of course, its owner) will see them.

To do that, tap the button on the album’s page of thumbnails; choose your photos and movies; tap Done; add a little comment about them; and tap Post.

### Fun with Shared Photo Albums

Once you’ve created a shared Photo Album, you can update it or modify it in all kinds of ways:

- **Add new photos or movies to it.** In Photos, open the shared Photo Album, whether it’s one you created or one you’ve subscribed to. Tap the button. Now you can browse your whole world of photos, tapping to add them to the Photo Album already in progress.

- **Remove things from it.** In Photos, open the shared Photo Album. Tap Select, tap the item(s) you want to delete, and then tap the Trash icon ()—and confirm with a tap on Delete Photo(s).

- **Delete an entire shared Photo Album.** Tap the People tab below an open Photo Album, scroll down, tap Delete Shared Album, and confirm by tapping Delete.

- **Change who’s invited, change the name.** The People tab is also where you can add to the list of email addresses (tap Invite People), remove someone (tap the name, and then tap Remove Subscriber), rename the album, or turn off Public Website to dismantle the Web version of this gallery.

At any time, you can tap the Activity “folder” at the top of the Shared tab in the Photos app. Here, for your amusement, is a visual record of everything that’s gone on in Shared Photo Album Land: photos you’ve posted, photos other people have posted, comments back and forth, “likes,” and so on. It’s your personal photographic Facebook.
**iCloud Photo Library**

If learning the difference between My Photo Stream, iCloud Photo Sharing, and Shared Photo Streams isn’t hard enough, then hold onto your lens cap. With iOS 8, Apple introduces yet another online photo feature: the *iCloud Photo Library.*

The idea this time is that all your Apple gadgets will keep all your photos and videos backed up online and synced. The advantages:

- All your photos and videos are always backed up.
- All your photos and videos are always accessible from any of your gadgets.
- You can reclaim a lot of space on your iPad. There’s an option that offloads the original photos and videos to iCloud but leaves small, iPad-sized copies on your iPad.

There are a couple of sizable downsides to iCloud Photo Library, too:

- Photos and videos eat up a lot of storage space. Remember, your entire iCloud account comes with only 5 gigabytes of free storage. If you start backing up your photo library to it, too, you’ll almost certainly have to pay to expand your iCloud storage.

- Things get a little complicated. The structure of the Photos app described in this chapter changes, for example; the albums usually called *Camera Roll* and *My Photo Stream* go away. They’re replaced by a new album called *All Photos.* (Camera Roll and My Photo Stream were just subsets of your whole photographic life anyway.)

If you decide to dive in, then open *Settings* → *iCloud* → *Photos* → *iCloud Photo Library.* (It may be labeled “Beta,” meaning that this service is still in testing.)

Once iCloud Photo Library is on, you won’t be able to copy pictures from your computer to your iPad using iTunes anymore; iTunes will be completely removed from the photo-management loop. That’s why, at this point, you may be warned that your iPad is about to delete any photos and videos that you’ve synced to it from iTunes (page 426). (Don’t worry—they’ll be safe on iCloud.)

And, of course, you might be warned that you need to buy more iCloud storage space.
Now the Settings panel expands and offers this important choice:

- **Optimize iPad Storage.** If your iPad’s storage ever begins to fill up, iCloud will quietly and automatically replace the iPad’s full-resolution copies of your photos with smaller versions. They’re still big enough to view on the iPad’s screen and even zoom in a little, but they’re nothing like the full, printable originals.

  If space gets tighter yet, your iPad gets even **lower-resolution** copies.

  ![iCloud Settings](image)

  Of course, your originals are always safe on iCloud; whenever you try to do something with one of these photos, like sending it or editing it, your iPad quickly downloads the full-quality original and works with that. Meanwhile, this arrangement saves you a **ton** of space on your iPad.

- **Download and Keep Originals** leaves the big original files on your iPad.

Finally, the uploading process begins. If you have a lot of photos and videos, it can take a very long time.

But when it’s all over, you’ll have instant access to all your photos and videos in any of these places:

- **On the iPad (or other iOS gadgets).** In the Photos app, on the Photos tab, the new “album” called **All Photos** represents your new, online photo library. Add to, delete from, or edit pictures in this set, and you’ll find the same changes made on all your other Apple gear.

- **On the Web.** You can sign into **iCloud.com** and click **Photos** to view your photos and videos, no matter what machine you’re using. The Moments and Albums tabs here correspond to the tabs in the iPad’s
Photos app. Click a photo to open it full-size, whereupon the icons at the top of the screen let you delete, download, or “favorite” it.

- **On the Mac, eventually.** Apple intends to kill off iPhoto and Aperture, its photo-management programs, and replace them with a new Mac program called Photos. Until this new program hatches in “early 2015,” you have no way to work with your photo library using a Mac. You’ve been warned.

## Capturing the Screen

Let’s say you want to write a book about the iPad. (Hey, it could happen.) How are you supposed to illustrate that book? How can you take pictures of what’s on the screen?

The trick is very simple: Get the screen just the way you want it, even if that means holding your finger down on an onscreen button or a keyboard key. Now hold down the **Home** button, and while it’s down, press the Sleep switch at the top of the iPad. (Yes, you may need to invite some friends over to help you execute this multiple-finger move.)

The screen flashes white. Now, if you go to the Photos program and open up the Camera Roll, you see a crisp, colorful image, in PNG format, of whatever was on the screen. (Its resolution matches the screen’s.)

At this point, you can send it by email (to illustrate a request for help, for example, or to send a screen from Maps to a friend who’s driving your way); sync it with your computer (to add it to your Mac or Windows photo collection); or designate it as the iPad’s wallpaper (to confuse the heck out of its owner).
App is short for application, meaning software program, and the App Store is a single, centralized catalog of every authorized iPad add-on program in the world. In fact, it’s the only place where you can get new programs.

You hear people talking about downsides to this approach: Apple’s stifling the competition; Apple’s taking a 30 percent cut of every app sold; Apple’s maintaining veto power over apps it doesn’t like.

But there are some enormous benefits, too. First, there’s one central place to look for apps. Second, Apple checks out every program to make sure it’s decent and runs decently. Third, the store is beautifully integrated with the iPad itself.

There’s an incredible wealth of software in the App Store. These programs can turn the iPad into an instant-messaging tool, an Internet radio, a medical reference, a musical keyboard, a time and expense tracker, a TV remote control, a photo editor, a recipe box, a tip calculator, a restaurant finder, a teleprompter, and so on. And games—thousands of dazzling handheld games, some with smooth 3-D graphics and tilt control.

About 500,000 apps have been designed for the iPad’s screen. But there are also 1.4 million apps that have been designed for the iPhone—and you can use them on the iPad, too. (They appear either double size or with a big black margin.)

It’s so much stuff that the challenge now is just finding your way through it. Thank goodness for those Most Popular lists.

Two Ways to the App Store

You can get to the App Store in two ways: from the iPad itself, or from your computer’s copy of the iTunes software.
Using iTunes offers a much easier browsing and shopping experience, of course, because you’ve got a mouse, a keyboard, and that big screen. But downloading straight to the iPad, without ever involving the computer, is wicked convenient when you’re out and about.

**Shopping from the iPad**

To check out the App Store from your iPad, tap the **App Store** icon. You arrive at the colorful, scrolling wonder of the store itself.

It has five tabs (the icons at the bottom). Here they are, in order:

- **Featured** is pretty clear: You can scroll vertically to see different categories, like **Best New Apps** or **Previews**, and horizontally to see more apps within each category.

The top row might say “Best New Apps.” Scroll sideways to see the apps that Apple is recommending (**See All** shows all the new apps).

At the top left, the **Categories** button presents the entire catalog, organized by category: Books, Business, Education, Entertainment, Finance, Games, and so on. Tap a category to see what’s in it.
• **Top Charts** is a list of the 100 most popular programs at the moment, ranked by how many people have downloaded them. There are actually three lists here: the most popular **free** programs, the most popular ones that cost money (“Paid”), and which apps have made the most money (“Top Grossing”), even if they haven’t sold the most copies.

• **Explore** lists apps that are popular **near you**. It uses your location to check for geographically relevant apps. Usually, this concept is most useful when you’re at a public institution: a museum, baseball stadium, train station, and so on. You may also see the newspaper apps for whatever town you’re in, or local bus and subway apps.

• **Purchased.** Here are all the apps you’ve ever bought. On the **Not on This iPad** tab, of course, are the ones you’ve bought on **other** iPads or iPhones, available to download to this one right now, no charge.

• **Updates.** Unlike its buddies, this button isn’t intended to help you navigate the catalog. Instead, it lets you know when one of the programs you’ve already installed is available in a newer version. Details in a moment.

About a third of the App Store’s programs are free; the rest are usually under $5. A few, intended for professionals (pilots, for example), can cost a lot more.

**Search**

As the number of iPad apps grows into the millions, viewing by scrolling through lists begins to get awfully unwieldy.

Fortunately, you can also search the catalog, which is efficient if you know what you’re looking for (either the name of a program, the kind of program, or the software company that made it).

Before you even begin to type, this panel shows you a list of Trending Searches—that is, the most popular searches right now. Odds are pretty good that if you want to download the latest hot app you keep hearing about, you’ll see its name here (because, after all, it’s hot).

Or tap in the search box to make the keyboard appear. As you type, the list shrinks so that it’s showing you only the matches. You might type **tetris**, or **piano**, or **Disney**, or whatever.

Tap anything in the results list (next page, bottom) to see a series of “cards,” one for each matching app. You can swipe horizontally to scroll through them. Tap one to view its details screen, as described below.
The App Details Page

No matter which button was your starting point, eventually you wind up at an app’s details screen. There’s a description, a scrolling set of screenshots, info about the author, the date posted, the version number, a page of related and similar apps, and so on.

You can also tap Reviews to dig beyond the average star rating into the actual written reviews from people who’ve already tried the thing.

Why are the ratings so important? Because the App Store’s goodies aren’t equally good. Remember, these programs come from a huge variety of people—teenagers in Hungary, professional firms in Silicon Valley, college kids goofing around on weekends—and just because they made it into the store doesn’t mean they’re worth the money (or even the time to download).
Sometimes a program has a low score because it’s just not designed well or it doesn’t do what it’s advertised to do. And sometimes, of course, it’s a little buggy.

If you decide something is worth getting, scroll back to the top of the page and tap its price button. It may say, for example, FREE or $0.99.

**TIP:** If you see a little + sign on the price button, it means that the same app works well on both the iPad and the iPhone.

If you’ve previously bought it, either on this iPad or on another Apple touchscreen gadget, then the button turns into a ✈; you don’t have to buy it again. Just tap to re-download. If, in fact, this app is already on your iPad, then the button says OPEN (handy!).

Once you tap the price and then INSTALL APP, you’ve committed to downloading the program. There are only a few things that may stand in your way:
• **A request for your iTunes account info.** You can’t use the App Store without an iTunes account—even if you’re just downloading free stuff. If you’ve ever bought anything from the iTunes Store, signed up for an iCloud account, or bought anything from Apple online, then you already have an iTunes account (an Apple ID, meaning your email address and password).

The iPad asks you to enter your iTunes account name and password the first time you access the App Store and periodically thereafter, just to make sure some marauding child in your household can’t run up your bill without your knowledge. Mercifully, you don’t have to enter your Apple ID information just to download an *update* to an app you already own.

**Tip:** If you have an iPad Air 2 or mini 3 model, and you’ve taught it to recognize your fingerprint, here’s the payoff: When you try to download an app, instead of having to enter your Apple password, you can just touch the Home button with your finger.

• **A file size over 100 megabytes.** If a program is bigger than 100 MB, you can’t download it over the cellular airwaves to a cellular iPad, a policy no doubt intended to soothe nerves at AT&T, Sprint, T-Mobile, and Verizon. Instead, over-100-meg files are available only when you’re on a WiFi connection.

Once you begin downloading a file, a tiny progress circle next to the app’s name fills in to indicate the download’s progress. (Tap the square Stop button inside the circle to cancel the download.) When the downloading is done, tap the **OPEN** button to open it and try it out.

**Tip:** You don’t have to sit there and stare at the progress bar. You can go on working on the iPad. In fact, you can even go back to the App Store and start downloading something else simultaneously. You can easily spot your fresh downloads on the Home screens: Their icons fill in with color as the download proceeds, and after that their names are preceded by a blue dot.

**Two Welcome Notes about Backups**

Especially when you’ve paid good money for your iPad apps, you might worry about what would happen if your iPad got lost or stolen, or if someone (maybe you) accidentally deletes one of your precious downloads.

You don’t have to worry. Here’s a handy little fact about the App Store: It remembers what you’ve already bought. You can re-download a purchased program at any time, on any of your iPads, iPhones, or iPod Touches, without having to pay for it again.
TIP: If some program doesn’t download properly on the iPad, don’t sweat it. Go into iTunes on your computer and choose **Store**→**Check for Available Downloads**. And if a program does download to the iPad but doesn’t transfer to iTunes, then choose **File**→**Transfer Purchases from “iPad”**. These two commands straighten things out, clear up the accounting, and make all well with your two copies of each app (iPad + computer).

**Shopping in iTunes**

You can also download new programs to your computer using iTunes and then sync them over to the iPad. By all means, use this method whenever you can. It’s much more efficient to use a mouse, a keyboard, and a full screen.

In iTunes, click the **A** (apps) icon at top left; at top center, click **App Store**. The screen fills with starting points for your quest, matching what you’d see on the iPad: Best New Apps, Best New Games, and so on.

![Screenshot of iTunes](image)

Or use the search box at top right.

From here, the experience is the same as it is on the iPad. Drill down to the **Details** page for a program, read its description and reviews, look at its photos, and so on. Click the price button to download and, at the next sync, install it.
iPhone Apps on the iPad

Apple wrote iOS 8 to run on both iPhones and iPads. As a side effect, you gain one fantastically useful perk: You can run all of those 1.4 million iPhone apps on the iPad.

Of course, those apps are designed to run on a smaller screen. So what happens on the much larger iPad?

In the olden days, iPhone apps started out floating in the middle of the iPad screen at phone size, surrounded by a sea of black. They ran perfectly fine that way. But you also could tap a little 2x button in the lower-right corner of the iPad screen to make the app fill the entire screen. The graphics were much coarser, since iOS 8 was basically just magnifying everything.

Today, the 2x button is gone. All iPhone apps automatically fill the screen. For the most part, the graphics aren’t as blurry as they once were; Apple has found ways to sharpen them up on the iPad screen.

*Tip:* Ordinarily, the App Store app shows you only apps designed for the iPad’s big screen. Which is a shame, because there are hundreds of thousands *more* apps available for the iPhone, which you can run on the iPad.

To find them, do a search—and on the search-results page, use the top-left pop-up menu to choose *iPhone Only.*

Organizing Your Apps

As you add new apps to your iPad, it sprouts new Home screens as necessary to accommodate them all, up to a grand total of 11 screens. That’s 224 icons—and yet you can actually go all the way up to many thousands of apps, thanks to the miracle of *folders.*

That multiple–Home screen business can get a little unwieldy, but a couple of tools can help you manage. First, you can just use Siri to open an app, without even knowing where it is. Just say, “Open Angry Birds” (or whatever).

Second, the Spotlight search feature can pluck the program you want out of your haystack, as described on page 81.

Third, you can organize your apps into folders, which greatly alleviates the agony of TMHSS (Too Many Home Screens Syndrome).
It’s worth taking the time to arrange the icons on your Home screens into logical categories, tidy folders, or at least a sensible sequence.

You can do that either on the iPad itself or in iTunes on your computer. That’s far quicker and easier, but it works only when your iPad is actually connected to the Mac or PC. Read on.

**Rearranging/Deleting Apps Using iTunes**

To fiddle with the layout of your Home screens with the least amount of hassle, connect the iPad to your computer using the white charging cable or over WiFi. Open iTunes.

Click your iPad’s icon (iPad) at top left, and then click Apps in the left-side list. You see the display on the next page.

From here, it’s all mouse power:

- For each listed app, click the button so that it says either Install (if the app is on your computer but not currently on your iPad) or Remove (if it is; at that point, the button changes to say Will Remove). In other words, it’s possible to store hundreds of apps in iTunes but load only some of them onto your iPad.

- Click one of the Home screen miniatures on the right list to indicate which screen you want to edit. It gets big. Now you can drag the app icons to rearrange them on that page. (Click the background to close the life-size image.)

- Beneath the Home screen miniatures, iTunes displays similar mockups of each folder on your iPad. Because they’re visible here, all of them, all the time, it’s very easy to put icons into them—and to work with the multiple “pages” within each folder (read on).

- It’s fine to drag an app onto a different page mockup. You can organize your icons on these Home screens by category, frequency of use, color, or whatever tickles your fancy. (The + button above each pile of mockups means “Click to install an additional Home screen.”)

**TIP:** You can select several app icons simultaneously by ⌘-clicking them (or Ctrl-clicking in Windows); that way, you can move a bunch of them at once.

- You can drag the page mockups around to rearrange them, too.

- To delete an app from the iPad, point to its icon and click the X. (You can’t delete Apple’s starter apps like Safari and Mail.)
• Create a folder by dragging one app’s icon on top of another (see page 270 for more on folders).

When your design spurt is complete, click **Apply** in the lower-right corner of the screen.

**Rearranging/Deleting Apps Right on the iPad**

You can also redesign your Home screens right on the iPad, which is handy when you don’t happen to be wired up to a computer.

To enter this Home screen editing mode, hold your finger down on any icon until, after about a second, the icons begin to—what’s the correct term?—**wiggle**.

**TIP:** You can even move an icon onto the Dock. Just make room for it by first dragging an **existing** Dock icon to another spot on the screen.

At this point, you can rearrange your icons by dragging them around the glass into a new order; other icons scoot aside to make room.

**TIP:** You can drag a single icon across multiple Home screens without ever having to lift your finger. Just drag the icon against the right or left margin of the screen to “turn the page.”
To create an additional Home screen, drag a wiggling icon to the right edge of the screen; keep your finger down. The first Home screen slides off to the left, leaving you on a new, blank one, where you can deposit the icon. You can create up to 11 Home screens in this way.

You may have noticed that, while your icons are wiggling, most of them also sprout little \x26;‘s. That’s how you delete a program you don’t need anymore: Tap that \x26;‘. You’ll be asked if you’re sure; if so, it says bye-bye.

(You can’t delete one of Apple’s preinstalled apps, so no \x26; appears on those icons. If they really bug you, you can drag the little-used Apple apps into a folder somewhere.)

When everything looks good, press the Home button to exit Edit mode and stop the wiggling.

**Restoring the Home Screen**

If you ever need to undo all the damage you’ve done, tap **Settings**→**General**→**Reset**→**Reset Home Screen Layout**. That function preserves any new programs you’ve installed, but it consolidates them. If you’d put 10 programs on each of four Home screens, you wind up with only two screens, each packed with 20 icons. Any leftover blank pages are eliminated. This function also places all your downloaded apps in alphabetical order.
Folders

Folders are so useful on your Mac or PC—so why not use them on your iPad? Folders let you organize your apps, de-emphasize the ones you don’t use often, and restore order to that dizzying display of icons.

These days, each folder can have many pages of its own, each displaying nine icons. A single folder, in other words, can contain as many apps as you want—and therefore, only memory limits how many apps you can fit onto your iPad.

Setting Up Folders on the iPad

To create and edit folders, begin by entering Home screen editing mode. That is, hold your finger down on any icon until all the icons begin to wiggle.

Now, to create a folder, drag one app’s icon on top of another. The software puts both of them into a new folder and proposes a name, which you can change at this point. If they’re the same kind of app, iOS even tries to figure out what category they both belong to—and names the new folder accordingly (“Music,” “Photos,” “Kid Games,” or whatever).

Drag one app onto another…

…and a new folder is born. Rename it here.
You’re welcome to add more apps to this folder. Tap the Home screen background to close the folder, and then (while the icons are still wiggling) drag another app onto the folder’s icon. Lather, rinse, repeat.

If one of your folders has more than nine apps in it, then iOS creates a second “page” for the folder—and a third, a fourth, and so on. You can move apps around within the pages and otherwise master your new multipage folder domain.

You can scroll the folder “pages” by swiping sideways, just as you scroll the full-size Home pages. The only limit to how many icons a folder can hold is your tolerance for absurdity.

Once you’ve created a folder or two, they’re easy to rename, move, delete, and so on. (Again, you can do all of the following only in icon-wiggling editing mode.) Like this:

- **Take an app out of a folder** by dragging its icon anywhere else on the Home screen. The other icons scoot aside to make room, just as they do when you move them from one Home screen to another.

- **Move a folder around** by dragging, as you would any other icon.

**TIP:** You can drag a folder icon onto the Dock, too, just as you would any app. Now you’ve got a pop-up subfolder full of your favorite apps—on the Dock, which is present on every Home screen. That’s a very useful feature; it multiplies the handiness of the Dock itself.

- **Rename a folder** by opening it (tapping it). At this point, the folder’s name box is ready for editing.

- **Move an icon from one folder “page” to another** by dragging it to the edge of the folder, waiting with your finger down until the page “changes,” and then releasing your finger in the right spot.

- **Delete a folder** by removing all of its contents. The folder disappears automatically.

When you’re finished manipulating your folders, press the Home button to exit Home screen editing mode—and stop all the wiggling madness.

**Setting Up Folders in iTunes**

It’s faster and easier to set up your folders within iTunes, on your Mac or PC, where you have a mouse and a big screen to help you. Connect your iPad to your computer (by cable or WiFi), open iTunes, click the iPad’s icon at top left, and then click the Apps tab in the left-side column. You see something like the illustration on page 268.
To create a folder, click a Home page miniature to expand it; now drag one app’s icon on top of another, exactly as you’d do on the iPad. The software puts both of them into a single new folder. As on the iPad, the computer proposes a folder name; an editing bar also appears so that you can type a custom name you prefer.

Once you’ve got a folder, you can open it just by double-clicking. It expands to life size, revealing its contents. Now you can edit the folder’s name, drag the icons around inside it, or drag an app right out of the folder window and onto another Home page (or another folder on it). Just keep your finger down on the mouse button or trackpad, no matter how long it takes, until the new Home page or folder page opens.

Below the Home pages, you’ll discover that each of your app folders now has an app-management screen mockup of its own, complete with a horizontally scrolling set of pages. That’s so you can move the “pages” around, organize the apps within them, and so on.

If you remove all the apps from a folder, the folder disappears.

**App Preferences**

If you’re wondering where you can change an iPad app’s settings, consider backing out to the Home screen and then tapping _Settings_. Apple encourages programmers to add their programs’ settings _here_, way down below the bottom of the iPad’s own Settings screen.

Some programmers ignore the advice and build the settings right into their apps, where they’re a little easier to find. But if you don’t see them there, now you know where else to look.

**App Updates**

When a circled number (like 🔄) appears on the App Store’s icon on the Home screen, or on the Updates icon within the App Store program, that’s Apple’s way of letting you know that a program you already own has been updated. Apple knows which programs you’ve bought—and notifies you when new, improved versions are released. Which is remarkably often; software companies constantly fix bugs and add new features.

**Manual Updates**

When you tap _Updates_, you’re shown a list of the programs with waiting updates. A tiny _What’s New_ arrow lets you know what the changes are—new features, perhaps, or some bug fixes. And when you tap a program’s
name, you go to its details screen, where you can remind yourself of what the app does and where you can read other people’s reviews of this new version.

You can download one app’s update, or, with a tap on the **Update All** button, all of them...no charge.

**NOTE:** You can also download your updates from iTunes. Click **Apps** in the Source list (under the **Library** heading); the lower edge of the window lets you know if there are updated versions of your programs waiting and offers buttons that let you download the updates individually or all at once.

**Automatic Updates**

If you have a lot of apps, you may come to feel as though you’re spending your whole life downloading updates. They descend like locusts, every single day, demanding your attention.

That’s why Apple offers an automatic update-downloading option. Your iPad can download and install updated versions of your apps quietly and automatically in the background.

To turn on this feature, open **Settings**→**iTunes & App Store**. Under **Automatic Downloads**, turn on **Updates**. (If you’d prefer that your cellular iPad wait to do this downloading until it’s in a WiFi hotspot—to avoid eating up your monthly cellular data-plan allotment—then turn off **Use Cellular Data**.)

From now on, the task of manually approving each app’s update is off your to-do list forever. Only a blue dot next to an app’s name on the Home screen lets you know that it’s been updated.

**TIP:** Fortunately, the iPad also keeps a tidy record of every app it’s updated and what that update gives you. Open the App Store app; tap the **Updates** tab. There’s your list, sorted chronologically. Tap an app’s row to read what was new in the update you’ve already received.

**How to Find Good Apps**

If the Featured, What’s Hot, and Charts lists in the App Store app aren’t getting you inspired, there are all kinds of Web sites dedicated to reviewing and recommending iPad apps. (Do a Google search for *best iPad apps*.)
But if you’ve never dug into iPad apps before, then you should at least try out some of the superstars, the big dogs that almost everybody has.

Many of the most popular apps are designed to deliver certain Web sites in the best-looking way possible. That’s why there are apps for Facebook, Twitter, LinkedIn, Spotify, Pandora, Flickr, Yelp, Netflix, Hulu, YouTube, Wikipedia, and so on.

Here are a very few more examples—a drop in the bucket at the tip of the iceberg—of the infinite app variety beyond those basics:

- **Google Maps (free).** Google Maps is a replacement for the built-in Maps app. It’s much, much better than the built-in Maps program—even Apple has admitted that. Among other things, it offers Street View (you can actually see a photo of almost any address and “look around” you), it incorporates the Zagat guides for restaurants, and it’s unbelievably smart about knowing what you’re trying to type into the search box. Usually, about three letters is all you need to type before the app guesses what you mean.

- **Google Mobile (free).** Speak to search Google’s maps. Includes Google Goggles: Point the iPad’s camera at a book, DVD, wine bottle, logo, painting, landmark, or bit of text, and the hyper-intelligent app recognizes it and displays information about it from the Web.
• **Echofon (free).** Most free Twitter apps are a bit on the baffling side. This one is simple and clean.

• **Instagram (free)** has a bunch of filter effects, as iOS’s Camera app does. But the real magic is in the way it’s designed to share your photos. You sign up to receive Instagrams from Facebook or Twitter folk. They (the photos, not the folk) show up right in the app, scrolling up like a photographic Twitter feed. Seeing what other people are doing every day with their cameras and creative urges is really inspirational.


Happy apping!

## The App Switcher

Often, it’s handy to switch among open apps. Maybe you want to copy something from Safari (on the Web) into Mail (a message you’re writing).

Maybe you want to refer to your frequent flyer number (in Notes) as you’re using an airline’s check-in app. Maybe you want to adjust something in Settings and then get back to whatever you were doing.

The key to switching apps is this: *Double-press the Home button.* Whatever is on the screen gets replaced by the app switcher.

You see a horizontally scrolling row of icons, representing the open apps. Above them, you see shrunken-down images of their *screens* (next page). You can actually see what’s going on in each open app. In fact, sometimes, that’s all you need; you can refer to another app’s screen in this view, without actually having to switch *into* that app.

When you scroll horizontally to look through your recently opened apps (they’re in chronological order), you may notice that the icons and their screens seem to scroll at different speeds. They’re moving so that the icon is always centered under its much larger screen.
Thoughtfully enough, the app switcher always puts the *previous app* front and center when you first double-press the Home button. For example, if you’re in Safari but you were using Mail a minute ago, Mail appears centered in the app switcher. That makes life easier if you’re doing a lot of jumping back and forth between two apps; one tap takes you into the previous app.

When you tap an app’s icon or screen in the app switcher, you open that app.

**Force Quitting an App**

The app switcher lets you manually exit an app, closing it down. To do that, flick the unwanted app’s mini-screen upward, so that it flies up off the top of the screen.

(The app is not really gone; it will return to the lineup the next time you open it from the Home screen.)

You’ll need this gesture only rarely. You’re not supposed to quit every app when you’re finished. Force-quit an app only if it’s frozen or acting glitchy and needs to be restarted.
Your Favorite People

In iOS 8, the app switcher gained a new feature: a row of people icons at the top. These are the people you’ve contacted most recently. It’s sort of a master speed-dial list that’s always available, no matter what app you’re using—ready for quick messaging or FaceTiming.

The idea is to let you reach these people quickly and efficiently, without having to burrow through your Contacts, or without having to fire up an app (like FaceTime or Messages) and interrupt what you’re doing.

Here’s the procedure:

1. **Double-press the Home button.**

   The app switcher screen appears. The icons you see at top are the Recents: people you’ve most recently texted or FaceTimed.

2. **Tap the icon of the person you want to contact.**

   It expands to show icons for the different ways you’ve set up to contact that person: ☰️ message, ☺️ FaceTime (video), or 📞 FaceTime (audio). (You can scroll these icons horizontally, too.)

3. **Tap the communication method you prefer.**

   If you tap ☰️, Messages opens, ready to send a note to that person. If you tap ☺️, FaceTime opens and initiates a video call. 📞 opens FaceTime and initiates an audio call.

The hardest part about this whole feature is just remembering to use it. You may be used to opening the app first and then choosing a person; using this VIP feature, you tap the person first and then choose the app.
TIP: There may be one more element on the task-switcher screen, too: a faint app icon at the far left. That’s a document, email, or Web page being sent to your iPad by your Mac, using Handoff (see page 453).

A Word About Background Apps

Switching out of a program doesn’t actually close it. All apps can run in the background.

Of course, if every app ran full-tilt simultaneously, your iPad would guzzle down battery power like crazy. To solve that problem, Apple has put two kinds of limits in place:

• **iOS’s limits.** Not all apps run full speed in the background. Apps that really need constant updating, like Facebook or Twitter, get refreshed every few seconds; apps that don’t rely on constant Internet updates get to nap for a while in the background.

In deciding which apps get background attention, iOS studies things like how good your iPad’s Internet connection is and what time of day you traditionally use a certain app (so that your newspaper’s app is ready with the latest articles when you open it).

• **Your own limits.** You can’t control which apps run in the background, but you can control which ones download new data in the background. In SettingsÆGeneralÆBackground App Refresh, you’ll find a list of every app that may want to update itself in the background. In an effort to make your battery last longer, you can turn off background updating for the apps you don’t really care about; you can even turn off all background updating using the master switch at the top.

The bottom line: There’s no need to quit apps you’re not using, ever. Contrary to certain Internet rumors, they generally don’t use enough memory or battery power to matter. You may see dozens of apps in the app switcher, but you’ll never sense that your iPad is bogging down as a result.

AirPrint: Printing from the iPad

The very phrase “printing from the iPad” might seem a little peculiar. How do you print from a gadget without any jacks for connecting a printer?

Wirelessly, of course.
You can send printouts from your iPad to any printer that’s connected to your Mac or PC on the same WiFi network if you have a piece of software like Printopia ($20).

Or you can use the iPad’s built-in AirPrint technology, which can send printouts directly to a WiFi printer without requiring a Mac or a PC.

Not just any WiFi printer, though—only those that recognize AirPrint. Many recent Canon, Epson, HP, and Lexmark printers work with AirPrint; you can see a list of them on Apple’s Web site, here: http://support.apple.com/kb/HT4356.

Not all apps can print. Of the built-in Apple programs, only iBooks, Mail, Photos, Notes, and Safari offer Print commands. Those apps contain what most people want to print most of the time: PDF documents (iBooks), email messages, driving directions from the Web, and so on. Plenty of non-Apple apps work with AirPrint, too.

To use AirPrint, start by tapping the 
 button; tap Print. You’re offered a Select Printer option. Tap it to introduce the iPad to your printer, whose name should appear automatically. Now you can adjust the printing options (number of copies, page range)—and when you finally tap Print, your printout shoots wirelessly to the printer, exactly as though your iPad and printer were wired together.

### The Share Sheet

Every app is different, of course. But all of them have certain things in common; otherwise, you’d go out of your mind.

One of them is the Share sheet. It’s your headquarters for sending stuff off your iPad: to other apps, to phones, to the Internet, to a printer. It’s made up of several icon rows, each of which scrolls horizontally. (From top to
bottom, you could title these rows “What to Share,” “Send by AirDrop,” “Send to an App,” and “Act on This Data Directly.”

The Share sheet pops up whenever you tap the Share button (-sharing icon) that appears in many, many apps: Maps, Photos, Safari, Notes, Voice Memos, Contacts, and so on.

The buttons you see depend on the app; you may see only two options here, or you may see a dozen. Starting on page 238, for example, you can read descriptions of the icons that appear when you’re sending a photo: AirDrop, Message, Mail, Twitter, Facebook, Copy, AirPlay, Print, and so on. The options here vary by app.

In iOS 8, moreover, there’s a More button at the end of each row. That’s an invitation for other, non-Apple apps to install their own “send to” options into the Share sheet. When you tap More, you can see the full list of apps that have inserted themselves here.

Now you can perform these tasks:

- **Hide a sharing option.** Flip the switch to make one of the sharing options disappear from the Share sheet. (You can’t hide the sharing options that Apple considers essential, like Message or Mail.)

- **Rearrange the sharing options.** Use the handle to move these items up or down the list, which affects their left-to-right order on the Share sheet.
AirDrop

It’s a headline feature: AirDrop, a way to shoot things from one Apple iPad, iPhone, or Mac to another—wirelessly, instantly, easily, encryptedly, without requiring names, passwords, or settings-up. It’s much faster than emailing or text messaging, since you don’t have to know (or type) the other person’s address. It’s available on the iPad 4th Generation and later.

**NOTE:** If your Mac is running OS X Yosemite, you can shoot files between it and your iPad, too!

You can transmit pictures and videos from the Photos app, people’s info cards from Contacts, directions (or your current location) from Maps, pages from Notes, Web addresses from Safari, electronic tickets from Passbook, apps you like in the App Store, song and video listings from the iTunes app), radio stations (iTunes Radio), and so on. As time goes on, more and more non-Apple apps will offer AirDrop, too.

Behind the scenes, AirDrop uses Bluetooth (to find nearby gadgets within about 30 feet) and a private, temporary WiFi mini-network (to transfer the file). Both sender and receiver must have Bluetooth and WiFi turned on.

The process goes like this:

1. **Find a willing recipient.** You can’t send anything with AirDrop unless the receiving iPad or tablet is running iOS 7 or later—and is awake. And only recent models work with AirDrop: iPad 5 or later, 4th Generation iPad or later, any iPad mini, and 5th Generation iPod Touch or later.

   In other words, most AirDrop exchanges begin with your saying, “Hey, do you have iOS 7 or 8?”

2. **Open the item you want to share.** Tap the Share button ( ). If your app doesn’t have a button, then you can’t use AirDrop.

   When the Share sheet appears, within a few seconds, you see something that would have awed the masses in 1975: small circular photos of everyone nearby. (Or at least everyone with iOS 7 or 8, or OS X Yosemite. Or at least everyone among them who’s open to receiving AirDrop transmissions, as described below.)

**TIP:** When you send a photo, the top row of the Share sheet shows your other photos and videos so that you can select additional items to go along for the ride. A blue checkmark identifies each item you’ve selected to send.
3. **Tap the icon of the person you want to share with.** In about a second, a message appears on the recipient’s screen, conveying your offer to transmit something good—and, when it makes sense, showing a picture of it (below, bottom).

**TIP:** Actually, you can select *more than one* person’s icon. In that case, you’ll send this item to everyone at once.

At this point, it’s up to your recipients. If they tap **Accept**, then the transfer begins (and ends); whatever you sent them opens up automatically in the relevant app. You’ll know that AirDrop was successful because the word “Sent” appears on your screen.
If they tap **Decline**, then you must have misunderstood their willingness to accept your item (or they tapped the wrong button). In that case, you’ll see the word “Declined” on your screen.

**The One AirDrop Setting**

Your existence probably won’t become a living hell of AirDrop invitations. Realistically, you won’t be bombarded by strangers around you who want to show you family pictures or Web links. Even so, Apple has given you some control over who’s allowed to try to send you things by AirDrop.

To see the settings, swipe up from the bottom of the screen to open the Control Center. There, in the middle, is the **AirDrop** button. Tap it to see these three choices:

- **Off.** Nobody can send anything to you by AirDrop. You’ll never be disturbed by an incoming “Accept?” message.

- **Contacts Only.** Only people in your Contacts app—your own address book—can send you things by AirDrop. Your iPad is invisible to strangers. (Of course, even when someone you know tries to send something, you still have to approve the transfer.)

  **NOTE:** The Contacts Only option requires that both you and your recipient have iCloud accounts and are logged in. Your Contacts card for the other person has to include that iCloud address (or .me or .mac).

- **Everyone.** Anyone, even strangers, can try to send you things. You can still accept or decline each transfer.

  **TIP:** OK, there’s one other AirDrop setting to fiddle with: In **Settings** → **Sounds**, you can specify the sound effect that means, “AirDrop file received.”

  (OK, OK, there’s **one more** setting. Deep in **General** → **Restrictions**, you can turn off AirDrop altogether. Now your youngster—or whomever you’re trying to restrict with restrictions—can’t get into trouble in a debauched frenzy of sending and receiving files.)

**iCloud Drive**

iCloud Drive, new in iOS 8, is Apple’s version of Dropbox. It’s a folder whose contents appear identically on every Mac, iPhone, iPad, and even Windows PC you own, through the magic of instant online syncing. It’s an online “disk” that holds 5 gigabytes (more, if you’re willing to pay for it).
The iCloud Drive is a perfect place to put stuff you want to be able to access from any computer, iPad, or iPhone, wherever you go. It’s a great backup, too, because anything you put into it is automatically duplicated on multiple machines.

Your first chance to turn on iCloud Drive was when you first installed iOS 8 (or bought your iOS 8 iPad). If you declined, maybe because you had no idea what it was about, then you can visit Settings→iCloud→iCloud Drive and turn iCloud Drive on now.

**NOTE:** iCloud Drive replaces a previous syncing feature that Apple called “Documents in the Cloud.” If you turn on iCloud Drive, the old system goes away; all the files you kept there are brought onto your new iCloud Drive. That’s fine, as long as you understand that non-iOS 8 (or OS X Yosemite) gadgets will no longer be able to see them.

Once you turn on iCloud Drive, you can’t go back to the “Documents in the Cloud” system. Sure, you can turn off iCloud Drive (in Settings), but all that does is stop syncing the drive’s contents with your other machines.

Now, it’s easy to understand iCloud Drive on a Mac or PC. It looks like any other disk, full of files and folders. You can even access them at iCloud.com (click the Drive icon), which is handy when you have to use someone else’s computer. Any change you make to the iCloud Drive or its contents is instantly synchronized across all your other gadgets.

But on the iPad, there is no traditional desktop. There are no disk icons. So where’s the iCloud Drive?

On the iPad, you can see what’s on your iCloud Drive only within apps that can open and save documents. That includes Apple’s apps—Keynote, Pages, Numbers, iMovie—and other apps that create and open documents, like, say, Scanner Pro and PDF Expert. Over time, more companies will make their apps compatible with iCloud Drive.

In all these apps, there’s an Open button or icon that presents the iCloud Drive’s contents. In Pages, for example, when you’re viewing your list of documents, tap +, and then tap iCloud. There’s the list of folders on your iCloud Drive, corresponding perfectly to what you would have seen on a Mac or a PC. Tap a folder to open it and see what’s in it.

Note that iOS shows you everything on your iCloud Drive, even things you can’t open at the moment. For example, if you’re using the iMovie app, you can’t open a Pages file, so Pages documents appear dimmed and gray.
On the other hand, this arrangement offers some really useful perks:

- You can open some kinds of files in different apps. A PDF file, for example, can open into Pages, or Photos, or iBooks. So PDF files show up as openable in all those apps.

- When you delete an app, you no longer lose all the documents you created with it.

You can view your iCloud Drive folders either as icons or in a list view. Tap to open one; tap at top left to back out of whatever folder you’ve opened.

On an iPad, the iCloud Drive folder list is not quite the same thing as having a real desktop—you can’t rename, copy, or delete files or folders on the iPad, for example.
But it's comforting to know that everything on your iCloud Drive that you can open is available wherever you go—and that you can now load up everyday documents (pictures, music, PDF files, Microsoft Office files, iWork documents) onto your iPad by dragging them into the iCloud Drive folder on your computer.

**NOTE:** Your free iCloud account includes only 5 gigabytes of storage—and that's for everything on your iCloud Drive. If you're willing to pay $1 to $20 a month, you can expand that storage to anywhere from 20 gigabytes to 1 terabyte. To do that, open **Settings** → **iCloud** → **Storage** → **Change Storage Plan**.
Your Home screen comes already loaded with the icons of about 25 programs. These are the essentials; eventually, of course, you’ll fill that Home screen with apps you install yourself. The starter apps include gateways to the Internet (Safari), communications tools (Messages, Mail, Contacts), visual records of your life (Photos, Camera), shopping centers (iTunes Store, App Store), and entertainment (Music, Videos, Podcasts).

Those core apps get special treatment in the other chapters. This chapter covers the secondary programs, in alphabetical order: Calendar, Clock, Compass, Game Center, Health, iBooks, Maps, Newsstand, Notes, Passbook, Podcasts, Reminders, Stocks, Tips, Voice Memos, and Weather.

**NOTE:** No, the iPad does not come with a Calculator app, even though the iPhone does. Weird. Of course, there are thousands of free calculator apps waiting for you in the App Store.

**Calendar**

What kind of digital companion would the iPad be if it didn’t have a calendar program? And not only does it have a calendar—it syncs. If you maintain your life’s schedule on a Mac (in Calendar or Entourage) or a PC (in Outlook), then you already have your calendar on your iPad. Make a change in one place, and it changes in the other, every time you sync over the USB cable.

Better yet, if you have an iCloud account or work for a company with an Exchange server (Chapters 15 and 16), then your calendar can be synchronized with your computer *automatically*, wirelessly, over the air.

Or you can use Calendar all by itself.
TIP: The Calendar icon on the Home screen shows what looks like one of those paper Page-a-Day calendar pads. But if you look closely, you’ll see a sweet touch: It actually shows today’s day and date.

The Four Views

When you open Calendar, you’re shown today’s schedule on the left half of the screen, broken down by time slot.

Across the top, you see buttons for the Calendar’s four views: **Day**, **Week**, **Month**, and **Year**. They work pretty much alike, even if you rotate the iPad.
• **Day view.** Swipe horizontally across the Day column to see the previous or next day. Tap a date at the top to see another day this week. Swipe across the dates at the top to jump to another week.

• **Week view** is the multicolumn layout shown on the facing page. You can swipe sideways to move to earlier or later dates. Swipe up or down to move through the hours of the day.

• **Month view,** of course, shows the entire month at a glance. You can scroll the month vertically, thereby scanning the entire year in a few seconds.

• **Year view** is a simple, vertically scrolling map of the year’s months. Tap a month block to open it back into Month view.

**TIP:** In all three views—Day, Month, Year—you can tap **Today** (bottom left) to return to today’s date.

### Making an Appointment

The basic calendar is easy to figure out. After all, with the exception of one unfortunate Gregorian incident, we’ve been using calendars successfully for centuries.

Even so, recording an event on this calendar is quite a bit more flexible than entering one on, say, one of those “Hunks of the Midwest Police Stations” paper calendars.

To begin, summon the New Event panel like this:

• **Day View, Week View.** In these views, **hold your finger down on a time slot** to add a new, 1-hour appointment right there.

• **Month View.** Hold your finger down on the appropriate Month view square.

• **Year View.** Tap + in the top-right corner of the screen. (This button actually works in all views, but it requires more steps because you have to specify the date and time manually.)

In each case, the New Event panel pops up, filled with tappable lines of information. Tap one (like **Starts/Ends** or **Repeat**) to open a configuration screen for that element.
For example:

- **Title/Location.** Name your appointment here. For example, you might type *Fly to Phoenix.*

  The second line, called **Location,** makes a lot of sense. If you think about it, almost everyone needs to record where a meeting is to take place. You might type a reminder for yourself like *My place,* a specific address like *212 East 23rd,* a contact phone number, or a flight number.

  Use the keyboard as usual.

- **Starts/Ends.** On this screen, tap **Starts,** and then indicate the starting time for this appointment, using the four spinning dials at the bottom of the screen. The first sets the date; the second, the hour; the third, the minute; the fourth, AM or PM. If only real alarm clocks were so much fun!
Then tap **Ends** and repeat the process to schedule the ending time. (The iPad helpfully presets the Ends time to one hour later.)

An **All-day** event, of course, has no specific time of day: a holiday, a birthday, a book deadline. When you turn this option on, the Starts and Ends times disappear. The event appears at the top of the list for that day.

**TIP:** Calendar can handle multiday appointments, too, like trips away. Turn on **All-day**—and then use the **Starts** and **Ends** controls to specify beginning and ending **dates.** On the iPad, you’ll see it as a list item that repeats on every day’s square. Back on your computer, you’ll see it as a banner stretching across the Month view.

- **Repeat.** (Scroll the New Event pane upward if you don’t see **Repeat** and the other options.)

Here you get common options for recurring events: every day, every week, and so on. It starts out saying **Never.**

Once you’ve tapped a selection, you return to the New Event screen. Now you can tap **End Repeat** to specify when this event should **stop** repeating. If you leave the setting at **Never,** then you’re stuck seeing this event repeating on your calendar until the end of time (a good choice for recording, say, your anniversary, especially if your spouse might be consulting the same calendar).

In other situations, you may prefer to tap **On Date** and spin the three dials (month, day, year) to specify an ending date, which is useful for car and mortgage payments.

Tap **New Event** to return to the editing screen.

- **Travel Time.** If you turn on this switch, you can indicate how long it’ll take you to get to this appointment.

You get six canned choices, from 5 minutes to 2 hours. If you choose one, two things happen. First, the travel time is blocked off on your calendar, so you don’t accidentally schedule things during your driving time. (The travel time is depicted as a dotted extension of the appointment.)

Second, if you’ve set up an alarm reminder, it will go off that much earlier, so you have time to get where you’re going.

- **Calendar.** Tap here to specify which color-coded **calendar** (A category, like Home, Kids, or Work) this appointment belongs to. Turn to page 294 for details on the calendar concept.
• **Invitees.** If you have an iCloud, Exchange, or CalDAV account, you can invite people to an event—a meeting, a party, whatever—and track their responses, right there on your iPad (or any iCloud gadget). When you tap **Invitees**, you get an Add Invitees screen, where you can type in the email addresses of your lucky guests. (Or tap ✉️ to choose them from your Contacts list.)

Later, when you tap **Done**, the iPad fires off email invitations to those guests. It contains buttons for them to click: **Accept**, **Decline**, and **Maybe**. You get to see their responses right here in the details of your calendar event.

As icing on the cake, your guests will see pop-up reminders on their phones when the time comes for the party to get started.

• **Alert.** This screen tells Calendar how to notify you when a certain appointment is about to begin. Calendar can send any of four kinds of flags to get your attention. Tap how much notice you want: 5, 15, or 30 minutes before the big moment (or before the travel time you’ve specified); an hour or two before; a day or two before; a week before; or on the day of the event.

**NOTE:** For all-day events like birthdays, you get a smaller but very useful list of choices: “On day of event (9 AM),” “1 day before (9 AM),” “2 days before (9 AM),” and “1 week before.”

When you return to the New Event panel, you see that a new line, called **Second Alert**, has sprouted up beneath the first Alert line. This line lets you schedule a **second** warning for your appointment, which can occur either before or after the first one. Think of it as a backup alarm for events of extra urgency.

Once you’ve scheduled these alerts, you’ll see a message appear on the screen at the appointed time(s). (Even if the iPad was asleep, it appears briefly.) You’ll also hear a chirpy alarm sound.

**TIP:** The iPad doesn’t play the sound if you turned off Calendar Alerts in **Settings → Sounds**. It also doesn’t play if your iPad has a mute switch and you’ve turned it on.

• **URL.** Here you can record the Web address of some online site that provides more information about this event.

• **Notes.** Here’s your chance to customize your calendar event. You can type any text you want in the Notes area—driving directions, contact phone numbers, a call history, or whatever.
When you’ve completed filling in all these blanks, tap Add. Your newly scheduled event now shows up on the calendar.

**Editing, Rescheduling, Deleting Events (Long Way)**

To examine the details of an appointment in the calendar, tap it once. An Info bubble appears, filled with the essentials of the details you previously established. (In Day view, the right half of the screen shows all of that information.)

If you tap Edit, you return to what looks like a clone of the Add Event screen. Here you can change the name, time, alarm, or any other detail of the event, just the way you set them up to begin with.

This time, there’s a red Delete Event button at the very bottom. That’s the only way to erase an appointment from your calendar. (You can’t edit or erase events created by other people—Facebook birthdays, meetings on shared calendars, and so on—only appointments you created.)

**Editing and Rescheduling Events (Fun Way)**

In Day or Week views, you can drag an appointment’s block to another time slot or even another day. Just hold your finger down on the appointment’s bubble for about a second—until it darkens—before you start to drag. It’s a lot quicker and more fluid than having to edit in a dialog box.
You can also change the duration of an appointment in Day and Week views. Hold your finger down on its colored block for about a second; when you let go, small, round handles appear.

You can drag those tiny handles up or down to make the block taller or shorter, in effect making it start or end at a different time.

Whether you drag the whole block, the top edge, or the bottom edge, the iPad thoughtfully displays “:15,” “:30,” or “:45” on the left-side time ruler to let you know where you’ll be when you let go.

**The Calendar (Category) Concept**

A calendar, in Apple’s somewhat confusing terminology, is a color-coded subset—a category—into which you can place various appointments. They can be anything you like. One person might have calendars called Home, Work, and TV Reminders. Another might have Me, Spouse ‘n’ Me, and The Kidz. A small business could have categories called Deductible Travel, R&D, and R&R.

You can create and edit calendar categories right on the iPad, in your desktop calendar program, or (if you’re an iCloud member) at www.icloud.com when you’re at your computer; all your categories and color-codings show up on the iPad automatically.

At any time, on the iPad, you can choose which subset of categories you want to see. Just tap Calendars at the bottom of any view. You open up the color-coded list of your categories (facing page, left). As you can see, it’s subdivided according to your accounts: your Gmail categories, your Yahoo categories, your iCloud categories, and so on. There’s even a Facebook option, if you’ve set up your Facebook account, so that you can see your Facebook calendar entries and friends’ birthdays right on the main calendar.
This screen exists partly as a reference, a cheat sheet to help you remember what color goes with which category, and partly as a tappable subset chooser. That is, you can tap a category’s name to hide or show all of its appointments on the calendar. A checkmark means you’re seeing its appointments. (The All [Account Name] button turns on or off all of that account’s categories at once.)

If you tap Edit, then a little > appears next to each calendar’s name. When you tap it, you’re offered a screen where you can change the calendar’s name, color, and list of people who can see it—or scroll all the way down to see the Delete Calendar button.

The Edit Calendars panel also offers an Add Calendar button. It’s the key to creating, naming, and colorizing a new calendar on the iPad. (Whatever changes you make to your calendar categories on the iPad will be synced back to your Mac or PC.)

**TIP:** You can set up real-time, wireless connections to calendars published on the Web in the CalDAV format—notably your Yahoo or Google calendar. Just tap your way to SettingsÆMail, Contacts, CalendarsÆAdd Account. Here you can tap iCloud, Exchange, Gmail, Yahoo, AOL, or Outlook.com to set up your account. (You can also tap OtherÆAdd CalDAV Account to fill in the details of a less well-known calendar server.)
Now you have a two-way synced calendar between your iPad and (in this case) your online calendar. To read about other ways of syncing the iPad with online calendars, including read-only .ics files (like sports-team schedules), download the PDF appendix called “Syncing Calendar with .ics Files” from this book’s “Missing CD” page (which you’ll find at www.missingmanuals.com).

**TIP:** You can share an iCloud calendar with other iCloud members (previous page, right), which is fantastic for families and small businesses who need to coordinate. Tap Calendars, tap Edit, and then tap the calendar to share. Tap Add Person and enter the person’s name. Your invitees get invitations by email; with one click, they’ve added your appointments to their calendars. They can make changes, too.

You can also share a calendar with anyone (not just iCloud members) in a “Look, don’t touch” condition. Tap Calendars, tap Edit, and then tap the calendar to share. Turn on Public Calendar; tap Share Link to open the Share sheet for sending the link. Most calendar apps understand the calendar link that your iPad sends.

**Search**

If you tap 📜 and type into the search box, you pare down a list of all events from all time; only events whose names match what you’ve typed show up. Tap one to jump to its block on the main calendar.

Next time you’re sure you made an appointment with Harvey but you can’t remember the date, keep this search feature in mind.

**TIP:** The iOS calendar is basic. For more features and power, consider calendar apps like Fantastical or Tempo.

**Clock**

It’s not just a clock—it’s more like a time factory. Hiding behind this single icon on the Home screen are four programs: a world clock, an alarm clock, a stopwatch, and a countdown timer.

**TIP:** The app icon itself is an accurate clock. It shows the time! Isn’t that cute?

**World Clock**

When you tap World Clock on the Clock screen, you see the current time in several world cities—including Apple’s own Cupertino, California. The
color of the clock indicates whether it’s daytime (white) or night (black). A handsome world map below shows the geographic locations of these cities within their time zones.

The result looks like the row of clocks in a hotel lobby, making you seem Swiss and precise.

By checking these clocks, you can avoid calling somebody up at what turns out to be 3 a.m.

To specify which city’s time appears on the clock, tap Add. Scroll to the city you want, or tap its first letter in the index at the right side to save scrolling, or tap in the search box at the top and type the name of a major city. As you type, matching city names appear; tap the one whose time you want to track.

As soon as you tap a city name, you return to the World Clock display, where that city’s clock joins the others.

**TIP:** Tap a clock to make it larger, filling the screen, so you can see it from across the street.

You can scroll the list of clocks. You’re not limited to six, although only that many fit on the screen at once.
TIP: Only the world’s major cities are in the iPad’s database. If you’re trying to track the time in Squirrel Cheeks, New Mexico, add a major city in the same time zone instead—like Albuquerque.

To edit the list of clocks, tap Edit. Delete a city clock by tapping – and then Delete, or drag clocks up or down using the as a handle. Then tap elsewhere on the screen to close the panel.

**Alarm**

If you travel much, this feature could turn out to be one of your iPad’s most useful functions. It’s reliable, it’s programmable, it lets you set up multiple re-usable alarms (say, a 6:30 a.m. alarm for weekdays and an 11:30 a.m. alarm for weekends), and it even wakes the iPad first, if necessary, to wake you.

To set an alarm, tap Alarm at the bottom of the Clock screen. On a map of the week, you see the alarms you’ve already created, even if none are currently set to go off (below). At the top of the screen, in huge numbers, you see the next scheduled alarm—again, even if it’s currently turned off. (Use the switch to the right to turn it on and off.)

To create a new alarm, tap + to open the Add Alarm panel.
But really, you should not bother setting alarms using this manual technique. Instead, you’ll save a lot of time and steps by using Siri. Just say, “Set my alarm for 7:30 a.m.” (or whatever time you want).

You have several options here:

- **Time dials.** Spin these three vertical wheels—hour, minute, AM/PM—to specify the time you want the alarm to go off.

- **Repeat.** Tap to specify what days this alarm rings. You can specify, for example, Mondays, Wednesdays, and Fridays by tapping those three buttons. (Tap a day-of-the-week button again to turn off its checkmark.) Tap **Back** when you’re done. (If you choose Saturdays and Sundays, iOS is smart enough to call that “Weekends.”)

- **Label.** Tap to give this alarm a description, like “Get dressed for wedding.” That message appears on the screen when the alarm goes off.

- **Sound.** Choose what sound you want to ring. You can choose from any of the iPad’s ringtone sounds, any you’ve added yourself—or, best of all, **Pick a Song.** That’s right—you can wake to the music of your choice.

- **Snooze.** If this option is on, then at the appointed time the alarm message on the screen offers you a **tap to snooze** button. Tap it for 10 more minutes of sleep, at which point the iPad tries again to get your attention. (It gives you a countdown in the meantime.)

When you finally tap **Save,** you return to the Alarm screen, which lists your new alarm. Just tap the on/off switch to cancel an alarm. It stays in the list, though, so you can quickly reactivate it another day. You can tap **+** to set another alarm, if you like.

Now the ⌚ icon appears in the status bar at the top of the iPad screen. That’s your indicator that the alarm is set.

To delete or edit an alarm, tap **Edit.** Tap – and then **Delete** to get rid of an alarm completely, or tap the alarm’s name to return to the setup screen, where you can make changes to the time, name, sound, and so on.

So what happens when the alarm goes off? The iPad wakes itself up, if it was asleep. A message appears, identifying the alarm and the time.

And, of course, the sound rings. This alarm is one of the only iPad sounds that you’ll hear **even if the mute switch is turned on** (if your model has one). Apple figures that if you’ve gone to the trouble of setting an alarm, you probably **really** want to know about it, even if you forget to turn the ringer back on.
In that case, the screen says slide to stop alarm.

To cut the ringing short, tap OK or Snooze, or press the Sleep switch, or tap a volume button. After the alarm plays (or you cut it short), its on/off switch goes to Off (on the Alarm screen)—unless, of course, you’ve set it up to be an auto-repeating alarm.

**Stopwatch**

You’ve never met a more beautiful stopwatch than this one. Tap Start to begin timing something: a runner, a train, a person who’s arguing with you.

While the digits are flying by, you can tap Lap as often as you like. Each time, the list at the bottom identifies how much time elapsed since the last time you tapped Lap. It’s a way for you to compare, for example, how much time a runner is spending on each lap around a track.

(The tiny digits at the very top measure the current lap.)

You can work in other apps while the stopwatch is counting. In fact, the timer keeps ticking away even when the iPad is asleep! As a result, you can time long-term events, like how long it takes an ice sculpture to melt, the time it takes for a bean seed to sprout, or the length of a Michael Bay movie.

Tap Stop to freeze the counter; tap Start to resume the timing. If you tap Reset, you reset the counter to zero and erase all the lap times.

**Timer**

The fourth Clock mini-app is a countdown timer. You input a starting time, and it counts down to zero.

Countdown timers are everywhere in life. They measure the periods in sports and games, cooking times in the kitchen, penalties on The Amazing Race. But on the iPad, the timer has an especially handy function: It can turn off the music or video after a specified amount of time. In short, it’s a sleep timer that plays you to sleep and then shuts off to save power.

To set the timer, open the Clock app and then tap Timer. Spin the two dials to specify the number of hours and minutes you want to count down.

Then tap 🎶 Radar (or whatever it says directly beneath the dials) to choose the sound you want the iPad to play when the timer reaches 0:00. The last one listed, Stop Playing, is the aforementioned sleep timer. It stops audio and video playback at the appointed time, so that you (and the iPad) can go to sleep. Tap Set.
Finally, tap **Start**. Big clock digits count down toward zero. While it’s in progress, you can do other things on the iPad, change the **When Timer Ends** settings, or just hit **Cancel** to forget the whole thing.

**TIP:** It’s much faster and simpler to use Siri to start, pause, and resume the Timer. See page 40.

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**Game Center**

The iPad is an accomplished gaming device, the equal of Sony’s PlayStation Portable or Nintendo’s DS. iPad features like the accelerometer and touchscreen are perfect for a multitude of games, from first-person shoot-’em-ups to casual games that require nothing more complicated than dragging a tile across the screen. Game makers have responded to the iPad—on the App Store, the Games category is one of the most active sections, with thousands of games available.

To help fan the flames of iPad gaming, Apple created Game Center as a way for iPadders to compare scores with their friends and to challenge buddies to games.
Getting Started

You have to sign up for Game Center before you can use it, but the process is simple: Just enter your Apple ID and password.

You’ll be asked to create a nickname—“AngriestBird” or “BobSmith2000,” for example. On the next screen, you can make this nickname public, so that it can appear on the leaderboards (scoreboards that show the highest point winners) for iOS games; you can also use this nickname when you play multiplayer apps like Super Stickman Golf against other people.

That public profile includes a photo of you; you can grab one from your photo library or shoot it from within Game Center itself using the iPad’s front-facing camera. You also have space to write a little description of yourself, like the bio line in Twitter.

Once all that’s in place, the Me tab in Game Center displays your nickname, that clever little phrase you wrote, and your picture (above). Beneath that, multicolored spheres display the number of Game Center-compatible games you own, the number of Game Center friends you have, and—perhaps most significantly—the number of points you’ve accrued from your gaming activities.
Points and Achievements

Points play a leading role in Game Center. They’re what you earn from racking up achievements in Game Center–compatible apps. Smash enough blocks in Angry Birds Seasons, or build a certain number of floors in Tiny Tower, and you unlock achievements in those games; those achievements translate to points, which show up in your Game Center profile.

Those points also provide a way to measure yourself against your friends. On Game Center’s Friends tab, you can tap the name of one of your friends. You get a choice of three bubbles: the games your friends play, the names of their friends, and the number of points they’ve tallied. That points view features a side-by-side comparison showing your respective accomplishments in commonly played games, so you can settle once and for all who’s tops at Tiny Wings. (Game Center also shows the points your friends have racked up in games you don’t own, which is Apple’s way of suggesting that maybe you should download more games.)

Making Friends

Of course, before you can compare your scores with your friends, you have to have some friends. Tap the + button in the upper-right corner of the Friends panel to open the Friend Request page, where you can invite someone to be your Game Center buddy using his nickname, Facebook account, or email address. (In fact, Game Center thoughtfully offers you a list of Facebook contacts who are already on Game Center.)

But what if you don’t have any existing friends, or at least none that you know are on Game Center? Tap Upload My Contacts. The app sends your address book to Apple’s master computers, so it can match you up with strangers who have the same games you do. Tapping one of those names takes you to a page that shows common friends, if any, and a Send Friend Request button.

You can also find gaming companions through your other Game Center friends. Just tap names in the list of your current friends, and then select the Friends view on their pages to see who they hang out with in Game Center when they’re not matching scores with you.

Finding Games

Game Center can also help you find games to play—specifically, games that are designed to tie in with Game Center. The Recommended section of the Games tab lists suggested games. Game Center bases these recommendations on what you already own, what your friends play, and popular App Store downloads. Selecting a game in the Recommendations list shows you leaderboards, achievements you can unlock, and which of your friends are playing the game. You can download the app right from this screen.
You can also buy games directly from the list of games your friends play within the Friends tab. Tap a game name to see your friends’ rankings, or tap the price tag to download the game directly.

**Playing Games**

All right. Suppose, then, that you’ve downloaded some games (easy) and you have some friends (it could happen). You’re ready to play!

Tap the Games tab, tap the game you want, and then tap the player you want to challenge.

Or start on the Friends tab. Tap the friend, tap his Games bubble, and then tap the game you want.

Game Center hands you off to the game itself—a different app—so that your online adventure can begin. (Usually you’ll see an option for Network play or Internet play; that’s the one you want.)

**iBooks**

iBooks is Apple’s ebook reading program, and one of the iPad’s most natural and useful apps. With iBooks, you can carry around dozens or hundreds of books on your tablet, without adding an ounce of weight to it.
Most people think of iBooks as a reader for books that Apple sells on its iTunes bookstore—bestsellers and current fiction, for example—and it does that very well. But you can also load it up with your own PDF documents, as well as thousands of free, older, out-of-copyright books.

**TIP:** iBooks is very cool and all. But in the interest of fairness, it’s worth noting that Amazon’s free Kindle app, and Barnes & Noble’s free B&N eReader app, are much the same thing—but offer much bigger book libraries at lower prices than Apple’s.

### Downloading Books

To shop the iBooks bookstore, open the iBooks app. If this is your first time diving in, you might be offered a selection of free starter books to download right now. Go for it; they’re real, brand-name books by famous authors.
If, at any time, you want to buy another book—it could happen—well, the icons across the bottom are the literary equivalent of the App Store. Tap **Featured** to see what Apple is plugging this week; **NYTimes** to see what’s on *The New York Times* Best Seller list; **Top Charts** to see what books Apple is selling the most of; **Top Authors**; and **Purchased** to see what you’ve bought.

**TIP:** Once you’ve bought a book from Apple, you can download it again on other iPads, iPod Touches, iPhones, and Macs. Buy once, read many times. That’s the purpose of the **Not on This iPad** tab, which appears when you tap **Purchased**.

Once you find a book that looks good, you can tap **Sample** to download a free chapter, read ratings and reviews, or tap the price itself to buy the book and download it straight to the iPad.

**PDFs and ePub Files**

You can also load up your ebook reader from your computer, feeding it with PDF documents and ePub files.

**NOTE:** ePub is the normal iBooks format. It’s a very popular standard for ebook readers, Apple’s and otherwise. The only difference between ePub documents you create and the ones Apple sells is that Apple’s are copy protected.
As usual, your Mac or PC is the most convenient loading dock for files bound for your iPad. If you have a Mac, open the iBooks program. If not, open iTunes, click your iPad’s icon at the top (when it’s connected), and then click Books.

Either way, you now see all the books, PDF documents, and ePub files that you’ve slated for transfer. To add to this set, just drag files off your desktop and directly into this window.

And where are you supposed to get all these files? Well, PDF documents are everywhere—people send them as attachments, and you can turn any document into a PDF file. (For example, on the Mac, in any program, choose File→Print; in the resulting dialog box, click PDF→Save as PDF.)

**TIP:** If you get a PDF document as an email attachment, then adding it to iBooks is even easier. Tap the attachment to open it; now tap Open in iBooks in the corner of the page. (The iPad may not be able to open really huge PDFs, though.)

But free ebooks in ePub format are everywhere, too. There are 33,000 free downloadable books at gutenberg.org, for example, and over a million at books.google.com—oldies, but classic oldies, with lots of Mark Twain, Agatha Christie, Herman Melville, H.G. Wells, and so on. (Lots of these are available in the Free pages of Apple’s own iBook store, too.)

**TIP:** These freebie books usually come with generic-looking covers. But once you’ve dragged them into iTunes, it’s easy to add a good-looking cover. Use images.google.com to search for the book’s title. Right-click (or Control-click) the cover image in your Web browser; from the shortcut menu, choose Copy Image. In iTunes, in Library mode, choose Books from the top-left pop-up menu. Right-click (or Control-click) the generic book; choose Get Info; click Artwork; and paste the cover you copied. Now that cover will sync over to the iPad along with the book.

Once you’ve got books in iTunes, connect the iPad, choose its name at top right, click the Books tab at top, and turn on the checkboxes of the books you want to transfer.

**Your Library**

Once you’ve supplied your iBooks app with some reading material, the fun begins. When you open the app, its My Books tab shows a sleek bookshelf
with your library represented as little book covers. Mostly what you’ll do here is tap a book to open it. But there are other activities waiting for you:

• Tap казалось, which switches the book-cover view to a more boring (but more compact) list view. Buttons at the top let you sort the list by author, title, category, and so on.

• Tap Select if you want to delete a book, or a bunch of them. To do that, tap each book thumbnail that you want to target for termination; observe how they sprout ✔️ marks. Then tap Delete. Of course, deleting a book from the iPad doesn’t delete your copy in iTunes or online.

• You can reorganize your bookshelf. Hold down your finger on a book until it swells with pride, and then drag it into a new spot. (This trick doesn’t work in the All Books Collection; read on.)

• Once you’ve tapped Select and then selected a book (or several), the Move button becomes available. It opens the Collections screen shown below. The idea is that you can create subfolders for your books, called collections. You might have one for school, one for work, and a third for somebody who shares your iPad, for example. Tap an existing collection to move the selected titles, or tap New Collection to create and name a new collection.

TIP: To switch your bookshelf view among collections, tap the collection’s name. It’s the top-center button, which starts out saying, for example, All Books or PDFs.
• If you’ve loaded some PDF documents, then you can switch between the **Books** and **PDFs** bookshelves by tapping the top-center button to open the Collections panel.

• The **Search** bar above the book covers lets you search by author or title—not just *your* books, but the entire iBooks store.

• When you first start using a new iPad, iPhone, or Mac, your book covers bear the symbol. It means: “Our records show that you’ve bought this book, but it’s still online, in your great Apple locker in the sky. Tap to download it to your iPad so you can start reading.”

**Reading**

But come on—you’re a reader, not a librarian. Here’s how you read an ebook.

Open the book or PDF by tapping the book cover. Now the book opens, ready for you to read. Looks great, doesn’t it? (If you’re returning to a book you’ve been reading, iBooks remembers your place.)

In iOS 8, if the iPad detects that it’s nighttime (or just dark where you are), the screen appears with white text against a black background. That’s to prevent the bright white light of your iPad from disturbing other people in, for example, the movie theater. (This is the Night theme described below, and you can turn it off.)

**TIP:** Try turning the iPad 90 degrees. In landscape orientation, you see a two-page spread. In portrait orientation, you get a single, bigger page.

Reading is simple. Turn the page by tapping the margin of the page—or swiping your finger across the page. (If you swipe slowly, you can actually see the “paper” bending over—in fact, you can see through to the “ink” on the other side of the page! Amaze your friends.) You can tap or swipe the left edge (to go back a page) or the right edge (to go forward).

**TIP:** This is Lock Rotation’s big moment. When you want to read lying down, you can prevent the text from rotating 90 degrees using Lock Rotation (page 23).

But if you tap a page, a row of additional controls appears:

• **Library** takes you back to the bookshelf view.

• **Table of Contents** opens the Table of Contents. The chapter or page names are “live”—you can tap one to jump there.
• **A** lets you change the look of the page. For example, this panel offers a screen-brightness slider. That’s a nice touch, because the brightness of the screen makes a big difference in the comfort of your reading. (This is the same control you’d find in the Control Center or in Settings.)

A pair of A buttons controls the type size—a huge feature for people with tired or over-40 eyes. And it’s something paper books definitely can’t do. Tap the larger one repeatedly to enlarge the text; tap the smaller one to shrink it.

The same panel offers a **Fonts** button, where you can choose from seven different typefaces for your book, as well as a **Themes** button, which lets you specify whether the page itself is White, Night (black page, white text, for nighttime reading), or Sepia (off-white). As promised, there’s an Auto-Night Theme button; if you don’t care for the white-on-black theme in dark environments, then turn off this switch.

**TIP:** New in iOS 8: a **Scrolling View** switch. In Scrolling View, you don’t turn book “pages” (and in landscape orientation, you see one page instead of two). Instead, the entire book scrolls vertically, as though printed on an infinite roll of Charmin.

• **Q** opens the search box. It lets you search for text within the book you’re reading, which can be extremely useful. As a bonus, there are also **Search Web** and **Search Wikipedia** buttons so you can hop online to learn more about something you’ve just read.
• ▪️ adds a bookmark to the current page. This isn’t like a physical bookmark, where there’s usually only one in the whole book; you can use it to flag as many pages, for as many reasons, as you like.

• Chapter slider. At the bottom of the screen, a slider represents the chapters of your book. Tap or drag it to jump around in the book; as you drag, a pop-up indicator shows you what chapter and page number you’re scrolling to. (If you’ve magnified the font size, of course, your book consumes more pages.)

TIP: An iBook can include pictures and even videos. Double-tap a picture in a book to zoom in on it.

When you’re reading a PDF document, by the way, you can do something you can’t do when reading regular iBooks: zoom in and out using the usual two-finger pinch-and-spread gestures. Very handy indeed.

TIP: On the other hand, here are some features that don’t work in PDF files (only ebooks): font and type-size changes, page-turn animations, sepia or black backgrounds, highlighting, and notes.

Notes, Bookmarks, Highlighting, Dictionary

Here are some more stunts that you’d have trouble pulling off in a printed book. If you double-tap a word, or hold your finger down on a word, you get a bar that offers these options:

• Copy, of course, copies the selected text so you can paste it somewhere.

• Define. Opens up a page from iBooks’ built-in dictionary. You know—in the unlikely event that you encounter a word you don’t know.

• Highlight. Adds tinted, transparent highlighting, or underlining, to the word you tapped. For best results, don’t tap the Highlight button until you’ve first grabbed the blue dot handles and dragged them to enclose the entire passage you want highlighted.

Once you tap Highlight, the buttons change into a special Highlight bar (next page, middle). The first button opens a third row of buttons (bottom), so that you can specify which highlight color you want. (The final button designates underlining.)

The second button (蛰) removes highlighting. The third lets you add a note, as described next. The ▪️ button opens the Share sheet, also described momentarily.
• **Note.** This feature creates highlighting on the selected passage and opens an empty colored sticky note, complete with keyboard, so you can type in your own annotations. When you tap outside the note to close it, your note collapses down to a tiny yellow Post-it peeking out from the right edge of the margin. Tap to reopen it.

To delete a note, tap the highlighted text. Tap \[\text{Delete}\].

• **Search** opens the same search box that you’d get by tapping the \[\text{Search}\] icon—except this time, the highlighted word is already filled in, saving you a bit of typing.

• **Share** opens the Share sheet (page 279) so you can send the highlighted material to somebody else by message or email, post it to Facebook or Twitter, or copy it to your Clipboard for pasting into another app.
• **Speak** reads the highlighted passage aloud. (This button appears only if you’ve turned on **Speak Selection** in **Settings**→**General**→**Accessibility**→**Speech**.) Thank you, Siri!

There are a couple of cool things going on with your bookmarks, notes, and highlighting, by the way. Once you’ve added them to your book, they’re magically and wirelessly synced to any other copies of that book—on other gadgets, like the iPhone or iPod Touch, other iPads, or even Macs running OS X Mavericks or later. Very handy indeed.

Furthermore, if you tap the ♂ button to open the Table of Contents, you’ll see the **Bookmarks** and **Notes** tabs. Each presents a tidy list of all your bookmarked pages, notes, and highlighted passages. You can tap (and then **Share Notes**) to print or email your notes, or tap one of the listings to jump to the relevant page.

**Books That Read to You**

iBooks can actually read to you! It’s a great feature when you’re driving or jogging, when someone’s just learning to read, or when you’re having trouble falling asleep. In iOS 8, there’s even a special control panel just for managing your free audiobook reader.

To get started, open **Settings**→**General**→**Accessibility**→**Speech**. Turn on **Speak Screen**.

Then open a book in iBooks. Swipe down the page with two fingers to make the iPad start reading the book to you, out loud, with a synthesized voice. At the same time, a palette appears, offering these speech controls:

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Tell me. He said, ‘You can’t change my life.’

My father, a labor leader, was in the middle of a confrontation with the guards at the camps. I’d been hooked, and he knew it. So there I was, standing at the gate of California State Prison at Corcoran.

Ten minutes later, I took a seat at the Plexiglas partition as he came into the cubicle on the other side and grinned at me, showing his gappy teeth. He had been handsome once; now he looked like Harrison Ford on meth.

---

After a few seconds, the palette shrinks into a > button at the edge of the screen—and, after that, it becomes transparent, as though trying to make itself as invisible as possible. You can, of course, tap it to reopen it.
Yes, this is exactly the feature that debuted in the Amazon Kindle and was then removed when publishers screamed bloody murder—but, somehow, so far, Apple has gotten away with it.

**iBooks Settings**

If you’ve embraced the simple joy of reading electronic books on your iPad, then you need to know where to make settings changes: in **Settings → iBooks**. Here are the options waiting there:

- **Full Justification.** Ordinarily, iBooks presents text with fully justified margins (left). Turn this off if you prefer ragged right margins (right).

  ![Example text showing full justification](image1)

  ![Example text without full justification](image2)

- **Auto-hyphenation.** Sometimes, typesetting looks better if hyphens allow partial words to appear at the right edge of each line. Especially if you’ve also turned on Full Justification.

- **Both Margins Advance.** Usually, tapping the right edge of the screen turns to the next page, and tapping the left edge turns back a page. If you turn on this option, then tapping either edge of the screen opens the next page. That can be handy if you’re a lefty, for example.

- **Sync Bookmarks and Notes, Sync Collections.** Turn these on if you’d like your bookmarks, notes, and book collections to be synced with your other Apple gadgets.

- **Online Content.** A few books contain links to video or audio clips online. This option comes set to Off, because video and audio can eat up your monthly cellular data allotment like a hungry teenager.
Maps

Here it is, folks, the feature that made international headlines: the Maps app.

From its birth in 2007, the iPad always came with Google Maps—an excellent mapping and navigation app. (Apple wrote it, but Google provided the maps and navigation data.) But in iOS 6, Apple replaced it with a new mapping system of its own.

Why? Apple says Google was withholding features like spoken turn-by-turn directions and smoothly drawn (vector-based) map images. Furthermore, as the rivalry intensified, Apple no longer wanted to share the super-valuable data generated by all those millions of moving iPads with Google.

Unfortunately, in its initial version, the databases underlying the Maps app had a lot of problems. They didn’t include nearly as many points of interest (buildings, stores, landmarks) as Google. Addresses were sometimes wrong.

Apple promised to keep working on Maps until it was all fixed, but in the meantime, in a remarkable apology letter, CEO Tim Cook recommended using one of its rivals. By far the best one is Google Maps. It’s free; it’s amazingly smart (it knows what address you mean after you type only a few letters); it has public transportation details, live traffic reports, Street View (you can see photos of most addresses, and even “look around” you), and, of course, Google’s far superior maps and data.

All right—you’ve been warned. It may still take some time before Apple Maps is complete and reliable.

But while Apple’s cartographical elves keep working on cleaning up the underlying maps, some of its features are pretty great. And if you have a Mac (running OS X Mavericks or later), you can look up a destination on the Mac and then send the directions wirelessly to your iPad.

Here’s what you have to look forward to.

Meet Maps

The underlying geographical database may need work, but Maps, the app itself, is a thing of beauty.

It lets you type in any address or point of interest in the U.S. or many other countries and see it plotted on a map, with turn-by-turn driving directions, just like a $300 windshield GPS unit. It also gives you a live national
Yellow Pages business directory and real-time traffic-jam alerts. You have a choice of a street-map diagram or actual aerial photos, taken by satellite.

And Maps offers Flyover, an amazing aerial, 360-degree 3-D view of major cities.

**Maps Basics**

When you open Maps, a blue dot represents your current location. Double-tap to zoom in, over and over again, until you’re seeing actual city blocks. You can also pinch or spread two fingers to shrink or magnify the view. Drag or flick to scroll around the map.

To zoom out again, you can use the rare two-finger double-tap.

At any time, you can tap the button in the corner of the screen to open a panel of options. Here you can tap your choice of amazing map views: **Standard** (street-map illustration), **Satellite** (stunning aerial photos), or **Hybrid** (photos superimposed with street names).

There’s no guarantee that the Satellite view provides a very recent photo—different parts of the Maps database use photography taken at different times—but it’s still very cool.
NOTE: You’ll know when you’ve zoomed in to the resolution limits of Apple’s satellite imagery; it will just stop zooming. Do some two-finger double-taps to back out.

You can twist two fingers to rotate the map. (A compass icon at top right helps you keep your bearings; you can tap it to restore the map’s usual north-is-up orientation.) And if you drag two fingers up the screen, you tilt the map into 3-D view, which makes it look more like you’re surveying the map at an angle instead of straight down.

Finding Yourself

If any tablet can tell you where you are, it’s the iPad. It has not one, not two, but three ways to determine your location.

• GPS. First, the cellular iPads (not the WiFi-only models) contain a traditional GPS chip, of the sort that’s found in automotive navigation units from Garmin, TomTom, and others. If the iPad has a good view of the sky and isn’t confounded by skyscrapers, then it can do a decent job of consulting the 24 satellites that make up the Global Positioning System and determining its own location.

• Google’s cellular triangulation system. A cellular iPad can also check its proximity to the cellphone towers around you. Software from Google relies upon its knowledge of cellular towers’ locations. The accuracy isn’t as good as GPS—you’re lucky if it puts you within a block or two of your actual location—but it’s something.

• Wi-Fi Positioning System. Metropolitan areas today are blanketed by overlapping WiFi signals. At a typical Manhattan intersection, you might be in range of 20 base stations. Each one broadcasts its own name and unique network address (its MAC address—nothing to do with Mac computers) once every second. Although you’d need to be within 150 feet or so to actually get onto the Internet, a laptop or iPad can detect this beacon signal from up to 1,500 feet away.

Imagine if you could correlate all those beacon signals with their physical locations. Why, you’d be able to simulate GPS—without the GPS!

So for years, millions of iPhones have been quietly logging all those WiFi signals, noting their network addresses and locations. (An iPhone never had to connect to these base stations. It was just reading the one-way beacon signals.)

At this point, Apple’s database knows about millions of hotspots—and the precise longitude and latitude of each.
So now you know how the WiFi-only iPad can find out its location, sort of: It sniffs for WiFi base stations.

That accuracy is good to within only 100 feet, and of course the system fails completely when you’re not in any WiFi hotspots. In general, therefore, using Maps as a navigational tool is useful only for the cellular iPad models.

**TIP:** The iPad’s location circuits eat into battery power. To shut them down when you’re not using them, open Settings → Privacy and turn off Location Services.

All right—now that you know how the iPad gets its location information, here’s how you can use it. Its first trick is to show you where you are.

Tap the ↩ button at the bottom of the Maps screen. The button turns white, indicating that the iPad is consulting its various references to figure out where you are. You show up as a blue pushpin that moves with you. That’s the iPad saying, “OK, pal, I’ve got you. You’re here.” It keeps tracking until you tap the ↩ enough times to turn it off.

### Orienting Maps

It’s great to see a blue pin on the map, and all—but the iPad can also show you which way you’re facing.

Just tap the ↩ button twice. The map spins so that the direction you’re facing is upward, and the ↩ icon points straight up. A “flashlight beam” emanates from your blue dot; its width indicates the iPad’s degree of confidence. (The narrower the beam, the surer it is.)

### Searching Maps

You’re not always interested in finding out where you are; often, you know that much perfectly well. Instead, you want to see where something else is.

Now, the following paragraphs guide you through using the search box at the top of Maps. But, frankly, if you use it, you’re a sucker. It’s much quicker to use Siri to specify what you want to find.

You can say, for example, “Show me the map of Detroit” or “Show me the closest Starbucks” or “Give me directions to 200 West 79th Street in New York.” Siri shows you that spot on a map; tap to jump into the Maps app.

If you must use the search box, though, here’s how it works: Tap in the search box to summon the iPad keyboard. (If there’s already something in the box, tap ✗ to clear it out.) Here’s what Maps can find for you:
• An address. You can skip the periods (and usually the commas, too). And you can use abbreviations. Typing **710 w end ave ny ny** will find 710 West End Avenue, New York, New York. (In this and any of the other examples, you can type a Zip code instead of a city and a state.)

• An intersection. Type **57th and lexington, ny ny**. Maps will find the spot where East 57th Street crosses Lexington Avenue in New York City.

• A city. Type **chicago il** to see that city. You can zoom in from there.

• A Zip code or a neighborhood. Type **10024** or **greenwich village**.

• Latitude and longitude coordinates. Type **40.7484° N, 73.9857° W**.

• A point of interest. Type **washington monument** or **niagara falls**.

• A business type. Type **drugstores in albany ny** or **hospitals in roanoke va**.

When Maps finds a specific address, an animated, red-topped pushpin comes flying down onto its precise spot on the map. A bubble identifies the location by name.

Tap outside the bubble to hide it. Tap the map pin to bring the bubble back. Tap the 🚪 icon for instant driving directions.

**TIP:** Or walking directions. You choose whether you mostly walk or drive (and therefore which Maps suggests) in **Settings → Maps**.

Tap the ➔ to open the Location page; read on.
The Location Page

Once you’ve found something on the map—your current position, say, or something you’ve searched for—you can drop a pin there for future reference. Tap the button; when the page slides up, tap Drop a Pin. A blue pushpin appears. (You can drag the pin to move it, if your aim wasn’t exact.)

TIP: You can also drop a pin by holding your finger down on the right spot.

There are also the red pushpins that represent addresses you’ve looked up. And there are the tiny icons that represent restaurants, stores, and other establishments in Apple’s (actually Yelp’s) database.

All these pushpins and nano-icons are tappable. You get a little label that identifies each one. And if you tap the on that label, you open a details screen called the Location page.

Here links let you bookmark the spot, get directions, add it to Contacts, or share it with other people (via AirDrop, email, text message, Facebook, or
Twitter). Often, what you’re after are the Direction To Here and Direction From Here links (“here” meaning your current location).

If this is the location for a restaurant or a business, you might strike gold: The Location page might offer several screens full of useful information, courtesy of Yelp.com. You’ll see customer reviews, photos, hours of operation, delivery and reservation information, and so on.

The Location screen may also offer the Popular Apps Nearby link. It lists apps that other people have downloaded in the vicinity. Sometimes there’s no rhyme or reason to them, but sometimes you’ll discover a gem that pertains to the place you’re scoping out: a guide app, for example.

Finding Friends and Businesses

Maps is also plugged into your Contacts list, which makes it especially easy to find a friend’s house (or just to see how ritzy his neighborhood is).

Instead of typing an address into the empty search bar, tap inside it; a list of recent searches appears (it’s designed to save you time if you need those directions again). Tap Favorites. You arrive at the Favorites/Recents/Contacts panel, containing three lists that can save you a lot of typing.

Two of them are described in the next section. But if you tap Contacts, you see your master address book (Chapter 4). Tap a name. In a flash, Maps drops a red, animated pushpin onto the map to identify that address.

TIP: As you type, the iPad displays a list of matching names. Tap the one you want to find on the map.

That pushpin business also comes into play when you use Maps as a glorified national Yellow Pages. If you type, for example, pharmacy 60609, then those red pushpins show you all the drugstores in that Chicago Zip code. It’s a great way to find a gas station, a cash machine, or a hospital in a pinch. Tap a pushpin to see the name of the corresponding business.

As usual, you can tap the button in the map pin’s label bubble to open a details screen. If you’ve searched for a friend, then you see the corresponding Contacts card. If you’ve searched for a business, then you get a screen containing its phone number, address, Web site, and so on; often, you get a beautiful page of Yelp information (photos, reviews, ratings). Remember that you can tap a Web address to open it.

In both cases, you get two useful buttons, labeled Direction To Here and Direction From Here. You also get a button; on the resulting Share sheet, you have the option to send the address to someone by AirDrop, Message, or Mail (for a restaurant where you’re supposed to meet, for
example)—or to bookmark this address for use later (Add to Favorites), as described next.

Favorites and Recents

One nice thing about Maps is the way it tries to eliminate typing at every step. The Favorites/Recents/Contacts screen is a great example.

In iOS 8, you have to tap in the search bar and then tap Favorites to find it. But here they are: three lists that spare you from having to type stuff.

- **Favorites** are addresses you’ve flagged for later use by tapping Add to Favorites, an option that appears whenever you tap the P on a place’s details screen. For sure you should bookmark your home and workplace. That will make it much easier to request driving directions.

- **Recents** are searches you’ve conducted. You’d be surprised at how often you want to call up the same spot again later—and now you can, just by tapping its name in this list. You can also tap Clear to empty the list—if, for example, you intend to elope and don’t want your parents to find out. (This is actually the same list that appears when you tap the empty search box, right there on the screen.)

- **Contacts** is your iPad address book. One tap maps out where someone lives.
Tap a destination to see it on the map, or tap anywhere on the map to back out without choosing a destination.

**Directions**

Suppose you’ve just searched for a place (below, top) and then tapped its name. The place’s bubble is open on the screen.

Now you can tap **Directions** (or the blue car icon next to the place name) for instant directions (below, bottom).

If there’s no identified address yet, tapping **Directions** produces two search bars, labeled **Start** and **End**. Plug in two addresses—the Start address may already say “Current Location”—and let Maps guide you from the first to the second. You can use any of the address shortcuts on page 319, or you can tap one of the recent searches listed here. (Or, after performing any search that produces a pushpin, you can tap the > in its label bubble and then tap **Directions To Here** or **Directions From Here** on the details screen.)
TIP: If you tap **stop**, you swap the Start and End points. That’s a great way to find your way back after a trip.

In any case, once you’ve told Maps where you’re going, you can tell it how you’re going. Three buttons say Drive, Walk (yes, walking directions), and Apps. This last button is supposed to make up for Maps’ lack of public-transportation guidance. It presents a page from the App Store that offers train- and bus-schedule apps, relevant to the city of your search, for downloading.

Maps also displays an overview of the route you’re about to drive. In fact, it usually proposes several different routes. They’re labeled with little tags that identify how long each will take you: **3 hrs 37 min, 4 hrs 11 min, and 4 hrs 33 min**, for example.

If you tap one of these tags, the bottom of the screen lets you know the distance and estimated time for that option and identifies the main roads you’ll be on.

Tap the Route label you want and then tap **Start** to see the first driving instruction.

The map zooms into the actual road you’ll be traveling, which looks like it’s been drawn in with blue highlighter, and Navigation mode begins.

**Navigation Mode**

When the iPad is guiding you to a location, Maps behaves exactly like a windshield GPS unit, but better looking and with less clutter to distract you. You see a simplified map of the world around you, complete with the outlines of buildings, with huge white directional banners that tell you how to turn next, and onto what street. Siri’s familiar voice speaks the same information at the right times, so you don’t even have to look at the screen.

Even if you hit the Sleep switch to lock the iPad, the voice guidance continues. (It also continues even if you switch to another app; return to Maps by tapping the banner at the top of the screen.)

If you do tap the Maps screen, however, a few extra controls appear. The top bar shows your projected arrival time, plus the remaining distance and time. It also offers the **End** button, which makes the navigation stop. Tap **End** when you suddenly recognize where you are, for example, and don’t need Siri’s opinion anymore.

The Navigation mode is meant to be a hands-free, distraction-free guidance system only. While Maps is guiding you, you can’t zoom in and out, nor can you pan the map to look ahead at upcoming turns or to inspect alternate routes. (You can twist two fingers to turn the map, but it snaps back as soon as you let go.)
But if you tap **Overview** in the upper-right corner, your entire planned route shrinks down to fit on a single screen. Now you see your entire route, and you can zoom, turn, and pan. To return to the navigation screen, tap **Resume**.

At the bottom, these buttons await:

- **3D.** Tap to view the map at an angle. In major cities, you even see 3-D shapes of the buildings.

- **List Steps.** Tap to get a written list of turn-by-turn instructions.

- **-volume.** You can adjust the volume of Siri’s speaking voice as she gives you driving directions by tapping here. Choose **Low**, **Medium**, or **Loud Volume**, or turn off her voice prompts altogether with **No Voice**.

Tap the screen to hide these additional controls once again.

**Night Mode**

If the iPad's ambient light sensor decides that it’s dark in your car, it switches to a dimmer, grayer version of the map. It wouldn’t want to distract you, after all. When there’s light, it brightens back up again.
Traffic

How’s this for a cool feature? Free, real-time traffic reporting. Just tap the button (it’s visible whenever you’re not in Navigation mode), and then tap Show Traffic. Now traffic jams appear as dashed red lines on the relevant roads, for your stressing pleasure; less severe slowdowns show up as dashed yellow lines.

Better yet, tiny icons appear, representing accidents and construction sites. Tap the icon to make a quick description tag appear (like “Accident, Park Ave at State St”); tap that tag to read a full-screen account of what’s going on.

If you don’t see any dotted lines, it’s either because traffic is moving fine or because Apple doesn’t have any information for those roads. Usually, you get traffic info only for highways, and only in metropolitan areas.

Flyover

You don’t need a car to use Flyover, the Maps app’s most dazzling feature; it has nothing to do with navigation, really. You can operate it even while you’re lying on your couch like a slug.

Flyover is a dynamic, interactive, photographic 3-D model of certain major cities. It looks something like an aerial video, except that you control the virtual camera. You can pan around these scenes, looking over and around buildings to see what’s behind them. To create this feature, Apple says, it spent two years filming cities in helicopters.
To try it, you must be in Satellite or Hybrid view (tap 🌍 to get there). Enter 3-D mode by dragging down the screen with two fingers (or tap 🌍, then Show 3D Map).

Wait for a moment as the iPad downloads the photographic models. Now you can go nuts, conducting your own virtual chopper tour of the city using the usual techniques:

- Drag with one finger to move around the map.
- Pinch or spread two fingers to zoom in or out.
- Drag two fingers up or down to change your camera angle relative to the ground.
- Twist two fingers to turn the world before you.

It’s immerse, completely amazing, and very unlikely to make you airsick.

**Flyover Tours**

In iOS 8, Apple wasn’t satisfied with letting you pan around virtual 3-D city models using your finger. Now it’s prepared to give you *city tours* in 3-D.

Use the search box to enter the name of a big city or major landmark. (Some examples: San Francisco, New York, Tokyo, London, Paris, Rome, Madrid, Vancouver, San Jose, Cape Town, Stockholm. Or places like...
Yosemite National Park, Sydney Opera House, Stonehenge, St. Peter’s Basilica, or the Brooklyn Bridge.)

When you hit Search, a new control appears just beneath the Start box; “3D Flyover Tour.” When you tap Start, you’re in for a crazy treat: a fully automated video tour of that city or place. The San Francisco tour shows you the baseball park, the famous Transamerica Pyramid, the Alcatraz prison island, and so on. It’s slow, soothing, cool, and definitely something that paper maps never did.

Newsstand

Just about every major magazine and newspaper now offers a downloadable electronic version; your iPad can download and “deliver” them in the background automatically. They show up right here, in Newsstand. In fact, you can’t move their icons anywhere else.

Newsstand is the mutant love child of an app and a folder. Like an app, it shows up in the app switcher when you double-press the Home button. Like a folder, when you tap it, you don’t leave the Home screen. Instead, a
bookshelf version of a folder opens, showing the icons of your subscriptions. You can’t find Newsstand by searching, either.

**TIP** You can drag Newsstand into another folder to hide it—a great option if you never use it.

Tap one of these magazine or newspaper icons to open it.

Why is Newsstand a pseudo-folder? Because each magazine or newspaper is different. Some are self-contained apps. Others are just glorified PDF files. Some are nothing more than links to other apps elsewhere on your iPad (like The New York Times, for example).

At least you know where to find them all.

![Image of magazine icons]

To subscribe to something, tap **Store** in the corner. You arrive at what should look familiar by now: the usual App Store screen, composed of horizontally scrolling categories. You’re looking at a special corner of the store that’s dedicated to e-publications. Tap the name of one to see sam-
ple pages, read a description, peruse reviews from other readers—and, if you like what you see, download it.

Most big-name magazines, by the way, appear to be free. You can download them, view their covers in your Newsstand “folder,” and so on. But you’re really downloading only a shell—a mini-store just for that magazine. When you actually open it, you’re asked to pay $4 or $5 to buy issues within that app.

In the same vein, you don’t see individual issues on your Newsstand bookshelf. You see one cover for each magazine; other issues are inside it. A blue dot appears beneath the cover to let you know that a new issue has arrived.

**Notes**

The Notes app is the closest thing the iPad has to a word processor. It’s nice to be able to jot down—or dictate—lists, reminders, and brainstorms. You can email them to yourself when you’re finished—or sync them right to your Mac or PC. In iOS 8, you can now format your text with bold, italic, or underlining, and you can insert a photo.

The first time you open Notes, you see what looks like a blank white page. Tap to make the keyboard appear so you can begin typing. When you’re finished with a note for now, tap the key to put away the keyboard (or just tap somewhere else).
At all times, a handy row of icons appears at the top of your Notes page. The rundown:

- 🗑. Tap to delete the current note. After you confirm your decision, the note vanishes.
- 📝. Tap to print your note, copy it, or send it to someone by email, text message, AirDrop, and so on. (See page 279 for more on the sharing options.)
- ☒ starts a new blank note.

The Table of Contents

Notes keeps a handy list of your notes’ first lines—a little table of contents, most recent at the top. When the iPad is in landscape mode, this list is always open at the left side of the screen. In portrait mode, tap Notes at top left to see it.

In any case, this list is the only way to jump from one note to another. To open a note, tap its name. To delete a note, you can swipe across its name in the list, right to left, and then confirm by tapping Delete.

There’s a search box here, too. Tap in it to open the keyboard. You can now search all your notes instantly—not just their titles, but also the text inside them.

Syncing Notes

The real beauty of this app is that it can synchronize your collection of Notes with all kinds of other Apple gear—other iPads, iPhones, iPod Touches, and Mountain Lion or later Macs—so the same notes are waiting for you everywhere you look. Just make sure Notes is turned on in Settings ➔ iCloud on each iPad or tablet, and in System Preferences ➔ iCloud on your Mac. The rest is automatic.

Notes Accounts

Your notes can also sync wirelessly with the Notes modules on Google, Yahoo, AOL, Exchange, or another IMAP email account. To set this up, open Settings ➔ Mail, Contacts, Calendars. Tap the account you want (iCloud, Gmail, Yahoo, AOL, or whatever); finally, turn the Notes switch On.

That should do it. Now your notes are synced nearly instantly, wirelessly, both directions.
One catch: Notes that you create at gmail.com, aol.com, or yahoo.com don’t wind up on the iPad. Those accounts sync wirelessly in one direction only: from the iPad to the Web site, where the notes arrive in a Notes folder. (There’s no problem, however, if you get your AOL or Gmail mail in an email program like Outlook, Entourage, or Apple Mail. Then it’s two-way syncing as usual.)

At this point, a Folders or Accounts button appears at the top-left corner of the Notes list. Tap it to see your note sets from Google, Yahoo, AOL, Exchange, iCloud, or an IMAP email account.

If you’ve created Notes folders in OS X on your Mac (Mountain Lion or later), then you see those folders here, too.

All of this makes life a little more complex, of course. For example, when you create a note, you have to worry about which account it’s about to go into. To do that, be sure to specify an account name (and a folder within it, if necessary) before you create the new note.

In Settings → Notes, you can also specify which of your different Notes accounts you want to be the main one—the one that new notes fall into if you haven’t specified otherwise.

**Photo Booth**

It may be goofy, it may be pointless, but the Photo Booth app is a bigger time drain than Solitaire, the Web, and Dancing with the Stars put together.

Photo Booth takes your front-facing camera into a world of special visual effects. Some make you look like a pinhead, or bulbous, or like a Siamese twin; others simulate Andy Warhol paintings, fisheye lenses, and charcoal sketches.

When you find an effect that looks appealing (or unappealing, depending on your goals here), tap it. Have fun posing and goofing around.

At any time, you can tap ○. Snap!—your screen flashes white to add illumination to your face, and the resulting photo’s thumbnail joins the horizontally scrolling collection at the bottom.

Tap one to see it full-screen. At point, you’ll discover that these masterpieces of goofiness and distortion aren’t locked in Photo Booth forever. Tap ☐ to share.

Or ☐ to delete. Or ☐ to start over.
As you set off on your Photo Booth adventures, a note of caution: Keep it away from children. They won’t move from Photo Booth for the next 12 years.

## Podcasts

A podcast is a “TV” or “radio” show that’s distributed online.

Lots of podcasts begin life as actual radio and TV shows; most of NPR’s shows are available as podcasts, for example, so you can listen to them whenever and wherever you like.

But thousands more are recorded just for downloading. They range from recordings made by professionals in high-end studios to amateurs talking into their phones. Some have thousands of regular listeners; some have only a handful.

One thing’s for sure: There’s a podcast out there that precisely matches whatever weird, narrow interests you have.

The Podcasts app is designed to help you find, subscribe to, organize, and listen to podcasts. It’s designed just like Apple’s online stores for apps, music, movies, and so on. For example, tap **Featured** to see scrolling rows.
of recommended podcasts, or Top Charts to see what the rest of the world seems to be listening to these days. Or use Search to look for something specific.

Don’t miss the Video tab (on the Featured and Top Charts screens), by the way. The most popular videocasts are usually clips from network or cable TV shows, but there are plenty of quirky, offbeat, funny video podcasts that will never be seen except on tablet and phone screens.
In any case, once you find a podcast episode that seems interesting (facing page, bottom), you can listen to it in either of two ways:

- **Stream it.** Tap a podcast’s name to play it directly from the Internet. It’s never stored on your iPad and doesn’t take up any space, but it does require an Internet connection. Generally no good for plane rides.

- **Download it.** If you tap the ☁️ next to a podcast’s name, you download it to your iPad. It takes up space there (and podcasts can be big)—but you can play it back anytime, anywhere. And, of course, you can delete it when you’re done.

**Subscribing**

Most podcasts are series. Their creators crank them out every week or whatever. If you find one you love, subscribe to it, so that your iPad downloads each new episode automatically. Just tap **SUBSCRIBE** on its details page.

The episodes wind up on the My Podcasts screen. Tap an icon to open the Episodes screen, where you can tap **Unplayed** (episodes you haven’t heard) or **Feed** (all episodes). Other buttons include **Edit** (delete episodes en masse); **Settings** (for this podcast only, as described next); and 📩 (pass along links to this podcast by Messages, Mail, Twitter, Facebook, and so on).

**Settings**

There’s a lot to control when it comes to podcasts. Do you want new episodes downloaded automatically? Do you want them auto-deleted when you’re finished? Do you want to limit how many episodes of each show are stored on your iPad? What playback order—oldest first or newest first?

You make all of these choices in **Settings → Podcasts**. That’s the global setting for podcasts—but you can also override them for individual podcast shows, using the **Settings** button described above.

**Playback**

To play a podcast, tap its icon on **My Podcasts** (facing page), and then tap the episode name. At this point, all the usual audio-playback controls are available (page 39)—with the handy addition of buttons that speed up or slow down the talking (0.5x, 1x, 1.5x, or 2x regular speed). There’s a **Sleep Timer**, too, so that you can drift off to the sound of a droning podcaster.
You can press the Sleep switch to turn off the screen; the podcast continues playing. And even if the iPad is locked, you can open the Control Center (page 37) to access the playback controls.

**TIP:** Don’t forget to use Siri! You can say things like “Play ‘Fresh Air’ podcast,” “Play my latest podcasts,” “Play my podcast” (to resume what you listened to last), “Play latest TED podcast,” and so on.

**Stations**

A station is a playlist of podcasts. A smart playlist, actually, because it can update itself according to your specs.

To create one, tap My Stations and then New Station. Name it (“Jogging,” “The drive to work,” whatever) and tap Save.

Now you’re shown a list of your subscriptions. Tap the ones that you want to be part of your station, and then tap Done. That’s it: You’re ready to play! (Any podcast playlists you’ve created on your computer, in iTunes, appear on the My Stations list, too.)

When you tap a station’s name, its page offers a Settings button. Here’s where you can tweak its settings: playback order, grouping (so that episodes of the same show play back together), how many episodes, audio or video podcasts, and so on.

**Reminders**

The Reminders app not only records your life’s little tasks, but it also reminds you about them, either when the right time comes or when you come to the right place. For example, it can remind you to water the plants as soon as you get home.

If you have an iCloud account, your reminders sync across all your gadgets. Create or check off a task on your iPad, and you’ll also find it created or checked off on your iPhone, iPod Touch, Mac (thanks to Calendar), PC (thanks to Outlook or Exchange), and so on.

**TIP:** Reminders sync wirelessly with anything your iCloud account knows about: the iCal, Calendar, or BusyCal programs on your Mac, Outlook on the PC, and so on.

Siri and Reminders are a match made in heaven. “Remind me to file the Jenkins report when I get to work.” “Remind me to set the TiVo for tonight at 8.” “Remind me about Timmy’s soccer game a week from Saturday.” “Add waffles to my Groceries list.”
The List of Lists

When you open Reminders, one thing becomes instantly apparent: You can create more than one to-do list, each with its own name: a groceries list, kids’ chores, a running tally of expenses, and so on. It’s a great way to log what you eat if you're on a diet, or to keep a list of movies people recommend.

They show up as colorful tabs; tap one to see the to-do list within.

If you share an iCloud account with another family member, you might create a different Reminders list for each person. (Of course, now you run the risk that your spouse might sneakily add items to your to-do list!)

If you have an Exchange account, one of your lists can be synced to your corporate Tasks list. It doesn’t offer all the features of the other lists in Reminders, but at least it’s kept tidy and separate.

To delete a list, tap Edit (lower left) and then tap Delete List.

TIP: You can use Siri to add things to individual lists by name. You can say, for example, “Add low-fat cottage cheese to the Groceries list.” Siri can also find these reminders, saving you a lot of navigation later. You can say, “Find my reminder about dosage instructions,” for example.
Once you’ve created some lists, you can easily switch among them. Just tap the title of a different list to open it.

To create a new list, tap Add List. If you have multiple accounts that offer reminders, you’re asked to specify which one will receive this new list (lower right). Now your jobs begin:

1. **Enter a name for the list.** When you tap the light-gray letters New List, the keyboard appears to help you out.

2. **Tap a colored dot.** This will be the color of the list’s title font and also of the “checked-off” circles once the list is under way (top right).

3. **Tap Done.** Now you can tap the first blank line and enter the first item in the list.

   **NOTE:** After that first line, you can’t create new items in the list by tapping the blank line below the existing items. As you type, tapping the Return key is the only way to move to the next line.

Later, you can assign a task to a different list by tapping List on its Details screen.

**The Scheduled List**

If you really do wind up using Reminders as a to-do list, you might be gratified to discover that the app also offers a Scheduled list: a consolidated list of every item, from all your lists, to which you’ve given a **deadline**.

**Recording a Reminder**

Once you’ve opened a list, here’s how you record a new task the manual way: Tap the blank line beneath your existing reminders. Type your reminder (or dictate it). Tap the ① to set up the details, described below; tap Done when you’re finished.
As you go through life completing tasks, tap the circle next to each one. A checked-off to-do remains in place until the next time you visit its list. At that point, it disappears. It’s moved into a separate list called Completed.

But when you want to take pride in how much you’ve accomplished, you can tap **Show Completed** to bring your checked-off tasks back into view.

Other stuff you can do:

- **Delete a to-do item altogether, as though it never existed.** Swipe leftward across its name, and then tap **Delete** to confirm.

- **Delete a bunch of items in a row.** Tap **Edit**. Tap each ⌁ icon, and then tap **Delete** to confirm.

- **Rearrange a list so the items appear in a different order.** Tap **Edit**, and then drag the ⬕️ handle up or down.

**The Details Screen**

If you tap ⚙️ next to an item’s name, you arrive at the Details panel. Here you can set up a reminder that will pop up at a certain time or place, create an auto-repeating schedule, file this item into a different to-do list with its own name, add notes to this item, or delete it. Here are your options, one by one (next page, left):

- **Remind me on a day.** Here you can set up the iPad to chime at a certain date and time (tap whatever it says now to bring up the “time wheel”).

  Using the Repeat control, you can ask to be reminded about things that recur in your life, like quarterly tax payments, haircuts, and anniversaries.

- **Remind me at a location.** If you turn on this amazing feature, then the iPad will use its location circuits to remind you of this item when you arrive at a certain place or leave a certain place. When you tap **Location**, iPad proposes “Current Location”—wherever you are at the moment. That’s handy if, for example, you’re dropping off your dry cleaning and want to remember to pick it up the next time you’re driving by.

  But you can also choose **Home** or **Work** (your home or work addresses, as you’ve set them up in Contacts). Or you can use the search box at the top, either to type (or dictate) a street address or to search your own Contacts list.
Once you've specified an address, the Location screen shows a map. The diameter of the blue circle shows the area where your presence will trigger the appearance of the reminder on your screen (above, right).

**TIP:** You can adjust the size of this “geofence” by dragging the black handle to adjust the size of the circle. In effect, you're telling the iPad how close you have to be to the specified address for the reminder to pop up. You can adjust the circle's radius anywhere from 328 feet (“Remind me when I’m in that store”) to 1,500 miles (“Remind me when I’m in that country”).

The final step here is to tap either When I leave or When I arrive.

Later, the iPad will remind you at the appointed time or as you approach (or leave) the appointed address, which is fairly mind-blowing the first few times it happens.

**NOTE:** If you set up both a time reminder and a location reminder, then your iPad uses whichever event happens first. That is, if you ask to be reminded at 3 p.m. today and “When I arrive at the office,” then you’ll get the reminder when you get to the office—or at 3 p.m., if that time rolls around before you make it to work.
• **Priority.** Tap one of these buttons to specify whether this item has low, medium, or high priority—or *None.* In some of the calendar programs that sync with Reminders, you can sort your task list by priority.

• **List.** Tap here to assign this to-do to a different reminder list.

• **Notes.** Here’s a handy box where you can record freehand notes about this item: an address, a phone number, details of any kind.

To exit the Details screen, tap **Done.**

**Tips**

Hey, check it out—Apple’s getting into the how-to game!

This new iOS 8 app is designed to show you tips and tricks for getting the most from your iPad. Each screen offers an animated illustration and a paragraph of text explaining one of iOS 8’s marvels. Swipe leftward to see the next tip, and the next, and the next. Or tap ¥ to see a list of all the tips in one place.

Tap **Like** if it’s one of your favorites. Tap Í to share a tip by text message, email, Twitter, Facebook, or AirDrop.

Over time, Apple will beam you fresh tips to add to this collection. It’s not exactly, you know, a handsome, printed, full-color book, but it’s something.
More Standard Apps

This book describes every app that comes on every iPad. But Apple has another suite of useful programs for you. And they’re free.

To find them, scroll down to Collections on the first page of the App Store. Tap Apps Made by Apple. You’ll find links to these apps:

- **Pages** is a word processing/page-layout program.
- **Numbers** is Apple’s spreadsheet program.
- **Keynote** is Apple’s version of PowerPoint. It lets you make slideshow presentations from your iPad.
- **iMovie**. Here’s video-editing program with all the basics: rearranging clips; adding music, crossfades, and credits.
- **GarageBand** is a portable music studio.
- **iTunes U** is a catalog of 600,000 free courses by professors at colleges, museums, and libraries all over the world. This app lets you browse the catalog, watch and read the course materials.
- **Find My Friends** lets you see where your friends and family members are on a map (with their permission, of course).
- **Find My iPhone** is useful when you want to find other missing Apple gadgets (Macs, iPhones, iPod Touches).
The iPad’s concept as an all-screen machine is a curse and a blessing. You may curse it when you’re trying to type text, wishing you had real keys. But when you’re online—oh, baby. That’s when the Web comes to life, looming larger and clearer than you’d think possible. That’s when you see real email, full-blown YouTube videos, hyper-clear Google maps, and all kinds of Internet goodness, right in your hand.

So many of its miracles, however, depend on its ability to get online. And how likely it is to succeed depends on which model you bought: the WiFi-only model, or the WiFi+Cellular model.

Either way, it might help to explore your options.

**WiFi Hotspots**

WiFi, known to geeks as 802.11, is wireless networking, the same technology that gets computers and phones online at high speed in any WiFi hotspot. All iPad models can get online through WiFi hotspots.

Hotspots are everywhere these days: in homes, offices, coffee shops, hotels, airports, and thousands of other places. Unfortunately, a hotspot is a bubble about 300 feet across; once you wander out of it, you’re off the Internet. So, in general, WiFi is for people who are sitting still.

When you’re in a WiFi hotspot, your iPad usually gets a fast connection to the Internet, as though it’s connected to a cable modem or DSL. Even if you bought the cellular keyboard model, it looks for a WiFi connection first and considers connecting to a cellular network only if there’s no WiFi.
Sequence of Connections

The iPad isn’t online all the time. To save battery power, it opens the connection only on demand: when you check email, request a Web page, and so on. At that point, the iPad tries to get online following this sequence:

- **First, it sniffs around for a WiFi network** that you’ve used before. If it finds one, it connects quietly and automatically. You’re not asked for permission, a password, or anything else.

- **If the iPad can’t find a previous hotspot**, but it detects a new hotspot, a message appears (below, inset). It displays any new hotspots’ names; tap the one you want. (If you see a password icon, then that hotspot is password protected.)

### Silencing the “Want to Join?” Messages

Sometimes, you might be bombarded by those “Do you want to join?” messages at a time when you have no need to be online. You might want the iPad to stop bugging you—to stop offering WiFi hotspots. In that situation, from the Home screen, tap Settings→Wi-Fi (or tell Siri, “Open WiFi settings”), and then turn off Ask to Join Networks. When this option is off,
the iPad never interrupts you by bounding in, wagging its tail, and dropping the name of a new network at your feet. In this case, to get onto a new network, you have to visit the aforementioned Settings screen and select it, as described next.

The List of Hotspots

At some street corners in big cities, WiFi signals bleeding out of apartment buildings give you a choice of 20 or 30 hotspots to join. But whenever the iPad invites you to join a hotspot, it suggests only a couple of them: the ones with the strongest signal and, if possible, no password requirement.

**NOTE:** Sometimes, the overlords of a hotspot choose not to broadcast its name. If you know its name, though, you can still get onto it; tap Other and type it in.

But you might sometimes want to see the complete list of available hotspots—maybe because the iPad-suggested hotspot is flaky. To see the full list, from the Home screen, open Settings→Wi-Fi. Tap the one you want to join, as shown on the facing page.

**TIP:** Tap next to your current hotspot’s name to view an info sheet for techies. It shows your IP address, subnet mask, router address, and other delicious stats. Even mere mortals, however, will sometimes enjoy the Forget this Network button. It removes this hotspot from the list, which is handy if you’ve moved away and don’t need to be reminded of the high speed that was once yours.

Commercial Hotspots

Tapping the name of the hotspot you want to join is generally all you have to do—if it’s a home WiFi network. Unfortunately, joining a commercial WiFi hotspot—one that requires a credit card number—requires more than just connecting to it. You also have to sign into it.

In general, the iPad prompts you to do that automatically. A big login screen pops up on its own, interrupting whatever you’re doing; that’s where you supply your credit card information or (if you have a membership to this WiFi chain, like Boingo or T-Mobile) your name and password. Tap Submit or Proceed, try not to contemplate the cost, and enjoy your surfing.

(If that login screen doesn’t appear, or if you canceled out of it accidentally, open Safari. You’ll see the “Enter your payment information” screen, either immediately or as soon as you try to open a Web page of your choice.)

Mercifully, the iPad memorizes your password. The next time you use this hotspot, you won’t have to enter it again.
Airplane Mode and WiFi Off Mode

In Airplane mode, you turn off all wireless circuitry: Bluetooth, WiFi, and (if you have it) cellular. Now you can’t get onto the Internet. You’re saving power, however, and complying with airline regulations.

The short way to turn it on: Swipe up from the bottom of the screen; on the Control Center, tap so it turns white. (The long way: Open Settings, turn on Airplane Mode.)

In Airplane mode, anything that requires Internet access—text messages, Web, email, apps—triggers a message: “Turn off Airplane Mode or use WiFi to access data.” Tap either OK (to back out of your decision) or Settings (to turn off Airplane mode and get online).

You can, however, enjoy all the other iPad features: Music, Camera, and so on. You can also work with stuff you’ve already downloaded to the phone, like email and Web pages you’ve saved in the Reading List.

On the same Control Center, you can also turn WiFi and Bluetooth on and off independently. An iPad is perfectly OK to use on flights—even during takeoff and landing in the U.S.—with WiFi and Bluetooth turned on. (It’s the cellular circuitry, on the cellular iPad, that must be turned off in flight.)

Personal Hotspot (Tethering)

Tethering means using a cellphone as an Internet antenna for gadgets that don’t have cellular built in, like laptops, iPod Touches, game consoles, and WiFi iPads. The phone gets online using the cellular network and shares its connection over a personal WiFi hotspot. (Which is why Apple calls its tethering feature Personal Hotspot.)

Basically, your cellphone connects to the Internet with its cellular connection—and converts that signal into WiFi, as this diagram more or less makes clear.
In fact, several gadgets can share the phone’s connection simultaneously. Your phone becomes a personal cellular router, like a MiFi.

But here’s what’s wild: A cellular iPad can be a hotspot, too. You could replace the iPhone in the diagram above with a cellular iPad.

In short, tethering might make your life on the road easier in two ways:

- **If you have a WiFi-only iPad**, you can get online if an iPhone or another phone has Personal Hotspot (tethering) turned on.

- **If you have a cellular iPad**, it can serve as the conduit to the Internet for your laptop—or other people’s laptops or WiFi iPads.

Apple’s execution of this feature is especially nice. For example, the hotspot shuts itself off 90 seconds after the last laptop disconnects. That’s hugely important, because a personal hotspot is a merciless battery drain.

The hotspot feature may cost, say, $20 a month extra on your cellphone plan, or it may be included in your plan. Either way, beware of the monthly data limit. You’re sharing it among more devices now. It can go quickly, and the overage charges can be steep.

To get this feature, you have to sign up for it by calling your cell company or visiting its Web site (if you didn’t already do that when you signed up for service).
Turning On the Hotspot

On the phone or cellular iPad, open Settings→Cellular→Personal Hotspot (or tell Siri, “Open cellular settings”). Turn Personal Hotspot On.

TIP: Once you’ve used Personal Hotspot for the first time, you won’t have to drill down as far to get to it. A new Personal Hotspot item appears right there on the main Settings screen from now on.

You have to use a password for your personal hotspot; it’s to ensure that people sitting nearby can’t surf using your connection and run up your cell bill. The software proposes a password, but you can edit it and make up one of your own. (It has to be at least eight characters long and contain letters, numbers, and punctuation. Don’t worry—your laptop or other WiFi gadget can memorize it for you.)

Connecting via WiFi

After about 15 seconds, the name of the cellular device (iPhone or cellular iPad) shows up as though it’s any other WiFi network.

On your computer or WiFi iPad, choose that name from the menu. Enter the password, and bam—you’re now online. On the Mac or a WiFi-only iPad, the changes to look like this:

You can leave the iPhone or iPad put away while connected. You’ll surf away on your laptop, baffling every Internet-less soul around you. Your laptop can now use email, the Web, chat programs—anything it could do in a real WiFi hotspot (just a little slower).

A blue bar appears at the top of the iPhone or cellular iPad’s screen to make you aware that other gadgets are connected; in fact, it shows how many are connected at the moment. (You can tap that bar to open the Personal Hotspot screen in Settings.)
Most carriers won’t let more than five people connect through a single cellular device, though.

**Instant Hotspot**

If all your gadgets are made by Apple, you get extra perks. Now, when you want your laptop to get online, you don’t have to wake your iPhone or cellular iPad, unlock it, open Settings, and turn on Personal Hotspot.

Instead, its name appears in your laptop’s menu all the time, ready for choosing—even if the phone or iPad is asleep and locked, and even if Personal Hotspot is turned off! Handily enough, the menu also shows the battery and signal status of your iPhone or cellular iPad.

When your Mac or WiFi iPad is online through your cellular connection, it tries to save you money by suspending data-intensive jobs like full backups and software updates. And it closes down the connection when you no longer need it, to save your cellular gadget’s battery.

All of this works only if the gadgets both have Bluetooth turned on and are signed into the same iCloud account. The Mac has to be running OS X Yosemite; the touchscreen gadgets need iOS 8.1.

**The Cellular iPad**

A cellular iPad costs $130 more than a WiFi-only iPad. And you have to pay for cellular service, which costs from $10 to $400 a month, depending on how many gigabytes of data you want to burn through.

But the beauty of a cellular iPad is, of course, that you can use it outside WiFi hotspots. On the road. At the beach, in the car, on the mountain.

TIP: There’s one exception to that “you have to pay to use cellular” bit. If you bought your iPad from T-Mobile, you get 200 megabytes a month of free cellular service, forever. That’s not tons, but it’s enough for email checks and a few Web visits each month, and of course you can always buy more if you need it.

It may be a strange concept at first: Even though it may have cellular service, the iPad is not a phone. It doesn’t get onto the cellular voice network—only onto the cellular data network.
Cellphone carriers (Verizon, AT&T, and so on) maintain separate networks for voice and Internet data—and every year, they spend billions of dollars trying to make those Internet networks faster. Over the years, they’ve come up with data networks like these:

- **Old, slow cellular network.** The earliest, slowest cellular Internet connections were called things like EDGE (AT&T) or 1xRTT (Verizon and Sprint). The good part is that these networks are almost everywhere, so a cellular iPad can get online almost anywhere you can make a phone call. You’ll know when you’re on one of these slow networks because your status bar bears a symbol like 📞 or 📞.

The bad news is that it’s slow. *Dog* slow—dial-up slow.

- **3G cellular networks.** The world wasn’t happy with those slow networks, so the carriers spent several years building faster systems called 3G networks. (3G stands for “third generation.” The ancient analog cellphones were the first generation; EDGE-type networks were the second.) Geeks refer to the 3G network standard by its official name: HSDPA, for High-Speed Downlink Packet Access.

Web pages that take 2 minutes to appear using EDGE or 1xRTT show up in about 20 seconds on 3G. Email downloads much faster, especially when there are attachments.

- **4G networks.** AT&T enhanced HSDPA, made it faster using a technology called HSPA+ (High-Speed Packet Access), and calls it 4G. (You’ll know when you’re on one; your status bar says 📞.) But nobody else recognizes HSPA+ as real 4G, which is why AT&T feels fine advertising “the nation’s largest 4G network.” The other carriers aren’t even measuring that network type.

- **4G LTE networks.** Now *this* is 4G.

An LTE network (Long-Term Evolution), offered in major cities by all four carriers, gives you amazing speeds—in some cases, faster than your broadband Internet at home. When your status bar says 📞, it’s *fantastic*.

But LTE is not all sunshine and bunnies; it has two huge downsides.

First: coverage. LTE coverage is available in hundreds of U.S. cities, which is a good start. But that still leaves most of the country, including huge chunks of several entire states, without any 4G coverage at all.

Verizon covers the most cities; AT&T has about half as many; Sprint and T-Mobile have only a handful. Whenever you’re outside the high-speed areas, your iPad falls back to the slower speeds.
The second big problem with LTE is that, to receive its signal, a phone’s circuitry uses a lot of power.

You’ll always know which kind of network you’re on, thanks to the icons on the status bar: You’ll see either WiFi, or one of the cellular icons (G, 2G, 3G, 4G, or LTE).

Or “No service” if there’s nothing available at all.

**NOTE:** The iPad connects to the cellular network only if it can’t find a WiFi hotspot to join.

And how much faster is one than the next? Well, network speeds are measured in kilobits and megabits per second (which isn’t the same as the more familiar kilobytes and megabytes per second; divide by 8 to get those).

The EDGE/1xRTT network is supposed to deliver data from 70 to 200 kbps, depending on your distance from the cell towers. 3G gets 300 to 700 kbps. A WiFi hotspot can spit out 650 to 2,100 kbps. And 4G LTE can deliver speeds as fast as 100 Mbps on the iPad Air 2. You’ll rarely get speeds near the high ends—but even so, you can see that there’s quite a difference.

The bottom line: LTE and WiFi are awesome. EDGE/1xRTT—not so much.

**TIP:** You sometimes might want to turn off WiFi, but leave cellular on. Why? Because sometimes, the iPad bizarrely won’t get online at all. It’s struggling to use a WiFi network that, for one reason or another, isn’t connecting to the Internet. By turning WiFi off, you force the iPad to use its cell connection—which may be slower, but at least it works!

**Signing Up for Service**

You can thank Steve Jobs for this one: He negotiated with the cellular carriers to offer à la carte cell service for the cellular iPad. You don’t have to sign up for a two-year contract, as you would with a cellphone. You can buy a month here, a month there.

When you want to order some, open Settings ➔ Cellular ➔ Set Up Cellular Data; choose the plan you want. Depending on how you bought your iPad, you may even be able to switch plans and carriers from time to time (page 25).
Chapter 11

Twitter and Facebook

Twitter, of course, is a free service (sign up at twitter.com) that lets you send out short messages, like text messages, to anyone who wants to get them from you. On Twitter, people spread news, links, thoughts, and observations directly to the people who care—incredibly quickly. And Facebook is—well, Facebook. 1.3 billion people sharing their personal details and thoughts can’t be wrong, right?

These services are woven into the built-in iPad apps.

In Settings→Twitter or Settings→Facebook, enter your account name and password or sign up for an account. Here, too, you’re offered the chance to download the Twitter or Facebook apps. You can also tap Update Contacts, which adds the Twitter or Facebook addresses of everybody in your Contacts app to their information cards.

Once you’ve set up Twitter and Facebook this way, you’ll find some nifty buttons built into your other apps, for one-tap tweeting or Facebook posting. For example, the Share button (✓) appears in Photos, Maps, Safari, and other apps, making it easy to post a photo, location, or Web page. Siri understands commands like “Tweet” and “Post to Facebook,” too, so you can broadcast when the spirit moves you.

In each case, you wind up at a small tweet sheet or Facebook sheet. Here you can add a comment to the link or photo, or attach your current location, or (for Facebook) specify who’s allowed to see this post.

For Twitter posts, the keyboard at that point offers dedicated @ and # keys. (The # is for creating hashtags—searchable keywords on a tweet like #iPad4bugs—that Twitter fans can use when searching for tweets about certain topics. And the @ precedes every Twitter person’s address—@pogue, for example.)
The iPad’s Web browser is Safari, a version of the same one that comes on every iPhone and every Mac. It’s fast, simple to use, and very pretty indeed. In iOS 8, Safari gains a handful of slick new features (take a picture of your credit card, anyone?). Safari on the iPad is still not quite as good as surfing the Web on, you know, a laptop. But it’s getting closer.

Safari Tour

Safari has most of the features of a desktop Web browser: bookmarks, autocomplete (for Web addresses, account names, passwords, and credit cards), scrolling shortcuts, cookies, a pop-up ad blocker, password memorization, and so on. (It’s missing niceties like streaming music, Java, Flash, and other plug-ins.)

TIP: You don’t have to wait for a Web page to load entirely. You can zoom in, scroll, and begin reading the text even when only part of the page has appeared.

Now, don’t be freaked out: The main screen elements disappear shortly after you start reading a page. That’s supposed to give you more screen space to do your surfing. To bring them back, tap the Web site name at the top of the screen. Or scroll to the top, scroll to the bottom, or just scroll up a little. At that point, here are the controls, as they appear from the top left:

• <<, >> (Back, Forward). Tap << to revisit the page you were just on. Once you’ve tapped <<, you can then tap >> to return to the page you were on before you tapped the << button.
**TIP:** Since these buttons disappear as soon as you scroll down a page, how are you supposed to move back and forward among pages?

By *swiping in* from outside the screen. Start your swipe on the edge of the iPad’s front glass and whisk inward. Swiping rightward like this means “back”; leftward means “forward again.” Do it slowly, and you can actually see the page sliding in.

- **📖 (Bookmarks).** This button brings up your list of saved bookmarks—and much more. Here, too, are your History list, your Favorites, your Reading List, and links recommended by the people you follow on Twitter. You can read about these elements later in this chapter.

- **Search/address bar.** In iOS, a single, unified box serves as both the address bar and the search bar at the top of the screen. (That’s the trend these days. Desktop-computer browsers like Chrome and Safari on the Mac work that way, too.)

This box is where you enter the **URL** (Web address) for a page you want to visit. (“URL” is short for the even-less-self-explanatory **Uniform Resource Locator.**) For example, if you type *amazon.com*, tapping **Go** takes you to that Web site.
But this is also where you search the Web. If you type anything else, like *cashmere sweaters* or just *amazon*, tapping *Go* gives you the Google search results for that phrase.

In general, it’s handy to have a combined address bar/search bar. Unfortunately, it means that you can no longer leave off the .com when you’re typing an address—a longtime advantage of Safari’s smart address bar.

**TIP:** If you hold your finger down briefly on the standard keyboard’s period key, you get a pop-up palette of Web-address suffixes (.org, .edu, and so on). Luckily, .com starts out selected—so just release your finger to type it in. In other words, the entire process for typing in .com goes like this: Hold finger on period key; release.

- **(Reader view).** In this delightful view, all the ads, boxes, banners, and other junk disappear. Only text and pictures remain, for your sanity-in-reading pleasure. See page 374.

- **X, Ç (Stop, Reload).** Tap X to interrupt the downloading of a Web page you’ve just requested (if you’ve made a mistake, for instance, or if it’s taking too long).

  Once a page has finished loading, the X button turns into a Ç (re-load) button. Click it if a page doesn’t look or work quite right. Safari re-downloads the Web page and reinterprets its text and graphics.

- **+ (New tab).** In iOS 8, Safari can open multiple Web pages in the form of *tabs*, just as on a Mac or PC. (You can see them in the picture on the facing page.) The + button opens a new one.

- **(Share/Bookmark).** When you’re on an especially useful page, tap this button. It offers every conceivable choice for commemorating the page: AirDrop, Mail, Message, Twitter, Facebook, Add Bookmark, Add to Reading List, Add to Home Screen, Copy, Print, and AirDrop. See page 279 for details.

- **(Page Juggler).** Safari can keep multiple Web pages open, just like any other browser. Page 371 has the details.

**Zooming and Scrolling**

When you first open a Web page, you get to see the *entire thing*, so you can get the lay of the land.

At this point, of course, the type may be too small to read. So the next step is to magnify the *part* of the page you want to read.
The iPad offers three ways to do that:

- **Rotate the iPad.** Turn the device 90 degrees in either direction. The iPad rotates and magnifies the image to fill the wider view. Often, this simple act is enough to make tiny type big enough to read.

- **Do the two-finger spread.** Put two fingers on the glass and slide them apart. The Web page stretches before your very eyes, growing larger. Then you can pinch to shrink the page back down again. (Most people do several spreads or several pinches in a row to achieve the degree of zoom they want.)

- **Double-tap.** When you double-tap a block of text, Safari magnifies it, usually just enough to read easily. Double-tap again to zoom back out.

Once you’ve zoomed out to the proper degree, you can then scroll around the page by dragging or flicking with a finger. You don’t have to worry about “clicking a link” by accident; if your finger’s in motion, Safari ignores the tapping action, even if you happen to land on a link.

**TIP:** Once you’ve double-tapped to zoom in on a page, you can use this little-known trick: Double-tap anywhere on the upper half of the screen to scroll up or the lower half to scroll down. The closer you are to the top or bottom of the screen, the more you scroll.

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### Full-Screen Mode

On an iPad, the screen is pretty small to begin with; most people would rather dedicate that space to showing more Web.

So in iOS, Safari enters **full-screen mode** the instant you start to scroll down a page. In full-screen mode, all the controls and toolbars vanish. Now the entire iPad screen is filled with Web goodness, as shown on these pages.

You can bring the controls back in any of these ways:

- Scroll **up** a little bit.
- Return to the top or bottom of a Web page.
- Tap the top strip.
- Navigate to a different page.

And enjoy Safari’s dedication to trying to get out of your way.
Typing a Web Address

As on a computer, this Web browser offers several tools for navigating the Web: the address bar, bookmarks, the History list, and good old link-tapping. These pages cover each of these methods in turn, along with the Reading List and Web Clips.

The address/search bar is the strip at the top of the screen where you type in a Web page’s address. And it so happens that five of the iPad’s greatest tips and shortcuts all have to do with this important navigational tool:

- **Your favorites await.** When you tap in the address bar or open a new tab, the icons of your bookmarked sites appear, to save you time.

- **Insta-scroll to the top.** You can jump directly to the address bar, no matter how far down a page you’ve scrolled, just by tapping the very top edge of the screen (the status bar).

- **Don’t delete.** There is a button at the right end of the address bar whose purpose is to erase the current address so you can type another one. (Tap inside the address bar to make it, and the keyboard, appear.) But the button is for suckers.
Instead, whenever the address bar is open for typing, **just type.** Forget that there’s already a URL there. The iPad is smart enough to figure out that you want to replace that Web address with a new one.

- **Don’t type http://www.** You can leave that stuff out; Safari will supply it automatically. Instead of http://www.cnn.com, for example, just type **cnn.com** (or tap its name in the suggestions list) and hit **Go.**

- **Type .com, .net, .org, or .edu the easy way.** Safari’s canned URL choices can save you four keyboard taps apiece. To see their secret menu, hold your finger down on the **period key** on the standard keyboard (previous page). Then tap the common suffix you want. (Or, if you want .com, just release your finger without moving it.)

Otherwise, this address bar works just like the one in any other Web browser. Tap inside it to make the keyboard appear.

Tap the blue **Go** key when you’re finished typing the address. That’s your Enter key. (Or tap **Cancel** to hide the keyboard **without** “pressing Enter.”)

**Searching in Safari**

The address bar is also the search box. Just tap into it and type your search phrase (or speak it, using Siri).

To save you time and fiddling, Safari instantly produces a drop-down menu filled with suggestions that could spare you some typing—things it guesses you might be looking for. If you see the address you’re trying to type, then by all means tap it instead of typing out the rest of the URL. The time you save could be your own:

- **Top Hits.** The Top Hits are Safari’s best guesses at what you’re looking for. They’re the sites on your bookmarks and History lists that you’ve visited most often (and that match what you’ve typed so far).

  Try tapping one of the Top Hits sometime. You’ll discover, to your amazement, that that site appears almost instantly. It doesn’t seem to have to load. That’s because, as a favor to you, Safari quietly downloads the Top Hits in the background, while you’re still entering your search term, all to save you time.

  **NOTE:** If you’re concerned that this feature is sucking down some of your monthly cellular data allowance unnecessarily, you can turn it off in **Settings ➔ Safari ➔ Preload Top Hit.**

- **Google Search.** The next category of suggestions: a list of search terms you **might** be typing, based on how popular those searches are
on Google (or whatever search service you’re using). For example, if you type **chick**, this section proposes things like **chicken recipes**, **chick fil a**, and **chicken pox**. It’s just trying to save you a little typing; if none of these tappable choices is the one you want, then ignore them and continue typing.

**NOTE:** You can turn this feature off, too, if it makes you feel spied upon. (Behind the scenes, it’s transmitting your search term to Apple.) You do that in **Settings→Safari→Search Engine Suggestions**.

- **Bookmarks and History.** Here Safari offers matching selections from Web sites you’ve bookmarked or recently visited. Again, it’s trying to save you typing if it can.
- **On This Page.** Here’s how you search for certain text **on the page you’re reading**.

Once you’ve started typing, under the **On This Page** heading, you see a listing called **Find “chick”** (or whatever you’ve typed so far), shown on the facing page at left. Tap that line to jump to the first appearance of that text on the page; then use the `<` and `>` buttons at the bottom to jump from one match to the next. Tap **Done** to return to your regularly scheduled browsing.
TIP: Suppose you’ve started typing a search term. Safari pipes up with its usual list of suggestions. At this point, if you drag up or down the screen, you hide the keyboard—so you can see the suggestions that were hidden behind it.

Now then. If, among all of these Safari labor-saving suggestions, you don’t see what you’re looking for, then maybe you really do have to search the Web. Tap the big blue Go button in the corner.

You can tell the iPad to use a Yahoo, Bing, or DuckDuckGo search instead of Google, if you like. From the Home screen, tap Settings → Safari → Search Engine. (DuckDuckGo, a new option in iOS 8, is a search service dedicated to your privacy. It doesn’t store your searches or tailor the results to you. On the other hand, it’s capable of searching only about 50 Web sources—Wikipedia, Wolfram Alpha, and so on.)
TIP: If you’ve set your search options to use Google, there are all kinds of cool things you can type here—special terms that tell Google, “I want information, not Web page matches.”

You can type a movie name and Zip code or city/state (Titanic Returns 10024) to get a list of today’s showtimes in theaters near you. Get the forecast by typing weather chicago or weather 60609. Stock quotes: Type the symbol (AMZN). Dictionary definitions: define schadenfreude. Unit conversions: liters in 5 gallons. Currency conversions: 25 usd in euros. Then tap Go to get instant results.

Quick Website Search

This crazy, not fully baked feature, new in iOS 8, lets you search within a certain site (like Amazon or Reddit or Wikipedia) using only Safari’s regular search bar. For example, typing wiki mollusk can search Wikipedia for its entry on mollusks. Typing amazon ipad can offer links to buy an iPad from Amazon. Typing reddit sitcoms opens reddit.com to its search results for sitcoms.

None of this will work, however, until (a) you’ve turned the feature on (SettingsÆSafariÆQuick Website Search), and (b) you’ve manually taught Safari how to search those sites one time each.

To do that, pull up the site you want to search (let’s say it’s reddit.com) and use its regular search bar. Search for anything.

That site’s name now appears in the list at SettingsÆSafariÆQuick Website Search. (Sometimes. Many sites don’t work with Quick Website Search.) From now on, you can search that site by typing, for example, reddit sitcoms. You’ll jump directly to that site’s search results.

Bookmarks

Bookmarks, of course, are Web sites you might want to visit again without having to remember and type their URLs.

To see the list of bookmarks on your iPad, tap ‡ at the top of the screen. You see the master list of bookmarks (next page, left). They’re organized in folders, or even folders within folders.

Tapping a folder shows you what’s inside (next page, right), and tapping a bookmark begins opening the corresponding Web site.

NOTE: Actually, what you see when you tap ‡ are three tabs at the top: ‌‌ (Bookmarks), ‌‌ (Reading List), and ‌‌ Twitter links and RSS feeds). The latter two are described later in this chapter.
You might be surprised to discover that Safari already seems to be pre-stocked with bookmarks—that, amazingly, are interesting and useful to you in particular! How did it know?

Easy—it copied your existing desktop computer’s browser bookmarks from Internet Explorer (Windows) or Safari (Mac) when you synced the iPad (Chapter 14), or when you turned on Safari syncing through iCloud. Sneaky, eh?

Creating New Bookmarks

You can add new bookmarks right on the iPad. Any work you do here is copied back to your computer the next time you sync the two machines—or instantaneously, if you’ve turned on iCloud bookmark syncing.
When you find a Web page you might like to visit again, tap $\text{P}$ to reveal the options shown at left (facing page); then tap Add Bookmark. The Add Bookmark screen appears (right).

You have two tasks here:

- **Type a better name.** In the top box, you can type a shorter or clearer name for the page. Instead of “Bass, Trout & Tackle—the Web’s Premier Resource for the Avid Outdoorsman,” you can just call it “Fish.”

  The box below this one identifies the underlying URL, which is independent of what you’ve named your bookmark. You can’t edit this one.

- **Specify where to file this bookmark.** If you tap Favorites $\triangleright$, you open Safari’s hierarchical list of bookmark folders, which organize your bookmarked sites. Tap the folder where you want to file the new bookmark so you’ll know where to find it later.

  **TIP:** You can specify which folder you want Safari to propose when you save a new bookmark—handy if you have a lot of those folders. You set that up in Settings $\Rightarrow$ Safari $\Rightarrow$ Favorites.

**Editing Bookmarks and Folders**

It’s easy enough to massage your Bookmarks list within Safari—to delete favorites that aren’t so favorite anymore, to make new folders, to rearrange the list, to rename a folder or a bookmark, and so on.

The techniques are the same for editing bookmark folders as editing the bookmarks themselves—after the first step. To edit the folder list, start by opening the Bookmarks (tap $\text{‡}$), and then tap Edit.

To edit the bookmarks themselves, tap $\text{‡}$, tap a folder, and then tap Edit. Now you can get organized:

- **Delete something.** Tap $\text{–}$ next to a folder or a bookmark, and then tap Delete to confirm.

- **Rearrange the list.** Drag the grip strip (---) up or down in the list to move the folders or bookmarks around. (You can’t move or delete the top two folders—Favorites and History.)

- **Edit a name and location.** Tap a folder or a bookmark name. If you tap a folder, you arrive at the Edit Folder screen; you can edit the folder’s name and which folder it’s inside of. If you tap a bookmark, Edit Bookmark lets you edit the name and the URL it points to.
Tap \textit{Done} when you’re finished.

- **Create a folder.** Tap \textit{New Folder} in the lower-left corner of the Edit Folders screen. You’re offered the chance to type a name for it and to specify where you want to file it (that is, in which \textit{other} folder).

Tap \textit{Done} when you’re finished.

\section*{The Reading List}

The Reading List is a handy list of Web pages you want to read later. Unlike a bookmark, it stores entire pages, so you can read them later even when you don’t have an Internet connection (on the subway or on a plane, for example).

![Reading List](image)

The Reading List also keeps track of what you’ve read. You can use the \textit{Show All/Show Unread} button at the bottom of the panel to view everything—or just what you haven’t yet read.

\textbf{TIP:} To make matters even sweeter, iCloud synchronizes your Reading List with your Mac, iPhone, and so on—as long as you’ve turned on bookmark syncing. It’s as though the Web always keeps your place.

To add a page to the Reading List, tap \includegraphics[width=1em]{folder} and then tap \textit{Add to Reading List}.  

364 Chapter 12
Once you’ve added a page to the Reading List, you can get to it by tapping 📚 and then tapping the Reading List tab at the top (ovolta). Tap an item on your list to open and read it.

**TIP:** When you get to the bottom of a Reading List item, keep scrolling down. The iPad is nice enough to offer up the next article in your Reading List, as though they were all vertically connected.

## Shared Links (@)

There’s a third tab button on the Bookmarks screen, too: @. It’s the Shared Links button. It lists every tweet from Twitter that contains a link. The idea is to make it easier for you to explore sites that your Twitter friends are recommending; all their Web finds are collected in one place.

**TIP:** In Safari, “shared links” has another meaning, too: The $ makes it easy to share the URL of a particularly juicy Web page. On the Share sheet, you get the usual set of links; Copy, Mail, Message (to send by text message), Twitter, Facebook, and so on. But remember that iOS 8 is extensible. Depending on the apps you’ve installed, you may see all kinds of other share-this-link options on this screen.
RSS Subscriptions
At the bottom of the Shared Links (@) tab, iOS 8 offers a new button called Subscriptions. It’s a reference to RSS feeds, which are something like subscriptions to Web sites. You don’t have to remember to go visit your favorite blogs or news sites; notification blurbs about their newly posted articles come to you.

Here’s the procedure:

1. **In Safari, open a site that offers an RSS feed.** News sites of all kinds offer RSS feeds (nytimes.com, usatoday.com, engadget.com, yahootech.com, and so on).

2. **Subscribe to it.** To do that, tap ‡, then @, then Subscriptions, and then Add Current Site (previous page, left).

3. **Read.** When you want to see what’s new, tap ‡, then @. That’s right: Blurbs representing newly posted stories appear on the @ tab (previous page, right), mixed in with all your Twitter links. That’s not ideal, especially if there are hundreds of Twitter links—but at least you’ll never be without a place to check for interesting stuff to read.

To delete a subscription, tap ‡, then @, then Subscriptions; tap – next to the subscription’s name, and confirm by tapping Delete.

Web Clips

If there’s a certain Web site you visit all the time, like every day, then even the four taps necessary to open it in the usual way (Home, Safari, Bookmarks, your site’s name) can seem like a lot of red tape. That’s why Apple made it simple to add the icon of a certain Web page right to your Home screen. It’s a shortcut that Apple calls a Web clip.

Start by opening the page in question. Tap  at the top of the screen. In the button list, tap Add to Home Screen. Now you’re offered the chance to edit the icon’s name; finally, tap Add.

When you return to your Home screen, you see the new icon. You’ve just added a bookmark to your Home screen. (You move or delete this icon exactly as you would any app.)
You can turn part of a Web page into one of these Web clips, too. You might want quick access to The New York Times’ “Most emailed” list, or the bestselling children’s books on Amazon, or the most-viewed video on YouTube, or the box scores for a certain sports league.

All you have to do is zoom and scroll the page in Safari before you tap ⬅️, isolating the section you want. Later, when you open the Web clip, you’ll see exactly the part of the Web page you wanted.

The History List

Behind the scenes, Safari keeps track of the Web sites you’ve visited in the past week or so, neatly organized into subfolders like This Evening and Yesterday. It’s a great feature when you can’t recall the address for a Web site you visited recently—or when you remember it had a long, complicated address and you get the psychiatric condition known as iPad Keyboard Dread.

To see the list of recent sites, tap ⬅️; then, on the ⬅️ tab, tap History, whose icon bears a Ⓚ to make sure you know it’s special. Once the History list appears, just tap a bookmark to revisit that Web page.

Erasing the History List

Some people find it creepy that Safari maintains a complete list of every Web site they’ve seen recently, right there in plain view of any family member or coworker who wanders by. They’d just as soon their wife/husband/boss/parent/kid not know what Web sites they’ve been visiting.

You can delete just one particularly incriminating History listing easily enough; swipe leftward across its name and then tap Delete. Or you can delete the entire History menu, thus erasing all your tracks. To do that, tap Clear; confirm by tapping Clear History. You can also clear only the names of the sites you’ve seen in the past hour, today, or today and yesterday.

You’ve just rewritten History.

Tapping Links

On the iPad, not all links take you to other Web pages. If you tap an email address, it opens up the Mail app (Chapter 13) and creates a preaddressed outgoing message. There’s even such a thing as a map link, which opens the Maps app.
Each of these links, in other words, takes you out of Safari. If you want to return to your Web browsing, then you have to return to the Home screen, or the app switcher, and tap Safari. The page you had open is still there, waiting.

**TIP:** If you hold your finger on a link for a moment—touching rather than tapping—a handy panel appears (above). At the top, you see the full Web address that link will open. And there are some useful buttons: Open, Open in New Tab, Add to Reading List, and Copy (meaning “copy the link address”).

## Saving Graphics

If you find a picture online that you wish you could keep forever, you have two choices. You could stare at it until you’ve memorized it, or you could save it.

To do that, touch the image for about a second. A sheet appears, just like the one that appears when you hold your finger down on a regular link.

If you tap Save Image, then the iPad thoughtfully deposits a copy of the image in your Camera Roll, so it will get backed up and copied to your Mac or PC. If you tap Copy, then you nab a link to that graphic, which you can now paste into another program.
Saved Passwords and Credit Cards

On desktop Web browsers, a feature called AutoFill saves you an awful lot of typing. It fills out your name and address automatically when you’re ordering something online. It stores your passwords so you don’t have to re-enter them every time you visit passworded sites.

But on the iPad, where you’re typing on glass, the convenience of AutoFill goes to a whole new level.

And in iOS, there’s a whole new level above that level. The iPad can memorize your credit card information, too, making it much easier to buy stuff online; in fact, it can even store this information by taking a picture of your credit card.

And thanks to iCloud syncing, all those passwords and credit cards can auto-store themselves on all your other Apple gadgetry.

To turn on AutoFill, visit Settings → Safari → Passwords & AutoFill. Here’s what you find (previous page, top):

• Use Contact Info. Turn this On. Then tap My Info. From the address book, find your own listing. You’ve just told Safari which name, address, city, state, Zip code, and phone number belong to you.
From now on, whenever you’re asked to input your address, phone number, and so on, you’ll see an AutoFill button at the top of the keyboard. Tap it to make Safari auto-enter all those details, saving you no end of typing. (It works on most sites.) If there are extra blanks that AutoFill doesn’t fill, then you can tap the Previous and Next buttons to move your cursor from one to the next instead of tapping and scrolling manually.

• **Names & Passwords** lets Safari fill in your user name and passwords when you visit sites that require you to log in (Google, Amazon, and so on). On each Web site, you’ll be able to choose Yes (a good idea for your PTA or library account), Never for this Website (a good idea for your bank), or Not Now (you’ll be asked again next time).

You can also tap Saved Passwords to view a list of the memorized names and passwords—after entering your iPad password.

**TIP:** On this screen, you can delete saved passwords. Swipe leftward across the login that no longer pleases you, and then tap Delete.

• **Credit Cards.** Turn on Credit Cards, of course, if you’d like Safari to memorize your charge card info. To enter your card details, tap Saved Credit Cards (where you see a list of them) and then Add Credit Card. You can type in your name, card number, expiration date, and a description—or you can save yourself a little tedium by tapping Use Camera. Aim the camera at your credit card until you see its long number magically recognized, as you can see here. (You still have to enter your name and the card expiration manually.)

When you buy something online, iOS offers an Autofill Credit Card button. When you tap it, Safari asks you first which credit card you want to use, if you’ve stored more than one (it displays the last four
digits for your reference). Tap it, and boom: Safari cheerfully fills in the credit card information, saving you time and hassle.

Unfortunately, there’s nowhere to store the little three- or four-digit security code, sometimes called the CSC, CVV, or CV2 code. Safari makes no attempt to fill that in; you always have to enter it manually.

That’s one last safeguard against a kid, a spouse, a parent, or a thief using your iPad for an online shopping spree when you’re not around.

**TIP:** Once you’ve stored all of these passwords and credit cards, it sure would be nice if you didn’t have to enter them into other Apple gadgets, wouldn’t it? Your Mac, your iPhone, and so on?

Fortunately, the iCloud service can synchronize this information to Safari running on other Apple machines. Page 437 has the details.

**Manipulating Multiple Pages**

Like any other self-respecting browser, Safari can keep multiple pages open at once, making it easy for you to switch among them. You can think of it as a miniature version of tabbed browsing, a feature of browsers like Safari Senior, Firefox, Chrome, and Internet Explorer. Tabbed browsing keeps a bunch of Web pages open simultaneously.

One advantage of this arrangement is that you can start reading one Web page while the others load into their own tabs in the background.

**To Open a New Window**

Tap the + button at top right.

You now arrive at the Favorites page (below). Here are icons for all the sites you’ve designated as Favorites. Tap to open one. Or, in the address bar, enter an address. Or use a bookmark. (More on Favorites in a moment.)
TIP: Alternatively, hold your finger down on a link instead of tapping it. You get a choice of three commands, one of which is Open in New Page.

Sometimes Safari sprouts a new window automatically when you click a link. That’s because the link you tapped is programmed to open in a new window. To return to the original window, read on.

To Switch among Windows

Tap at top right. Now you see something like the thumbnail pages shown here. These, of course, are all your open windows. You work with them like this:

- **Close a window** by tapping the in the corner—or by swiping a page away to the left. It slides away into the void; the only thing missing is a falling sound effect like, “Oh noooooooooooooo!”

- **Rearrange these windows** by dragging them up or down with your finger. (Pause briefly with your finger down before moving it.)

- **Open a window** to full screen by tapping it.
You can open a third window, and a fourth, and so on, and jump among them, using these two techniques.

**iCloud Tabs**

The iPad can auto-open whatever browser windows and tabs you had open on another Apple gadget, like a Mac or an iPhone. Thanks to the miracle of iCloud syncing, the last windows and tabs you had open on that other gadget (even if the gadget is turned off) show up here.

The concept is to unify your Macs and i-gadgets into one glorious, seamless Web-browsing experience. You’re reading three browser windows and tabs on your iPad—why not resume on a bigger screen when you get home and sit down in front of your Mac?

You won’t see these tabs unless the Macs have OS X Mountain Lion or later. And, of course, Safari has to be turned on in **System Preferences** ➔ **iCloud** on the Mac, or **Settings** ➔ **iCloud** on the iPad or tablet.

To see these tabs, tap to open your view of open Safari window thumbnails. Scroll to the bottom (facing page). There they are: your iCloud tabs, sorted into headings that correspond to your other Apple gadgets. Tap to open.

**The Favorites Page**

You can never close all your Safari windows. The app will never let you get past the final page: the Favorites page (facing page).

This is the new starting point. It’s what you first see when you tap the button. It’s like a page of visual bookmarks.

In fact, if you see a bunch of icons here already, it’s because your iPad has synced them over from Safari on a Mac; whatever sites are on your Bookmarks bar become icons on this bookmark page.

You can edit this Favorites page, of course:

- **Rearrange them** as you would Home screen icons. That is, hold your finger down on an icon momentarily and then drag it to a new spot.

- **Remove or rename a Favorites icon.** Favorites are just bookmarks. So you can edit, move, or delete them just as you would any bookmark. (Tap ‡ to open your Bookmarks screen. Make sure that you’re on the ‡ tab, so that your list of folders is showing. Tap Favorites, then Edit. Tap ‭ for a site you want to delete, and then tap Delete.)
• **Add a Favorites icon.** When you find a page you’d like to add to the Favorites screen, tap 📌. On the Share sheet, tap **Add Bookmark**. The iPad usually proposes putting the new bookmark into the Favorites **folder**, which means that it will show up on the Favorites **screen**. (If it proposes some other folder on the Location line, then tap the folder’s name and then tap **Favorites**.) Tap **Save**.

**TIP:** It’s worth noting, by the way, that you don’t have to use the Favorites folder of bookmarks as the one whose contents appear on the Favorites screen. In **Settings** → **Safari** → **Favorites**, a list of all your Bookmarks folders appears. Whichever one you select there becomes your new Favorites folder, even if its name isn’t “Favorites.”

**Reader View**

How can people read Web articles when there’s Times Square blinking all around them? Fortunately, you’ll never have to put up with that again.

The Reader button in the address bar (☰) is amazing. With one tap, it eliminates **everything** from the page you’re reading except the text and photos. No ads, toolbars, blinking, links, banners, promos, or anything else.

The text is also changed to a clean, clear font and size, and the background is made plain white. Basically, it makes any Web page look like a printed book page, and it’s glorious. Shown here: the before and after. Which looks easier to read?
To exit Reader, tap again. Best. Feature. Ever.

The fine print: Reader doesn’t appear until the page has fully loaded. It doesn’t appear on “front page” pages, like the nytimes.com home page—only when you’ve opened an article within. It may not appear on sites that are already specially designed for access by mobile gadgets, as described next.

**Open the Full Site**

In an effort to conserve time and bandwidth (yours and theirs), many Web sites supply *mobile* versions to tablets and phones—smaller, stripped-down sites that transfer faster than (but lack some features of) the full-blown sites. You generally have no control over which version you’re sent.

Until now. Suppose you’re in Safari, and some site has dished up its mobile version, and you’re gnashing your teeth. Tap in the address box, and then swipe downward anywhere on the page. Tap **Request Desktop Site**. As you’ve requested, the full-blown desktop version of that site now appears.

**Web Security**

Safari on the iPad isn’t meant to be a full-blown Web browser like the one on your desktop computer, but it comes surprisingly close—especially when it comes to privacy and security. Cookies, pop-up blockers, parental controls—they’re all here, for your paranoid pleasure.

**Pop-Up Blocker**

The world’s smarmiest advertisers like to inundate us with pop-up and pop-under ads—nasty little windows that appear in front of the browser window, or, worse, behind it, waiting to jump out the moment you close your window. Fortunately, Safari comes set to block those pop-ups so you don’t see them. It’s a war out there—but at least you now have some ammunition.
The thing is, though, pop-ups are sometimes useful (and not ads)—notices of new banking features, seating charts on ticket-sales sites, warnings that the instructions for using a site have changed, and so on. Safari can’t tell these from ads—and it stifles them, too. So if a site you trust says “Please turn off pop-up blockers and reload this page,” then you know you’re probably missing out on a useful pop-up message.

In those situations, you can turn off the pop-up blocker. The on/off switch is in Settings→Safari.

Password Suggestions

When you’re signing up for a new account on some Web site, and you tap inside the box where you’re supposed to make up a password, Safari offers to make up a password for you. It’s a doozy, too, along the lines of 23k2k4-29cs8-58384-ckk3322.

Now, don’t freak out. You’re not expected to remember that. Safari will, of course, memorize it for you (and sync it to your other Apple computers, if they’re on the same iCloud account). Meanwhile, you’ve got yourself a unique, nearly uncrackable password.

Cookies

Cookies are something like Web page preference files. Certain Web sites—particularly commercial ones like Amazon.com—deposit them on your hard drive like little bookmarks so they’ll remember you the next time you visit. Ever notice how Amazon greets you with, “Welcome, Chris” (or whatever your name is)? It’s reading its own cookie, left behind on your hard drive (or in this case, on your iPad).

Most cookies are perfectly innocuous—and, in fact, are extremely useful, because they help Web sites remember your tastes. Cookies also spare you the effort of having to type in your name, address, and so on every time you visit these Web sites.

But fear is widespread, and the media fan the flames with tales of sinister cookies that track your movement on the Web. If you’re worried about invasions of privacy, Safari is ready to protect you.

From the Home screen, tap Settings→Safari→Block Cookies. The options here are like a paranoia gauge. If you click Always Block, you create an acrylic shield around your iPad. No cookies can come in, and no cookie information can go out. You’ll probably find the Web a very inconvenient place; you’ll have to re-enter your information upon every visit, and some Web sites may not work properly at all. The Always Allow option means “Oh, what the heck—just gimme all of them.”
A good compromise is **Allow from Websites I visit**, which accepts cookies from sites you **want** to visit, but blocks cookies deposited on your iPad by sites you’re not actually visiting—cookies an especially evil banner ad gives you, for example.

The **Settings→Safari** screen also offers a **Clear History and Website Data** button. It deletes all the cookies you’ve accumulated so far, your browsing history, and your iPad’s **cache**.

The cache is a patch of the iPad’s storage area where pieces of Web pages you visit—graphics, for example—are retained. The idea is that the next time you visit the same page, the iPad won’t have to download those bits again. It already has them on board, so the page appears much faster.

If you worry that your cache eats up space, poses a security risk, or is confusing some page (and preventing the most recent version of the page from appearing), then tap **Clear History and Website Data** to erase it and start over.

**Private Browsing**

**Private browsing** lets you surf without adding any pages to your History list, searches to your Google search suggestions, passwords to Safari’s saved password list, or autofill entries to Safari’s memory. You might want to turn on private browsing before you start visiting Web sites that would raise interesting questions with your spouse, parents, or boss.

When you want to start leaving no tracks, tap □ to open the page-juggler screen; tap **Private** at the top-right corner.

Safari now points out that you’re in Private mode. Tap ‹ to open a new page, and proceed as usual. From now on, Safari records nothing while you surf; the status bar at the top of the screen stays dark to remind you.

When you’re ready to browse “publicly” again, turn private browsing off once more (tap □, then tap **Private** to turn it off). Safari resumes taking note of the pages you visit—but it never remembers the ones you opened while in Private mode.

In other words, what happens in private browsing stays in private browsing.

**Parental Controls**

If your child (or employee) is old enough to have an iPad but not old enough for the seedier side of the Web, then don’t miss the Restrictions feature in Settings. The iPad makes no attempt to separate the good Web sites from the bad—but it **can** remove the Safari icon from the iPad altogether so that no Web browsing is possible at all. See page 507 for instructions.
Email

Email on your iPad offers full formatting, fonts, graphics, and choice of type size; file attachments like Word, Excel, PowerPoint, PDF, Pages, Numbers, photos, and even .zip compressed files; and compatibility with Yahoo Mail, Gmail, AOL Mail, iCloud mail, corporate Exchange mail, and any standard email account.

In iOS 8, the Mail app might well be called “Mail: The Anti-Annoyance App.” For example, new finger-swipes let you delete or flag messages; you can now flip between an email you’re writing and one you’re referring to; and with one tap on an outgoing message, you can request to be notified if anyone replies.

Dude, if you want a more satisfying portable email machine than this one, buy a laptop.

This chapter covers the basic email experience. If you’ve gotten yourself hooked up with iCloud or Exchange ActiveSync, see Chapters 15 and 16 for details.

Setting Up Your Account

In the olden days, setting up an email account on a new computer was a harrowing experience, requiring much typing of obscure codes and many calls to tech support.

These days, just typing in your email address and password might be all you have to do; it depends on what kind of email account you have.
Free Email Accounts

If you have a free email account from Google, AOL, Outlook, or Yahoo; an iCloud account (Chapter 15); or a Microsoft Exchange account run by your employer (Chapter 16), then setup on the iPad is easy.

From the Home screen, tap *Settings*→*Mail, Contacts, Calendars*→*Add Account*. Tap the colorful logo that corresponds to the kind of account you have (Google, Yahoo, or whatever).

Now you land on the account-information screen. Tap into each of the blanks and, when the keyboard appears, type the requested info: for example, your name, email address, account password, and a description (that one’s optional). Tap *Next*.

Now you may be shown the list of non-email data that the iPad can show you (from iCloud, Google, Yahoo, Exchange, and so on): Mail, Contacts, calendars, Reminders, and Notes. Turn off the ones you don’t want synced to your iPad, and then tap *Save*.

Your email account is ready to go!
If you don’t have one of these free accounts, they’re worth having, if only as a backup to your regular account. They can help with spam filtering, too, since the iPad doesn’t offer any. To sign up, go to Google.com, Yahoo.com, AOL.com, or iCloud.com.

**POP3 and IMAP Accounts**

Those freebie, brand-name, Web-based accounts are super-easy to set up. But they’re not the whole ball of wax. Millions of people have more generic email accounts, perhaps supplied by their employers or Internet providers. They’re generally one of two types:

- **POP accounts** are the oldest and most compatible type on the Internet. (POP stands for Post Office Protocol, but this won’t be on the test.) A POP account can make life complicated if you check your mail on more than one machine (say, a PC and an iPad), as you’ll discover shortly.

  A POP server transfers incoming mail to your computer or iPad before you read it, which works fine as long as you’re using only that machine to access your email.

- **IMAP accounts** (Internet Message Access Protocol) are newer and have more features than POP servers, and they’re quickly putting POP out to pasture. IMAP servers keep all your mail online, rather than making you store it on your computer; as a result, you can access the same mail from any computer or iPad. IMAP servers remember which messages you’ve read and sent, and they even keep track of how you’ve filed messages into mail folders. (Those free Yahoo email accounts are IMAP accounts, and so are Apple’s iCloud accounts and corporate Exchange accounts. Gmail accounts can be IMAP, too.)

**TIP:** The iPad copies your IMAP messages onto the iPad itself, so you can work with your email even when you’re not online. You can, in fact, control where these messages are stored (in which mail folder). To see this, open Settings→Mail, Contacts, Calendars→[your IMAP account name]→[your IMAP account name again]→Advanced. See? You can specify where your drafts, sent messages, and deleted messages wind up on the iPad.

The iPad can communicate with both kinds of accounts, with varying degrees of completeness.

If you haven’t opted to have your account-setup information transferred automatically to the iPad from your Mac or PC, then you can set it up manually on the iPad.
Tap your way to Settings→Mail, Contacts, Calendars→Add Account. Tap Other, tap Add Mail Account, and then enter your name, email address, password, and an optional description. Tap Next.

Apple’s software attempts to figure out which kind of account you have (POP or IMAP) by the email address. If it can’t make that determination, then you arrive at a second screen, where you’re asked for such juicy details as the host name for incoming and outgoing mail servers. (This is also where you tap either IMAP or POP, to tell the iPad what sort of account it’s dealing with.)

If you don’t know this stuff offhand, you’ll have to ask your Internet provider, corporate tech-support person, or next-door teenager to help you. When you’re finished, tap Save.

To delete an account, open Settings→Mail, Contacts, Calendars→[account name]. At the bottom of the screen, you’ll find the Delete Account button.

TIP: You can make, rename, or delete IMAP or Exchange mailboxes (mail folders) right on the iPad, in the Mail app itself.

On the top-level Mailboxes list, under Accounts, tap your account’s name (iCloud, Gmail, or whatever). Tap Edit. Tap New Mailbox to create a new folder. To edit an existing mailbox, tap its name; you can then rename it, tap the Mailbox Location folder to move it, or tap Delete Mailbox. Tap Save to finish up.

**Downloading Mail**

If you have “push” email (Yahoo, iCloud, or Exchange), then your iPad doesn’t check for messages; new messages show up on your iPad as they arrive, around the clock.

If you have any other kind of account, then the iPad checks for new messages automatically on a schedule—every 15, 30, or 60 minutes. It also checks for new messages each time you open the Mail program, or whenever you drag downward on the Inbox list.

You can adjust the frequency of these automatic checks or turn off the “push” feature (because it uses up your battery faster) in Settings; see page 486.

When new mail arrives, you’ll know it at a glance; all the Notification Center options work well in Mail. For example, if your iPad is off, you can tap the Sleep or Home button to view the sender, subject, and the first line of the messages right on the Lock screen. (Swipe across one, right there on the Lock screen, to jump to it in Mail.)
You’ll also hear the iPad’s little “You’ve got mail” sound, unless you’ve turned that off in Settings.

If your iPad is on, then a new message can alert you by appearing briefly at the top of the screen, without disturbing your work.

In iOS 8, in fact, you can actually process a message right from that banner. If you see at a glance that it’s junk, or if no response is necessary, drag your finger down on it to reveal two new buttons: Mark as Read (leave it in your inbox, no longer appearing as a new message) and Trash.

At the Home screen, Mail’s icon sprouts a circled number that tells you how many new messages are waiting. If you have more than one email account, it shows you the total number of new messages, from all accounts.

If you routinely leave a lot of unread messages in your inbox, and you don’t really care about this “badge,” you can turn it off. In fact, you can turn it off on a per-account basis, which is great if one of your accounts is sort of a junk account that you keep as a spare. Tap Settings→Notifications→Mail→[account name]→Badge App Icon.

In any case, once you know you have mail, tap Mail on the Home screen to start reading it.

The Mailboxes Pane

The pane down the left side of the Mail app is your starting point. It lists all your mail folders.
When you’re holding the iPad horizontally (landscape mode), the Mailboxes pane is always at the left side of the screen. When you’re holding it vertically (portrait), the Mailboxes pane is hidden until you swipe inward from the left edge of the screen (or tap the button at top left).

Either way, this panel is designed to be a series of nested lists. You start out seeing a list of accounts; tap one to see a list of folders; tap one for a list of messages; tap one to read the actual message on the main part of the screen.

To backtrack through these lists, tap the in the upper-left corner over and over again.

Today’s dust-up
November 9, 2014 at 12:08 AM

Casey, I’m so sorry about what happened today on the highway. I’m told that turpentine can take tomato stains out of a tuxedo very easily.

Good luck…

A long-winded question

Okay, suppose 4 people are invited to a party, and each person will br…

*i Want an iPhone* lyrics
Here they are, as requested. Happy singing!

*t happened today on the highway. I’m told to stains out of a tuxedo very easily.

Casey Robin

Today’s dust-up
I wouldn’t be so hasty if I were you – it is a really really cool origami d…

Join Jan Carpenter’s *Sports &…
The Unified Inbox

If you have more than one email address, you’re in luck. The iPad offers a unified inbox—an option that displays all the incoming messages from all your accounts in a single place. (If you don’t see it—if Mail opened up to some other screen—keep tapping , backing up a screen at a time, until you do.)

This Mailboxes page has two sections:

- **Unified inboxes (and other unified folders).** To see all the incoming messages in one unified box, tap All Inboxes. Below that, you see the Inboxes for each of the individual accounts.

This part of the main Mail list also offers unified folders for VIPs and Flagged messages, which are described below.

But what you may not realize is that you can add other unified folders to this section. You can, for example, add a folder called Unread, which contains only new messages from all accounts. (That’s not the same thing as All Inboxes, because your inbox can contain messages you have read but haven’t deleted or filed.)

You can also add a unified folder showing all messages where you were either the To or CC addressee; this folder won’t include any mail where your name appeared on the BCC (blind carbon-copy) line, like mailing lists and, often, spam.
You can also add an **Attachments** folder here (messages with files attached), a **Today** folder, or unified folders that contain **All Drafts**, **All Sent**, or **All Trash**. (“All” means “from all accounts.”)

To hide or show these special uni-folders, tap **Edit**, and then tap the selection circles beside the names of the folders you want to appear. (You can also take this opportunity to drag them up or down into a pleasing sequence.) Tap **Done**.

- **Accounts.** Farther down the Mailboxes screen, you see your accounts listed again. Tap one to view the traditional mail folders: Inbox, Drafts (emails written but not sent), Sent, Trash, and any folders you’ve created yourself (Family, Little League, Old Stuff, whatever), as shown on the previous page. If you have a Yahoo, iCloud, Exchange, or another IMAP account, then the iPad automatically creates these folders to match what you’ve set up online.

**NOTE:** Not all kinds of email accounts permit the creation of your own filing folders, so you might not see anything but Inbox, Sent, and Trash.

### The Message List—and Threading

If you tap an inbox’s name, you wind up face to face with the list of incoming messages. At first, you see only the subject lines of your messages, plus, in light-gray type, the first lines of their contents; that way, you can scan through new messages to see if there’s anything important. You can flick upward to scroll this list. Blue dots indicate messages you haven’t yet opened.

Tap a message’s row to read it in all its formatted glory.

Here and there, you may spot a double arrow at the right side of the message list, like this: 🔄 That means you’re looking at some **threaded** messages. That’s where several related messages—back-and-forths on the same subject—appear only once, in a single, consolidated entry. The idea is to reduce inbox clutter and to help you remember what people were talking about.

When you tap a threaded message, the left-side pane lists the messages in the thread and tells you how many there are. Tap one of those to read, at last, the message itself.

Of course, this also means that to return to the inbox, you have more back-tracking to do (tap 🔄 twice).

In general, threading is a nice feature, even if, from time to time, it accidentally clumps in a message that has nothing to do with the others.
But if it bugs you, you can turn it off. Open **Settings → Mail, Contacts, Calendars**, scroll down, and turn off **Organize By Thread**.

VIPs and Flagged Messages

You might notice, in your master Inbox, two “email accounts” that you didn’t set up: **VIP** and **Flagged**. They’re both intended to help you round up important messages from the thousands that flood you every day.

Each one magically rounds up messages from **all** your account inboxes, so you don’t have to go wading through lots of accounts to find the really important mail. (Note: That’s **inboxes**. Messages in other mail folders don’t wind up in these special inboxes, even if they’re flagged or are from VIPs.)

VIPs

In the real world, VIPs are people who get backstage passes to concerts or special treatment at business functions (it stands for “very important person”). In iOS, it means “somebody whose mail is important enough that I want it brought to my attention immediately when it arrives.”
So who should your VIPs be? That’s up to you. Your spouse, your boss, and your doctor come to mind.

To designate someone as a VIP, proceed in either of these two ways:

- **On the accounts screen,** carefully tap the 🔄 next to the VIP item. Your master list of all VIPs appears (below). Tap Add VIP to choose a lucky new member from Contacts.

  ![VIP List Screen](image)

  This is also where you **delete** people from your VIP list when they’ve annoyed you. Swipe leftward across a name, and then tap Delete. Or tap Edit and then tap each ✗ button; tap Delete to confirm.

  **TIP:** You can set things up so that when a new message from a VIP comes in, the iPad lets you know with a sound, a banner, an alert bubble, and so on. Tap VIP Alerts to set them up. (That’s a shortcut to the SettingsÆNotificationsÆMailÆVIP screen.)

- **In a message from the lucky individual,** tap his name in the From, To, or Cc/Bcc box. His Contact screen appears, complete with an Add to VIP button.

Once you’ve established who’s important, lots of interesting things happen:

- The VIP inbox automatically collects messages from your VIPs.
- VIP names in every mail list sprout a gray star.
- If you use iCloud, the same person is now a VIP on all your other iPads and iPads (running iOS 6 or later) and Macs (running OS X Mountain Lion or later).
TIP: You can hide the VIP inbox on the main Mailboxes screen—handy if you don’t really use this feature. Tap Edit, and then tap 📣 next to the VIP heading. Tap Done.

Flag It

Sometimes you receive email that prompts you to some sort of action, but you may not have the time (or the fortitude) to face the task at the moment. (“Hi there, it’s me, your accountant. Would you mind rounding up your expenses for 2002 through 2014 and sending me a list by email?”)

That’s why Mail lets you flag a message, summoning a little flag icon or a little orange dot in a new column next to the message’s name. (You can see the actual dot in the message below.) It can mean anything you like—it simply calls attention to certain messages.

TIP: The flag marker can be either a 📣 icon or an orange dot. You make your choice in Settings → Mail, Contacts, Calendars → Flag Style.

To flag an open message, tap 📣 above the message. When the confirmation sheet opens (below), tap Flag.

Thanks to a new trick in iOS 8, you can also rapidly flag messages directly in a list (the Inbox, for example). Just swipe leftward across the message—half an inch of finger-sliding does the trick—to reveal the set of buttons shown here:

Tap Flag. (If you tap More there, you get the option to Unflag.)

The dot or 📣 icon appears in the body of the message, next to the message’s name in your message list. (In this picture, the top dot looks more like a bull’s-eye; that’s because it’s flagged and unread.) The flag appears
even on the corresponding message in your Mac or PC email program, thanks to the miracle of wireless syncing.

Finally, the Flagged mailbox appears in your list of accounts, making it easy to work with all flagged messages, from all accounts, in one place.

**TIP:** If you don’t really use this feature, you can hide the Flagged folder. On the Inboxes panel, tap **Edit**, and then tap the ✗ next to “Flagged” to turn it off. Tap **Done**.

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**What to Do with a Message**

Once you’ve opened a message, you can respond to it, delete it, file it, and so on. Here’s the drill.

**List View: Flag, Trash, Mark as Unread**

In iOS 8, Apple has made it much faster and easier to plow through a seething inbox, processing messages as you go, without ever having to open them. All you have to do is swipe across a message in the list horizontally.

- **Full left-swipe delete.** Swipe your finger leftward *all the way* across the message to delete it. That’s it: No confirmation tap required.

- **Partial left-swipe options.** If you don’t swipe leftward all the way, you reveal a set of three buttons on the right: **Trash** (same as above, but now you have to tap again to confirm); **Flag** (described in the previous section); and **More** (opens up a raft of options like **Reply**, **Forward**, **Flag**, **Move to Junk**, and so on).

- **Full right-swipe.** Swipe your finger to the *right* all the way across the message to mark it as new (unread). Great for reminding yourself to look at this message again later. Or, if it’s already unread, that swipe marks it as *read.*
To a certain extent, you can customize these gestures. You can turn off the right-swipe gesture. Or swap the positions of the Flag and Mark as Read options, for example, so that you flag a message when you swipe fully to the right and Mark as Read appears as a button when you swipe to the left. Or you can put the Archive button into the place of Flag when you swipe to the left.

To check out your options, open Settings → Mail, Contacts, Calendars → Swipe Options (shown below).

Tap Swipe Left to specify which button appears in the center of the three when you swipe partway leftward None, Mark as Read, or Flag). Tap Swipe Right to choose which function you want to trigger with a full rightward swipe (None, Mark as Read, Flag, or Archive).

Read It

The type size in email messages can be pretty small. Fortunately, you have some great iPaddy enlargement tricks at your disposal. For example:

- Spread two fingers to enlarge the entire email message.
- Rotate the iPad 90 degrees. The text gets bigger.
• **Double-tap a narrow block of text** to make it fill the screen, if it doesn’t already.

• **Drag or flick your finger** to scroll through or around the message.

• **Choose a larger type size for all messages.** See page 163.

Links are “live” in email messages. Tap a Web address to open it, a YouTube link to watch the video, an email address to write to it, a time and date to add it to your calendar, and so on.

### Reply to It

To answer a message, tap the **Reply/Forward** icon (毽) above the message; tap **Reply**. If the message was originally addressed to multiple recipients, then **Reply All** sends your reply to everyone simultaneously.

A new message window opens, already addressed. As a courtesy to your correspondents, Mail pastes the original message at the bottom of the window.

**TIP:** If you select some text before you tap, then the iPad pastes only that selected bit into the new, outgoing message. In other words, you’re quoting back only a portion—just the way it works on a full-sized computer.

At this point, you can add or delete recipients, edit the subject line or the original message, and so on. When you’re finished, tap **Send**.

Use the Return key to create blank lines in the original message. (Use the loupe—page 57—to position the insertion point at the proper spot.)

Using this method, you can splice your own comments into the paragraphs of the original message, replying point by point. The brackets by each line of the original message help your correspondent keep straight what’s yours and what’s hers.
Forward It

Instead of replying to the sender, you may sometimes want to pass the note on to a third person. To do so, tap \(\rightarrow\). This time, tap **Forward**.

**TIP:** If there’s a file attached to the inbound message, the iPad says, “Include attachments from original message?” and offers **Include** and **Don’t Include** buttons. Rather thoughtful, actually—the iPad can forward files it can’t even open.

A new message opens, looking like the one that appears when you reply. You can precede the original message with a comment of your own, like, “Frank: I thought you’d be interested in this joke about your mom.” Finally, address and send it as usual.

Follow It

In iOS 8, your iPad can notify you when anyone responds to a certain email conversation.

- If you’re composing or replying to a message, tap in the subject line to make the \(\rightarrow\) appear; tap it.

  ![Example of Notify Me](image)

- If you’re **reading** a message, tap \(\rightarrow\) above the screen; tap **Notify Me**; and confirm by tapping **Notify Me** again.

- In a list, swipe leftward, partly across a message; tap **More**; tap **Notify Me**.

In each case, a bell icon appears beside the message (or thread) in the list. When anybody replies, a notification banner appears, ready for swiping and reading.
Filing or Deleting One Message

Once you’ve opened a message that’s worth keeping, you can file it into one of your account’s folders (“mailboxes”) by tapping the 💌 above the message. Up pops the list of your folders; tap the one you want.

It’s a snap to delete a message you no longer want, too. If it’s open in front of you, tap the ✖️ or ⏹️ button above the message. The message rapidly shrinks into the icon and disappears.

**NOTE:** If that one-touch Delete method makes you a little nervous, by the way, you can ask the iPad to display a confirmation box before trashing the message. Visit Settings ➔ Mail, Contacts, Calendars ➔ Ask Before Deleting.

You can also delete a message from the message list—the inbox, for example; see page 390.

**TIP:** Gmail doesn’t want you to throw anything away. That’s why swiping like this produces a button that says Archive, not Delete, and why the usual 🗑️ button in a message looks like a filing box 📁. If you prefer to delete a message for good, hold down the ⏹️ until the Trash Message and Archive Message buttons appear.

There’s a long way to delete messages from the list, too, as described next. But for single messages, the finger-swipe method is much more fun.

**TIP:** There’s a handy Undo shortcut, too: Shake the iPad lightly. Tap Undo Trash. The deleted message jumps back to the folder it just came from. (You can then shake again to undo the Undo!)
Filing or Deleting Batches of Messages

You can also file or delete a bunch of messages at once. In the message list, tap Edit. A circle appears beside each message title. You can tap as many of these circles as you like, scrolling as necessary, adding a ☑️ with each touch.

Finally, when you’ve selected all the messages in question, tap either Trash (Archive) or Move.

If you tap Move, you’re shown the folder list so you can say where you want them moved. If you tap Trash, the messages disappear.

If you decide you’ve made a mistake, just shake the iPad lightly—the “Undo” gesture. Tap Undo Move to put the filed messages back where they just came from.

**NOTE:** When you delete a message, it goes into the Deleted folder. In other words, it works like the Macintosh Trash or the Windows Recycle Bin. You have a safety net.

Email doesn’t have to stay in the Deleted folder forever, though. You can ask the iPad to empty that folder every day, week, or month. From the Home screen, tap Settings → Mail, Contacts, Calendars. Tap your account name and then Advanced → Remove. Now you can change the setting from “Never” to “After one day” (or week, or month).
Add the Sender to Contacts

When you get a message from someone new who’s worth adding to your iPad’s Contacts address book, tap that person’s name (in blue, on the From line). You’re offered buttons for Create New Contact and Add to Existing Contact. Use the second button to add an email address to an existing person’s “card.”

Open an Attachment

The Mail program downloads and displays the icons for any kind of attachment—but it can open only documents from Microsoft Office (Word, Excel, PowerPoint), those from Apple iWork (Pages, Keynote, Numbers), PDFs, text, RTFs, VCFs, graphics, .zip files, and un-copy-protected audio and video files.
Just scroll down, tap the attachment’s icon, wait a moment for downloading, and then marvel as the document opens up, full screen. You can zoom in and out, flick, rotate the iPad 90 degrees, and scroll just as though it were a Web page or a photo.

**TIP:** If you hold your finger down on the attachment’s name, the Share sheet appears. It offers a list of ways you can send this attachment directly from your iPad to someone else (by AirDrop or Mail)—or to open it in other apps.

If you tap a Word document, for example, you may be offered buttons for Mail, Dropbox, Evernote, and other apps that can open Word docs. If you tap a PDF document, you’ll see a button for Open in iBooks. (Quick Look means the same non-editable preview as you’d get with a quick tap.)

When you’re finished admiring the attachment, swipe rightward to return to the original email message.

**TIP:** iOS can handle the compressed folders known as ZIP files, just as Mac and Windows can. When you tap a .zip attachment’s icon, the first file in it opens up. At that point, though, if you tap a list of every document in that zipped folder. You can tap each to view or share it.

**Snagging (or Sending) a Graphic**

If you get sent a particularly good picture, just hold your finger still on it. You’re offered the Save sheet, filled with options like Save (into your Photo app’s Camera Roll), Copy, Print, and Assign to Contact (as a person’s face photo). All the usual sending methods are represented here, too, so that you can fire off this photo via AirDrop, Messages, Mail, Twitter, and Facebook.

**Snagging a Contact or a Date**

iOS 8 can recognize contact information or calendar information from an incoming email message—and can dump it directly into Contacts or Calendar for you.

You’ll know when it’s found something—the block of contact information below somebody’s signature, for example—because you see a special gray banner at the top of the screen (facing page).

You can click Ignore if you don’t particularly need this person bulking up your address book. But if it’s somebody worth tracking, tap Add to Contacts. A new Contacts screen appears, ready to save.
Similarly, if the message contains a reference to a date and time, the same sort of banner appears, offering to pop the appointment onto your calendar. (This banner appears only when it’s **really sure** you’re being offered a date and time: e-invitations and airline-ticket confirmations, for example.)

iOS 8: Saving you time since 2014.

![Screenshot of Mail app with header information]

**View the To/From Details**

When your computer’s screen is only seven or nine inches diagonal, there’s not a lot of extra space. So Apple designed Mail to conceal header details (To, From, and so on) that you might need only occasionally. For example, you usually don’t actually see the word “From:”—you usually see only the sender’s name, in blue. The To and Cc lines may show only first names, to save space. (The on/off switch for that feature is in **Settings → Mail, Contacts, Calendars → Short Names**.) And if there’s a long list of addresses, you may see only “Michael (& 15 more)”—not the actual list of names.

You get last names, full lists, and full sender labels when you tap **More** following the header information.

Tap **Hide** to collapse these details.

**Tip:** When you tap a sender’s name in blue, you open the corresponding info card in Contacts. It contains one-touch buttons for calling someone back, sending a text message, or placing a FaceTime audio or video call—which can be very handy if the email message you just received is urgent.

**Mark as Unread**

In the inbox, any message you haven’t yet read is marked by a blue dot (●). Once you’ve opened the message, the blue dot goes away.
In iOS 8, if you slide your finger to the right across a message in the list, you trigger the **Mark as Unread** command—you make that blue dot **reappear**. It’s a great way to flag a message for later, to call it to your own attention. The blue dot can mean “un–dealt with” instead of “unread.”

**Move On**

Once you’ve had a good look at a message and processed it to your satisfaction, you can move on to the next (or previous) message in the list by tapping ⌂️ or ⌂️ in the upper-left corner. (Those controls appear only when you’re holding the iPad upright, in portrait orientation.)

Or you can swipe rightward to return to the inbox (or whatever mailbox you’re in).

**Searching**

Praise be—there’s a search box in Mail, above the message list. Tap inside the search box to make the keyboard appear. As you type, Mail hides all but the matching messages; tap any one of the results to open it.

You don’t have to specify **which fields** to search (From, To, Subject, Body), or which folder. You’re searching everywhere.

**TIP:** If you **want** to restrict the search just to the folder you’re in, you can. After the search results begin to appear, tug downward on the screen. Two new buttons appear: **All Mailboxes** and **Current Mailbox**.

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Wait long enough, and the search continues with messages that are still out there on the Internet but are so old that they’ve scrolled off your iPad.
TIP: If, after typing a few letters, you tap Search, the keyboard goes away and an Edit button appears. Tapping it lets you select a whole bunch of the search results—and then delete or file them simultaneously.

Writing Messages

To compose a new piece of outgoing mail, tap 📧 at top right. A blank new outgoing message appears, and the iPad keyboard pops up.

Here’s how you go about writing a message:

1. In the To field, type the recipient’s email address—or grab it from Contacts. Often, you won’t have to type much more than the first couple of letters of the name or email address. As you type, Mail displays all matching names and addresses so you can tap one instead of typing. (It thoughtfully derives these suggestions by analyzing both your Contacts and the people you’ve recently exchanged email with.)

TIP: As you type into the To box, the iPad displays a list of everyone whose name matches what you’re typing. The ones bearing 🔄 buttons are the people you’ve recently corresponded with but who are not in your Contacts. Tap the 🔄 to open a screen where you can add them to Contacts—or remove them from the list of recent correspondents, so Mail’s autocomplete suggestions will no longer include those lowlifes.

If you hold your finger down on the period (.) key, you get a pop-up palette of common email-address suffixes, like .com, .edu, .org, and so on.
Alternatively, tap the + to open your Contacts list. Tap the name of the person you want.

You can add as many addressees as you like; just repeat the procedure.

**TIP:** There’s no Group mail feature on the iPad, which would let you send one message to a predefined set of friends. But at [http://groups.yahoo.com](http://groups.yahoo.com), you can create free email groups. You can send a single email message to the group’s address, and everyone in the group will get a copy. (You have to set up one of these groups in a Web browser—but lo and behold, your iPad has one!)

Incidentally, if you’ve set up your iPad to connect to a corporate Exchange server (Chapter 16), then you can look up anybody in the entire company directory at this point. Page 460 has the instructions.

2. **To send a copy to other recipients, enter the address(es) in the Cc or Bcc fields.** If you tap Cc/Bcc, From, the screen expands to reveal two new lines beneath the To line: Cc and Bcc.

   **Cc** stands for carbon copy. Getting an email message where your name is in the Cc line implies: “I sent you a copy because I thought you’d want to know about this correspondence, but I’m not expecting you to reply.”

   **Bcc** stands for blind carbon copy. It’s a copy that goes to a third party secretly—the primary addressee never knows who else you sent it to. For example, if you send your coworker a message that says, “Chris, it bothers me that you’ve been cheating the customers,” you could Bcc your supervisor to clue her in without getting into trouble with Chris.

   Each of these lines behaves exactly like the To line. You fill each one up with email addresses in the same way.

   **TIP:** You can drag people’s names around—from the To line to the Cc line, for example. Just hold your finger down briefly on the name before dragging it. (It puffs and darkens once it’s ready for transit.)

3. **Change the email account you’re using, if you like.** If you have more than one email account set up on your iPad, you can tap Cc/Bcc, From to expand the form and then tap From to open up a list of your accounts. Tap the one you want to use for sending this message.
4. **Type the topic of the message in the subject line.** Leaving it blank only annoys your recipient. On the other hand, don’t put the *entire* message into the subject line, either.

5. **Type your message in the message box.** All the usual keyboard and dictation tricks apply (Chapters 2 and 4). Don’t forget that you can use Copy and Paste, within Mail or from other programs. Both text and graphics can appear in your message.

6. **Attach a photo or a video,** if you like. Hold down your finger anywhere in the body of the message until the black buttons appear. Tap the **Insert Photo or Video** button (facing page, top).

   When you tap it, you’re shown your iPad’s usual photo browser so that you can choose the photos and videos you want to attach (facing page, middle). Tap the collection you want; you’re shown all the thumbnails inside. Tap the photo or video, and then tap **Choose**.

   You return to your message in progress, with the photo or video neatly inserted (facing, bottom). You can repeat this step to add additional photo or video attachments. When you tap **Send,** you’re offered the opportunity to scale down the photo to a more reasonable (emailable) size.

   **TIP:** You can also email a photo or a video from within the Photos program; you can **forward** a file attached to an incoming piece of mail; and you can **paste** a copied photo or video (or several) into an open email message.
7. **Format the text**, if you like. You can apply bold, italic, or underlining to mail text you’ve typed.

The trick is to select the text first (page 77). When the button bar appears, tap the **B I U** button. Tap that to make the **Bold**, **Italics**, and **Underline** buttons appear on the button bar; tap away. Not terribly efficient, but it works.
TIP: You can use the same trick to summon the Quote Level controls. Select text; tap the ▶ (twice, if you’re holding the iPad upright) to bring the Quote Level button into view; tap it to reveal the Increase and Decrease buttons. These buttons indent or un-indent those cluttery blocks of quoted and re-quoted text that often appear when you’re replying to a message. (One tap affects the entire paragraph, not just the selected bit of it.)

If you really can’t stand those quote indentations, you can stop the iPad from adding them in the first place when you forward or reply to a message. The on/off switch for that feature is in Settings→Mail, Contacts, Calendars→Increase Quote Level.

8. Tap Send (to send the message) or Cancel (to back out of it). If you tap Cancel, the iPad asks if you want to save the message. If you tap Save Draft, then the message lands in your Drafts folder.

Later you can open the Drafts folder, tap the aborted message, finish it up, and send it.

TIP: If you hold down the □ button for a moment, the iPad presents a list of your saved drafts. Clever stuff—if you remember it!

Oh, and by the way: You can begin composing a message on your iPad, and then continue writing it on your Mac, without ever having to save it as a draft. Or go the other way. See page 453 for details on Handoff, new in iOS 8.
Signatures

A signature is a bit of text that gets stamped at the bottom of your outgoing email messages. It can be your name, a postal address, or a pithy quote.

Unless you intervene, the iPad stamps “Sent from my iPad” at the bottom of every message. You may be just fine with that, or you may consider it the equivalent of gloating (or free advertising for Apple). In any case, you can change the signature if you want to.

Tap Settings → Mail, Contacts, Calendars → Signature. You can make up one signature for All Accounts, or a different one for each account (tap Per Account). A Signature text area appears, complete with a keyboard, so you can compose the signature you want.

TIP: You can use bold, italic, or underline formatting in your signature, too. Just follow the steps on the previous page for formatting a message: Select the text, tap the ▶ to bring the B I U button into view, and so on.

Surviving Email Overload

If you don’t get much mail, you probably aren’t lying awake at night trying to think of ways to manage the information overload on your iPad.

If you do get a lot of mail, here are some tips.

Avoiding Spam

The key to keeping spam (junk mail) out of your inbox is to keep your email address out of spammers’ hands in the first place. Use one address for actual communication. Use a different address in the public areas of the Internet, like chat room posting, online shopping, Web site and software registration, and newsgroup posting. Spammers use automated software robots that scour these pages, recording email addresses they find. Create a separate email account for person-to-person email—and never post that address on a Web page.

If it’s too late, and you’re getting a lot of spam on your iPad, you have a couple of options. You could accept your fate and set up a new email account (like a free Gmail or Yahoo account), sacrificing your old one to the spammers.
You could install a spam blocker app on your iPad, like SpamDrain ($15 a year) or SpamBlocker (free).

Or, if you’re technically inclined, you could create a shadow Gmail account that downloads your mail, cleans it of spam, and then passes it on to your iPad. You can find tutorials for this trick by searching in, of course, Google.

**Condensing the Message List**

Messages in your inbox are listed with the subject line in bold type and a couple of lines, in light-gray text, that preview the message itself.

You can control how many lines of the preview show up here, from None (you see more message titles on each screen without scrolling) to 5 Lines. Tap Settings → Mail, Contacts, Calendars → Preview.

**Spotting Worthwhile Messages**

The iPad can display a little To or Cc logo on each message in your inbox. At a glance, it helps you identify which messages are actually intended for you. Messages without those logos are probably spam, newsletters, mailing lists, or other messages that weren’t specifically addressed to you.

To turn on these little badges, visit Settings → Mail, Contacts, Calendars and turn on Show To/Cc Label.

**Managing Accounts**

If you have more than one email account, you can delete one or just temporarily deactivate one—for example, to accommodate your travel schedule.

Visit Settings → Mail, Contacts, Calendars. In the list of accounts, tap the one you want. At the top of the screen, you see the on/off switch (at least for POP accounts); Off makes an account dormant. And at the bottom, you see the Delete Account button.

**TIP:** If you have several accounts, which one does the iPad use when you send mail from other apps—like when you email a photo from Photos or a link from Safari?

It uses the default account, of course. You determine which one is the default account in Settings → Mail, Contacts, Calendars → Default Account.
Just in case you’re one of the six people who’ve never heard of it, iTunes is Apple’s multifunction, multimedia jukebox software. It’s been loading music onto iPods since the turn of the 21st century.

Most people use iTunes to manipulate their digital movies, photos, and music, from converting songs off a CD into music files to buying songs, audiobooks, and movies online.

But as an iPad owner, you need iTunes even more urgently, because it’s the most efficient way to get masses of music, videos, apps, email, addresses, appointments, ringtones, and other stuff onto the iPad. It also backs up your iPad automatically.

If you’ve never had a copy of iTunes on your computer, then fire up your Web browser and go to www.apple.com/itunes/download. Once the file lands on your computer, double-click the installer icon and follow the onscreen instructions to add iTunes to your life.

This chapter gives you a crash course in iTunes and tells you how to sync it with your iPad.

**Tip:** Technically, iTunes is not *required*. It’s perfectly possible to use all of an iPad’s features without even owning a computer. You can download all that stuff—music, movies, apps—right from the Internet, and you can back up your iPad using iCloud (described in the next chapter).

Using iTunes, however, is more efficient, and it’s nice to know your stuff is backed up on a machine that’s within your control.
The Three Faces of iTunes

The first thing to understand is that iTunes is three apps in one. It’s designed to be the viewer for all the music, videos, apps, and ebooks in three places: (1) on your computer, (2) on your iPad, and (3) in Apple’s online store.

Apple loves to play with the design of this program; every couple of years, it gets another overhaul. The following pages describe version 12, for OS X and Windows.

In this version, it’s not as clear when you’re looking at the stuff that’s already on your computer—or the stuff that’s on the iTunes Store. The icons at top left (🎵, 🎥, 📑, and so on) affect what kind of file you’re viewing; the buttons at top center affect whether you’re looking on your computer or online.

You can install or remove file-type icons from this top-left “shelf.” For starters, you might want to add the Apps icon ( AppBar Icon), so that you can manage your iPad’s apps in iTunes.

To edit this shelf, click the ••• button; from the shortcut menu, choose Edit. Click to place checkmarks next to the file types you want to appear on the shelf, as shown on the facing page at right.
The playback and volume controls are at the top-left corner of iTunes. At the upper-right corner is a search box that lets you pluck one track out of a haystack.

The following pages take you through the three worlds—computer, store, iPad—one by one.

Your Stuff

The key to understanding iTunes’ new layout is the “shelf” of file-type icons at top left. These represent the kinds of files that iTunes can manage: 🎶 (Music), 🎥 (Movies), 📺 (TV Shows), 🌐 (Apps), 📺 (Podcasts), 📚 (iTunes U), 📚 (Audiobooks), and 🎶 (Tones). (Some are probably hiding in the ... button.)

To view the music, videos, apps, and ebooks that you’ve downloaded to your Mac or PC, click the corresponding “shelf” icon, and then click one of the “My” buttons at top center (My TV Shows, My Music, and so on).

The button at top right can sort your files or show them as a list. For example, if you clicked 🎶, you can see them displayed as Songs, Albums, Artists, Composers, or Genres. And that’s just how they’re displayed; an additional control in this menu governs how they’re sorted.

You may see wildly different things here, depending on which display you’ve chosen. For example, if you click Songs, you see a huge alphabetical list; if you click Albums, you see a square grid of album covers.
Three Ways to Fill Your Library

iTunes gives you at least three ways to get music and video onto your computer—ready for transferring to your iPad:

- **Let iTunes find your files.** The first time you open iTunes, it offers to search your PC or Mac for music files and add them to its library.

- **Visit the iTunes Store.** Another way to feed your iPad is to shop at the iTunes Store, as described in the next section.

- **Import music from a CD.** iTunes can also convert tracks from audio CDs into iPad-ready digital music files. Just start up iTunes and then stick a CD into your computer’s CD drive. The program asks if you want to convert the songs to audio files for iTunes. (If it doesn’t ask, click the CD icon at the top of the window.) Click **Yes** to import all the songs or **No** to view a list of songs and turn off the duds. (Then click **Import CD** near the top of the window.)

The program downloads song titles and artist information from the CD and begins to add the songs to the iTunes library. (For more control over this process, choose **iTunesÆPreferencesÆGeneral** (Mac) or **EditÆPreferencesÆGeneral** (Windows). Use the **When you insert a CD** pop-up menu.)

In that same Preferences box, you can also click **Import Settings** to choose the **format** (file type) and **bit rate** (amount of audio data compressed into that format) for your imported tracks. The factory setting is the AAC format at 128 kilobits per second.

Most people think these settings make for fine-sounding music files, but you can change your settings to, for example, MP3, another format that lets you cram big music into a small space. Upping the bit rate from 128 to 256 kbps makes for richer-sounding music files—which also take up more room.

Once the importing is finished, each imported song bears a green checkmark, and you have some brand-new files in your iTunes library.

**Playlists**

A **playlist** is a list of songs you’ve decided should go together. For example, if you’re having a party, you can make a playlist from the current Top 40 and dance music in your music library. Some people may question your taste if you, say, alternate tracks from *La Bohème* with Queen’s *A Night at the Opera*, but hey—it’s your playlist.
To create a playlist in iTunes, press `⌘-N` (Mac) or `Ctrl+N` (Windows). Or choose **File→New→Playlist**. Type a name for it: “Cardio Workout,” “Shoe-Shopping Tunes,” “Hits of the Highland Lute,” or whatever.

**TIP:** You can also create playlists on the iPad; see page 180.

Now click **Add To**. The screen is now divided into three sections: All your music at left; the selected music in the middle; and your playlist in the making at right. Use any of the buttons in the pop-up menu at top right—**Songs, Albums, Artists**, whatever—to help you find the songs (or videos); then drag their names into your playlist at far right.

**TIP:** Instead of making an empty playlist and then dragging songs into it, you can work the other way. You can scroll through a big list of songs, selecting tracks as you go by `⌘-clicking` (on the Mac) or `Ctrl-clicking` (in Windows)—and then, when you’re finished, choose **File→New→Playlist From Selection**. All the songs you selected immediately appear on a brand-new playlist.

When you drag a song title onto a playlist, you’re not actually moving or copying the song. In essence, you’re creating an **alias** or **shortcut** of the original, which means you can have the same song on several different playlists.

iTunes even starts you out with some playlists of its own devising, like “Top 25 Most Played” and “Purchased” (a convenient place to find all your iTunes Store goodies listed in one place).
Editing and Deleting Playlists

A playlist is easy to change. Click the Music icon (on the top-left “shelf”), and then click **Playlists**:

- **Change the order of songs.** Drag song titles up or down.

- **Add new songs to the playlist.** Click **Add To** (upper right), and then tiptoe through your iTunes library and drag more songs into a playlist.

- **Delete songs from the playlist.** Click the song in the playlist window and then hit Delete or Backspace to get rid of it. When iTunes asks you to confirm your decision, click **Remove**.

Deleting a song from a playlist doesn’t delete it from your music library—it just removes the title from your **playlist**.

- **Delete the whole playlist.** To delete an entire playlist, click its name in the list of playlists (far left) and then press Delete (Backspace). Again, this zaps only the playlist itself; the songs in it are still in iTunes.

iTunes Store

The iTunes software’s second purpose is to be the face of Apple’s online iTunes Store. (Click a file type on the “shelf,” like ⎪ or ⎬, and then click **iTunes Store** at top center).

Once you land on the store’s main page and set up your iTunes account, you can buy and download songs, audiobooks, ebooks, apps, and videos. This material goes straight into your iTunes library, just a sync away from the iPad.

Your iPad, of course, can also get to the iTunes Store, wirelessly; just tap that purple **iTunes Store** icon on the Home screen. Any songs you buy on the iPad get copied back to iTunes the next time you sync.

**TIP:** iTunes doesn’t have a monopoly on music sales for your iPad. Amazon, Google, Rhapsody, and other services sell songs in MP3 format, meaning no copy protection. eMusic.com has great MP3 prices, but the music comes from lesser-known bands. Amazon’s MP3 Downloader software for Mac and PC can whip your purchases right into iTunes; Rhapsody has similar helper software for Windows.
To navigate the iTunes Store, click the buttons on the file-type “shelf”: 🎵 (Music), 🎥 (Movies), 📺 (TV Shows), or whatever.

**Music (🎵)**

Here it is, the store that made Apple a powerhouse in the music industry: the Music store. Here are millions of songs, individually downloadable, all without copy protection, for 79 cents, $1, or $1.29, depending on popularity.

There are all kinds of ways to slice, dice, and search this catalog. On the right side of the screen, there’s a Genres pop-up menu that sorts the offerings by music type. Use the search box (top right) to find a song by name, album name, band, composer, and so on.

The various buttons on the front page of the Music store represent music Apple thinks you might like: new releases, big hits, Genius recommendations (songs Apple thinks you’ll like based on an analysis of what’s already in your library), and so on.

If you scroll down the right side of the window, you can find lists of the top-selling songs and albums. It’s a handy way to see what the rest of your fellow music lovers are buying, if you don’t mind being a sheep.

Learning these tools for finding songs is handy, because the same tools are available for finding TV shows, movies, podcasts, audiobooks, and so on.
TV (📺), Movies (🎞️), and Movie Rentals

The iTunes store also offers an increasingly vast selection of downloadable TV episodes ($2 apiece, no ads) and movies (some you can buy for $10 to $20; others you buy or rent for $3 to $56).

Once you rent a movie, you have 30 days to start watching—and once you start, you have 24 hours to finish before it turns back into a pumpkin (it deletes itself from your computer and iPad).

You can do your renting and buying in two ways. First, you can use iTunes on your Mac or PC and then sync it to the iPad by following the steps later in this chapter.

Second, you can download videos straight to the iPad when you’re in a WiFi hotspot. (The difference: If you download a rental movie to your iPad, you can’t move it to any other gadget. If you download it to iTunes, you can move it from computer to phone to iPad, or whatever, although it can exist on only one machine at a time.)

Podcasts (🎧)

Not everything in the iTunes Store costs money. In addition to free apps, there are plenty of free audio and video podcasts, suitable for your iPad, in the Podcasts area of the store. See page 333 for more on podcasts—and how to download them directly to, and listen directly on, your iPad.

iTunes U (🎓)

Here, for your personal-growth pleasure, are hundreds of thousands of downloadable college courses, all of them free and many of them amazing. Watch the videos of the professors, follow along with the reading materials. You won’t actually earn a college degree this way, but you will attain a degree of enlightenment.

Audiobooks (🎧)

Some people like to curl up with—or listen to—a good book, and iTunes has plenty to offer, both as ebooks (which you buy and read in the iBooks app) and as audiobooks (which you listen to as you work in the garden or drive).

If iTunes doesn’t offer the audiobook you’re interested in, you can find a larger collection (over 50,000 of them) at Audible.com. This Web store sells all kinds of audiobooks, plus recorded periodicals like The New York Times and radio shows. To purchase Audible’s wares, though, you have to go to the Web site and create an Audible account.
If you use Windows, then you can download from Audible.com a little program called Audible Download Manager, which catapults your Audible downloads into iTunes for you. On the Mac, Audible files land in iTunes automatically when you buy them.

**Apps (Ą)**

See Chapter 9 for details on grabbing iPad apps, using your computer as a loading dock.

**Internet Radio (Ą)**

iTunes offers two ways to use the Internet as the world’s biggest AM/FM radio. First, there’s iTunes Radio—the custom radio stations, based on songs or singers you like, and delivered to you with full pause/skip capabilities and the occasional ad. It’s exactly the same service that’s described on page 173—but in iTunes, you get to it by clicking the iTunes Radio link in the list at the right side.

Before iTunes Radio, the iTunes program offered the option to listen to live Internet radio broadcasts—from radio stations and colleges all over the world. That feature is still around; click on the “shelf,” click the style of music or talk you want, and then double-click a station to start listening.

**Authorizing Computers**

All movies and TV shows, and some old music files, are still copy protected.

When you create an account in iTunes, you automatically authorize that computer to play copy-protected songs from the iTunes Store. Authorization is Apple’s way of making sure you don’t go playing those
music tracks on more than five computers, which would greatly displease the music studios.

But you can copy those songs and videos onto a maximum of four other computers. To authorize each one to play music from your account, choose Store→Authorize Computer. (Don’t worry; you have to do this just once per machine.)

When you’ve maxed out your limit and can’t authorize any more computers, you may need to deauthorize one. On the computer you wish to demote, choose Store→Deauthorize Computer.

**Syncing the iPad**

The third and final function of iTunes is to load up, and back up, your iPad. You can connect it to your computer either wirelessly, over WiFi, or wirefully, with the white USB cable that came with it.

Once the iPad is connected, click the (iPad) button at the top-left corner of the iTunes screen. Now you can look over the iPad’s contents or sync it (read on).
Connecting the iPad with a Cable
Pretty simple: Plug one end of the white cable (supplied with your iPad) to your computer’s USB jack. Connect the other end to the tablet. If the iPad is turned on and awake, it’s officially connected.

Connecting over WiFi
The familiar white USB cable is all well and good—but the iPad is a wireless device, for Pete’s sake. Why not sync it to your computer wirelessly?

The iPad can be charging, happily and automatically syncing with your laptop somewhere else in the house. It transfers all the same stuff to and from your computer—apps, music, books, contacts, calendars, movies, photos, ringtones—but through the air instead of via your USB cable.

Your computer has to be turned on and running iTunes. The iPad and the computer have to be on the same WiFi network.

To set up wireless sync, connect the iPad using the white USB cable, one last time. Ironic, but true.

Now open iTunes and click 🌐 at top left. On the Summary tab, scroll down; turn on Sync with this iPad over Wi-Fi. Click Apply. You can now detach the iPad.

From now on, whenever the iPad is on the WiFi network, it’s automatically connected to your computer, wirelessly. You don’t even have to think about it. (Well, OK—you have to think about leaving the computer turned on with iTunes open, which is something of a buzzkill.)
Just **connecting** it doesn’t necessarily mean **syncing** it, though; that’s a more data-intensive, battery-drainy process. Syncing happens in either of two ways:

- **Automatically.** If the iPad is plugged into power (like a speaker dock, an alarm-clock dock, or a wall outlet), and it’s on the same WiFi network, it syncs with the computer all by itself.

- **Manually.** You can also trigger a sync manually—and this time, the iPad doesn’t have to be plugged into power. To do that, open **Settings**→**General**→**iTunes Wi-Fi Sync** and tap **Sync Now**. (You can also trigger a WiFi sync from within iTunes—just click the **Sync** button. It says “Sync” only if, in fact, anything has changed since your last sync.)

### All About Syncing

Transferring data between the iPad and the computer is called **synchronization**. In general, syncing begins automatically when you connect the iPad. The ☰ icon whirls in the top of the screen, but you’re welcome to keep using your iPad while it syncs.

**NOTE:** Your photo-editing program (like iPhoto or Photoshop Elements) probably springs open every time you connect the iPad, too. See page 428 if that bugs you.

Now, ordinarily, the iPad-iTunes relationship is automatic and complete, according to this scheme:

- **Bidirectional copying (iPad←computer).** Contacts, calendars, and Web bookmarks get copied in both directions. That is, after a sync, your computer and iPad contain exactly the same information.

  If you entered an appointment on the iPad, it gets copied to your computer—and vice versa. If you’ve edited the same contact or appointment on both machines, then your computer displays the two conflicting records and asks you which one “wins.”

- **One-way sync (computer→iPad).** Music, apps, TV, movies, ringtones, and ebooks you bought on your computer; photos from your computer; and email account information. All of this gets copied in one direction: computer→tablet.

- **One-way sync (iPad→computer).** Photos and videos taken with the iPad’s camera; music, videos, apps, ringtones, and ebooks you bought right from the iPad—it all gets copied the other way, from the iPad to the computer.
• A complete backup. iTunes also takes it upon itself to back up everything else on your iPad: settings, text messages, call history, and so on. Details on this backup business are covered at the end of this chapter.

TIP: If you’re in a hurry, you can skip the time-consuming backup portion of the sync. Just click at the top of the iTunes window whenever it says “Backing up.” iTunes gets the message and skips right ahead to the next phase of the sync—transferring contacts, calendars, music, and so on.

Manual Syncing

OK, but what if you don’t want iTunes to fire up and start syncing every time you connect your iPad? What if, for example, you want to change the assortment of music and video that’s about to get copied to it? Or what if you just want to connect the USB cable to charge the iPad, not to sync it?

In that case, you can stop the autosyncing in any of these ways:

• **Interrupt a sync in progress.** Click in the iTunes status window until the syncing stops.

• **Stop iTunes from syncing with the iPad just this time.** As you plug in the iPad’s cable, hold down the Shift+Ctrl keys (Windows) or the Option keys (Mac) until the iPad pops up in the iTunes window. Now you can see what’s on the iPad and change what will be synced to it—but no syncing takes place until you command it.

• **Stop iTunes from auto-syncing with this iPad.** Connect the iPad. Click in the upper-left corner of iTunes. On the **Summary** tab, turn off **Automatically sync when this iPad is connected** (shown in the previous illustration).

• **Stop iTunes from autosyncing any iPad, ever.** In iTunes, choose **Edit**→**Preferences** (Windows) or **iTunes**→**Preferences** (Mac). Click the **Devices** tab and turn on **Prevent iPods, iPhones, and iPads from syncing automatically**. You can still trigger a sync on command when the iPad is wired up—by clicking the **Sync** button.

Once you’ve made iTunes stop syncing automatically, you’ve disabled what many people consider the greatest feature of the iPad: its magical self-updating with the stuff on your computer.
Still, you must have turned off autosyncing for a reason. And that reason might be that you want to control what gets copied onto it. Maybe you’re in a hurry to leave for the airport, and you don’t have time to sit there for an hour while six downloaded movies get copied to the iPad. Maybe you have 50 gigabytes of music but only 16 gigs of iPad storage.

In any case, here are the two ways you can sync manually:

• **Use the tabs in iTunes.** With the iPad connected, you can specify exactly what you want copied to it—which songs, which TV shows, which apps, and so on—using the various tabs in iTunes, as described on the following pages. Once you’ve made your selections, click the Summary tab and then click **Apply.** (The **Apply** button says **Sync** instead if you haven’t actually changed any settings.)

• **Drag files onto the iPad icon.** Once your iPad is connected to your computer, you can click its icon and then turn on **Manually manage music and videos** (on the Summary screen). Click **Apply.**

Now you can drag songs and videos directly onto the iPad’s icon to copy them there. Wilder yet, you can bypass iTunes **entirely** by dragging music and video files **from your computer’s desktop** onto the iPad’s icon. That’s handy when you’ve just inherited or downloaded a bunch of song files, converted a DVD to the iPad’s video format, or whatever.

Just two notes of warning here. First, unlike a true iPod, the iPad accommodates dragged material from a **single** computer only. Second, if you ever turn off this option, all those manually dragged songs and videos will disappear from your iPad at the next sync opportunity.

**TIP:** Also on the Summary tab, you’ll find the baffling little option called **Sync only checked songs and videos.** This is a global override—a last-ditch “Keep the embarrassing songs off my iPad” option.

When this option is turned on, iTunes consults the tiny checkboxes next to every single song and video in your iTunes library. If you turn off a song’s checkbox, it will not get synced to your iPad, no matter what—even if you use the Music tab to sync **All songs or playlists,** or explicitly turn on a playlist that contains this song. If the song’s or video’s checkbox isn’t checked in your Library list, then it will be left behind on your computer.

**iTunes Tabs**

Once your iPad is connected to the computer, and you’ve clicked its icon in the upper-left corner of iTunes, the left side of the iTunes window reveals
a column of word buttons: Summary, Apps, Music, Movies, TV Shows, Podcasts, Books, Photos, and Info. Below that is a second, duplicate listing, labeled On My Device. For the most part, these represent the categories of stuff you can sync to your iPad.

The following pages cover each of these tabs, in sequence, and detail how to sync each kind of iPad-friendly material.

TIP: At the bottom of the screen, a colorful graph shows you the number and types of files: Audio, Video, Photos, Apps, Books, Documents & Data, and Other (for your personal data). More importantly, it also shows you how much room you have left, so you won’t get overzealous in trying to load the thing up.

Point to each color block without clicking to see how many of each item there are (“2031 photos”) and how much space they take.

Summary Tab

This screen gives basic stats on your iPad, like its serial number and capacity.

Buttons in the middle control how and where the iPad gets backed up. Checkboxes at the bottom of the screen let you set up manual syncing, as described previously.

TIP: If you click your iPad’s serial number, it changes to reveal the unique device identifier (UDID). That’s Apple’s behind-the-scenes ID for your exact product, used primarily by software companies (developers). You may, during times of beta testing a new app or troubleshooting an existing one, be asked to supply your iPad’s UDID.

You can click the same label again to see your iPad’s Product Type and your various cellular identifiers like the MEID, IMEI, and ICCID. If it’s a cellular model, you can cycle through enough clicks until you see the iPad’s phone number. (Yes, it has its own phone number—for data, not for phone calls.) Or click the iOS version to see your iOS version’s build number.

You can right-click (or, on the Mac, Control-click) any of these numbers to get the Copy command. It copies those long strings of letters and numbers onto your computer’s Clipboard, ready to paste into an email or a text.
## Apps Tab

On this tab, you get a convenient duplicate of your iPad’s Home screens. You can drag app icons around, create folders, and otherwise organize your Home screens much faster than you’d be able to on the iPad itself. See page 271 for details.

## Music Tab

Turn on **Sync Music**. Now decide what music to put on your iPad:

- If you have a big iPad and a small music library, you can opt to sync the **Entire music library**.

- If you have a big music collection and a small iPad, you’ll have to take only some of it along for the iPad ride. In that case, click **Selected playlists, artists, albums, and genres**. In the lists below, turn on the checkboxes for the playlists, artists, albums, and music genres you want to transfer. (These are cumulative. If there’s no Electric Light Orchestra in any of your selected playlists, but you turn on ELO in the Artists list, you’ll get all your ELO anyway.)

**TIP:** Playlists make it fast and easy to sync whole batches of tunes over to your iPad. But don’t forget that you can add individual songs, too, even if they’re not in any playlist. Just turn on **Manually manage music and videos**. Now you can drag individual songs and videos from your iTunes library onto the iPad icon to install them there.
If you’ve got music videos or voice memos (recorded by the iPad and now residing on your computer), you’ll see that they get their own checkboxes.

Making It All Fit

Sooner or later, everybody has to confront the fact that an iPad holds only 16, 32, 64, or 128 gigabytes of music and video. (Actually less, because the operating system itself eats up over a gigabyte.) That’s enough for around 4,000, 8,000, 16,000, or 32,000 average-length songs—if you don’t put any videos or photos on there.

Your multimedia stash may be bigger than that. If you just turn on Sync All checkboxes, an error message tells you that it won’t all fit on the iPad.

One solution: Tiptoe through the tabs, turning off checkboxes and trying to sync until the “too much” error message goes away.

If you don’t have quite so much time, turn on Automatically fill free space with songs. It makes iTunes use artificial Genius intelligence to load up your iPad automatically, using your most played and most recent music as a guide. (It does not, in fact, fill the iPad completely; it leaves a few hundred megabytes for safety—so you can download more stuff on the road, for example.)

Another helpful approach is to use the smart playlist, a music playlist that assembles itself based on criteria you supply. For example:

1. In iTunes, click 📀. Choose File→New Smart Playlist. The Smart Playlist dialog box appears.

2. Specify the category. Use the pop-up menus to choose, for example, a musical genre, or songs you’ve played recently, or haven’t played recently, or have rated highly.
3. **Turn on the “Limit to” checkbox, and set up the constraints.** For example, you could limit the amount of music in this playlist to 2 gigabytes, chosen at random. That way, every time you sync, you’ll get a fresh, random supply of songs on your iPad, with enough room left for some videos.

![Smart Playlist](image)

4. **Click OK.** The new Smart Playlist appears in the list of playlists at left; you can rename it.

Click it to look it over, if you like. Then, on the Music tab, choose this playlist for syncing to the iPad.

**Movies and TV Shows Tabs**

One of the things the iPad does best is play video on its gorgeous, glossy screen. TV shows and movies you’ve bought or rented from the iTunes Store look especially nice. (And if you start watching a rented movie on your computer, the iPad begins playing it right from where you left off.)

Syncing TV shows and movies works just like syncing music or podcasts. You can have iTunes copy all your stuff to the iPad, but video fills up your storage fast. That’s why you can turn on the checkboxes of just the individual movies or shows (either seasons or episodes) you want—or, using the **Automatically include** pop-up menu, request only the most recent, or the most recent ones you haven’t seen yet.

Remember that if you’ve rented a movie from the iTunes Store and started watching it, you have only 24 hours left to finish before it vanishes from your iPad.
Podcasts Tab

iTunes gives you access, in the iTunes Store, to thousands of free amateur and professional podcasts (basically, downloadable radio or TV shows).

Here you can choose to sync all podcast episodes, selected shows, all unplayed episodes—or just a certain number of episodes per sync. Individual checkboxes let you choose which podcast series get to come along for the ride, so you can sync to suit your mood at the time.

Books Tab

Here are the thumbnails of your audiobooks and your ebooks—those you’ve bought from Apple, those you’ve downloaded from the Web, and those you’ve dragged right into iTunes from your desktop (PDF files, for example). You can ask iTunes to send them all to your iPad—or only the ones whose checkboxes you turn on.

Tones Tab

Any ringtones that you’ve bought from the iTunes Store or made yourself appear here; you can specify which ones you want synced to the iPad. (This tab was once called “Ringtones,” but the iPad can handle tones for all kinds of different events, like incoming text messages or mail, tweets, reminders, and so on.) You can choose either All tones or, if space on your iPad is an issue, Selected tones (and then turn on the ones you want).
Be sure to sync over any ringtones you’ve assigned to your frequent callers so the iPad can alert you with a personalized audio cue, like Pink’s rendition of “Tell Me Something Good” when they call you up.

**Photos Tab (Computer → iPad)**

Why corner people with your wallet to show them your kid’s baby pictures, when you can whip out your iPad and dazzle them with a slideshow?

iTunes can sync the photos from your hard drive onto the iPad. You can even select individual albums of images that you’ve already assembled on your computer.

Here are your iPad-filling options for photos:

- **Windows:** You can sync with Photoshop Elements, Photoshop Album, or any folder of photos, like My Pictures (in Windows), Pictures (on the Mac), or any folder you like.

- **Mac:** You can sync with iPhoto, Aperture, or OS X Yosemite’s new Photos app.

**NOTE:** You can sync photos from only one computer. If you later attempt to snag some snaps from a second machine, iTunes warns you that you must first erase all the images that came from the original computer.
When you’re ready to sync your photos, click the Photos tab in iTunes. Turn on Sync photos from, and then indicate where you’d like to sync them from (Photoshop Elements, iPhoto, or whatever).

If you’ve chosen a photo-shoebox program’s name (and not a folder’s name), you can then click Selected albums, events, and faces. Turn on the checkboxes of the albums, events, and faces you want synced. (The “faces” option is available only if you’re syncing from iPhoto, Aperture, or Photos on the Mac, and only if you’ve used the Faces feature, which groups your photos according to who’s in them.) This option also offers to tack on recent Events (batches of photos taken the same day). Indicate whether or not you want videos included in the syncing (Include videos).

Once you make your selections and click Apply, the program computes for a time, “optimizing” copies of your photos to make them look great on the iPad (for example, downsizing them from 10-megapixel overkill to something more appropriate for the iPad’s screen), and then ports them over.

After the sync is complete, you’ll be able to wave your iPad around, and people will beg to see your photos.

**Syncing Photos and Videos (iPad → Computer)**

The previous section described copying photos in only one direction: from the computer to the iPad. But you can go the opposite direction, too: You can send photos and videos you took with the iPad’s own camera to the computer. You can rest easy, knowing that they’re backed up to your computer for safekeeping.

Now, it’s important to understand that iTunes is not involved in this process. It doesn’t know anything about photos or videos coming from the iPad; its job is just to copy pictures to the iPad.

So what’s handling the iPad-to-computer transfer? Your operating system. It sees the iPad as though it’s a digital camera and suggests importing them just as it would from a camera’s memory card.

Here’s how it goes: Plug the iPad into the computer with the USB cable. What you’ll see is probably something like this:

- **On the Mac.** iPhoto opens. This free photo-organizing/editing software comes on every Mac. Shortly after it notices that the iPad is on the premises, it goes into Import mode. Click Import All, or select some thumbnails from the iPad and then click Import Selected.
After the transfer, click **Delete Photos** if you’d like the iPad’s photographic memory cleared out after the transfer. (Both photos and videos get imported together.)

**NOTE:** In 2015, Apple expects to replace the iPhoto program with new software called Photos. You can expect it to work similarly.

- **In Windows.** When you attach a camera (or an iPad), a dialog box asks how you want its contents handled. It lists any photo-management program you might have installed (Picasa, Photoshop Elements, Photoshop Album, and so on), as well as Windows’ own camera-management software. (That would be the **Scanner and Camera Wizard** in Windows XP; **Using Windows** in Vista or Windows 7 or 8).

  Click the program you want to handle importing the iPad pictures and videos.

  You’ll probably also want to turn on **Always do this for this device**, so it’ll happen automatically the next time.

**Shutting Down the Importing Process**

Then again, some iPad owners would rather **not** see some lumbering photo-management program firing itself up every time they connect the iPad. You, too, might wish there were a way to **stop** iPhoto or Windows from bugging you every time you connect the iPad. That is easy enough to change—if you know where to look.

- **Windows Vista, Windows 7 and 8.** When the AutoPlay dialog box appears, click **Set AutoPlay defaults in Control Panel.** (Or, if the AutoPlay dialog box is no longer on the screen, choose *Start*→*Control Panel*→*AutoPlay.*)

  Scroll all the way to the bottom until you see the iPad icon. From the pop-up menu, choose **Take no action.** Click **Save.**

- **Macintosh.** Open iPhoto. Choose **iPhoto**→**Preferences.** Where it says **Connecting camera opens**, choose **No application.** Close the window.

  From now on, no photo-importing message will appear when you plug in the iPad. (You can always import its photos manually, of course.)
**Info Tab**

On this tab, you’re offered the chance to copy some distinctly non-entertainment data over to your iPad: your computer’s calendar, address book, email settings, and Web bookmarks.

Now, none of this setup is necessary if you use iCloud (Chapter 15), and you’ve told your iPad to sync its calendar (in Settings→iCloud). That’s because iCloud, not iTunes, handles synchronization with the iPad. Instead, this tab shows only a message that, for example, “Your calendars are being synced with your iPad over the air from iCloud.”

**Syncing Contacts and Calendars**

If you’re not using iCloud syncing, then you can choose to sync your iPad’s address book with a Windows program like Outlook, Outlook Express, or Windows Live Mail; a Mac program like Contacts or Entourage/Outlook for Mac; or an online address book like Google Contacts or Yahoo Address Book.

Similarly, you can sync the iPad’s calendar with a program like Outlook (for Windows) or Calendar or Outlook (on the Mac).

**On My Device**

Below those Settings tabs at the left side of the iTunes window, there’s a second, similar set labeled On My Device. It’s a tidy list of everything that is, in fact, on your iPad, organized by type (Music, Movies, and so on). There’s not really much you can do here—you can get more information about some items by pointing to them—but just seeing your multimedia empire arrayed before you can be very satisfying.

The Purchased category, in particular, can be handy; it shows everything on your iPad that you’ve bought with the iPad.

**One iPad, Multiple Computers**

In general, Apple likes to keep things simple. Everything it ever says about the iPad suggests that you can only sync one iPad with one computer.

That’s not really true, however. You can actually sync the same iPad with multiple Macs or PCs.
And why would you want to do that? So you can fill it up with material from different places: music and video from a Mac at home; contacts, calendar, ebooks, and iPad applications from your Windows PC at work; and maybe even the photos from your laptop.

iTunes derives these goodies from different sources to begin with—pictures from your photo program, addresses and appointments from your contacts and calendar programs, music and video from iTunes. So all you have to do is set up the tabs of each computer’s copy of iTunes to sync only certain kinds of material.

On the Mac, for example, you’d turn on the Sync checkboxes for only the Music, Podcasts, and Video tabs. Sync away.

Next, take the iPad to the office; on your PC, turn on the Sync checkboxes on only the Info, Books, and Apps tabs. Sync away once more. Then, on the laptop, turn off Sync on all tabs except Photos.

And off you go. Each time you connect the iPad to one of your computers, it syncs that data according to the preferences set in that copy of iTunes.

One Computer, Multiple iPads

It’s fine to sync multiple iPads with a single computer, too. iTunes cheerfully fills each one up, and can back each one up, as they come. In fact, if you open the Preferences box (in the iTunes menu on the Mac, the Edit menu on Windows), the Devices tab lists all the iPads that iTunes is tracking (and iPhones and iPod Touches).

Backing Up the iPad

You’ve spent all this time tweaking preferences, massaging settings, and getting everything just so on your expensive iPad. Wouldn’t it be great if you could back up all that work so that if something bad happens to the iPad, you wouldn’t have to start from scratch?

Fortunately, you can. Your iPad can back up everything your computer doesn’t already have a copy of: stuff you’ve downloaded to the iPad (music, ebooks, apps, and so on), plus less-visible things, like your iPad’s mail and network settings, your call history, contact favorites, notes, text messages, and other personal preferences that are hard or impossible to recreate.
TIP: If you turn on the Encrypted iPad Backup option, then your backup will include all your passwords: for WiFi hotspots, Web sites, email accounts, and so on. That can save you tons of time when you have to restore the iPad from the backup. (The one downside: You'll be asked to make up a password for the backup. Don’t forget it!)

You can create your backups in either of two places:

- **On your computer.** You get a backup every time the iPad syncs with iTunes. The backup also happens before you install a new iPad firmware version from Apple. iTunes also offers to do a backup before you use the Restore option described below.

- **On iCloud.** You can also back up your iPad wirelessly and automatically—to iCloud, if you’ve signed up. That method has the advantage of being available even if your computer gets lost or burned to a crisp in a house fire. On the other hand, since your free iCloud storage holds only 5 gigabytes, and your iPad holds 16 or more, the free iCloud account usually isn’t enough. See the next chapter for details.

You make this choice on the Summary tab described above. (You also have the option of encrypting the backup, so that no NSA snoop can steal your laptop and root around in your backup files.)

**Using That Backup**

So the day has come when you really need to use that backup of your iPad. Maybe it’s become unstable, and it’s crashing all over. Or maybe you just lost the dang thing, and you wish your replacement iPad could have all your old info and settings on it. Here’s how to save the day (and your data):

1. Connect the iPad to the computer you normally use to sync with.

2. Click the (iPad) button; click the Summary tab.

3. Take a deep breath and click Restore iPad. A message may announce that you can’t erase the iPad without first turning off Find My iPad. This is a security measure to stop a thief from erasing a stolen iPad. He can’t restore the iPad without turning off Find My iPad, and he can’t turn off Find My iPad without your iCloud password. Go to the iPad and do that (in Settings→iCloud).

4. Take iTunes up on its offer to restore all your settings and stuff from the backup. If you see multiple backup files listed from other iPads, be sure to pick the backup file for your iPad. Let the backup restore your iPad settings and info. Then resync all your music, videos, and podcasts. Exhale.
For the truly paranoid, there’s nothing like a backup of your backup. Yes, you can actually back up the iTunes backup file, maybe on a flash drive, for safekeeping. On a Mac, look in HomeÆLibraryÆApplication SupportÆMobileSyncÆBackup. For Windows Vista, 7, or 8, visit C: driveÆUserÆApp Data (hidden folder)ÆRoamingÆApple ComputerÆMobileSyncÆBackup.

If you get in a situation where you need to restore your iPad through iTunes on a different computer (say if your old machine croaked), install iTunes on it and then slip this backup file into the same folder on the new computer. Then follow the steps on these pages to restore your data to the iPad.

Deleting a Backup File

To save disk space, you can delete old backups (especially for i-gadgets you no longer own). Go to the iTunes preferences (EditÆPreferences in Windows or iTunesÆPreferences on the Mac) and click the Devices tab.

Click the dated backup file you don’t want and hit Delete Backup, as shown here.
Apple’s free iCloud service stems from Apple’s brainstorm that, since it controls both ends of the connection between a Mac and the Apple Web site, it should be able to create some pretty clever Internet-based features.

This chapter concerns what iCloud can do for you, the iPad owner.

**NOTE:** To get a free iCloud account if you don’t already have one, sign up in Settings→iCloud.

### What iCloud Giveth

So what is iCloud? Mainly, it’s these things:

- **A synchronizing service.** It keeps your calendar, address book, and documents updated and identical on all your gadgets: Mac, PC, iPad, iPhone, iPod Touch. Also your Web passwords and credit card numbers. That’s a huge convenience—almost magical.

- **Find My iPhone** pinpoints the current location of your iPad on a map (and iPhones, and Macs). In other words, it’s great for helping you find your iPad if it’s been stolen or lost.

You can also make your lost gadget start making a loud pinging sound for a couple of minutes by remote control. That’s brilliantly effective when your iPad has slipped under the couch cushions.

- **An email account.** Handy, really: An iCloud account gives you a new email address. If you already have an email address, great! This new one can be a backup account, one you never enter on Web sites so that it never gets overrun with spam. Or vice versa: Let *this* be your junk account, the address you use for online forms. Either way, it’s great to have a second account.
- **An online locker.** Anything you buy from Apple—music, TV shows, ebooks, and apps—is stored online, for easy access at any time. For example, whenever you buy a song or a TV show from the online iTunes Store, it appears automatically on your iPad and computers. Your photos are stored online, too.

- **Back to My Mac.** This option lets you access the contents of one Mac from another one across the Internet.

- **Automatic backup.** iCloud can back up your iPad—automatically and wirelessly (over WiFi). It’s a quick backup, since iCloud backs up only the changed data.

  If you ever want to set up a new i-gadget, or if you want to restore everything to an existing one, life is sweet. Once you’re in a WiFi hotspot, all you have to do is re-enter your Apple ID and password in the setup assistant that appears when you turn the thing on. Magically, your gadget is refilled with everything that used to be on it.

  Well, *almost* everything. An iCloud backup stores everything you’ve bought from Apple (music, apps, books); photos and videos in your Camera Roll; settings, including the layout of your Home screen; text messages; and ringtones. Your mail, and anything that came from your computer (like music/ringtones/videos from iTunes and photos from iPhoto), have to be reloaded.

- **Family Sharing** is a broad category of features intended for families (up to six people).

  First, everyone can share stuff bought from Apple’s online stores: movies, TV shows, music, ebooks, and so on. It’s all on a single credit card, but you, the all-knowing parent, can approve each person’s purchases—without having to share your account password. That’s a great solution to a long-standing problem.

  There’s also a shared family photo album and an auto-shared Family category on the calendar. Any family member can see the location of any other family member, and they can find each other’s lost iPads or iPhones using Find My iPhone.

- **iCloud Drive** is Apple’s version of Dropbox. It’s a folder, present on every Mac, iPad, iPhone, and iPod Touch, that lists whatever you’ve put into it—an online “disk” that holds 5 gigabytes (more, if you’re willing to pay money).

  The iCloud Drive is a perfect place to put stuff you want to be able to access from any Apple gadget, wherever you go. It’s a great backup, too.
• **Continuity.** If you have an iPhone, you’re in for a treat. The set of features Apple calls Continuity turn the iPhone into a part of the iPad. They let you make calls from your iPad as though it were a speakerphone. They let you send and receive text messages from your iPad—to any cellphone on earth. They let you AirDrop files between a Mac, iPhone, and iPad, wirelessly. And more.

So there’s the quick overview. The rest of the chapter covers each of these iCloud features in greater depth.

### iCloud Sync

For many people, this may be the killer app for iCloud right here: The iCloud Web site, acting as the master control center, can keep multiple Macs, Windows PCs, and iPads/iPhones/iPod Touches synchronized. That offers both a huge convenience factor—all your stuff is always on all your gadgets—and a safety/backup factor, since you have duplicates everywhere.

It works by storing the master copies of your stuff—email, notes, contacts, calendars, Web bookmarks, and documents—on the Web. (Or “in the cloud,” as the product managers would say.)

Whenever your Macs, PCs, or i-gadgets are online—over WiFi or cellular—they connect to the mother ship and update themselves. Edit an address on your iPad, and shortly thereafter you’ll find the same change in Contacts (on your Mac) and Outlook (on your PC). Send an email reply from your PC at the office, and you’ll find it in your Sent Mail folder on the Mac at home. Add a Web bookmark anywhere and find it everywhere else. Edit a spreadsheet in Numbers on your iPad and find the same numbers updated on your Mac.

Actually, there’s even another place where you can work with your data: on the Web. Using your computer, you can log into [www.icloud.com](http://www.icloud.com) to find Web-based clones of Calendar, Contacts, and Mail.

To control the syncing, tap **Settings→iCloud** on your iPad. Turn on the checkboxes of the stuff you want to be synchronized all the way around:

- **iCloud Drive.** This is the on/off switch for the iCloud Drive (page 283). **Look Me Up by Email** is a list of apps that permit other iCloud members to find you by looking up your address. And **Use Cellular Data** lets you prevent a cellular iPad from doing its iCloud Drive synchronization over the cellular network, since you probably get only a limited data allotment each month.

- **Photos.** Tap the > button to see four on/off switches.
iCloud Photo Library is Apple’s new online photo storage feature. It stores all your photos and videos online, so you can access them from any Apple gadget; you can read more about it on page 255.

My Photo Stream and iCloud Photo Sharing are the master switches for Photo Streams, which are among iCloud’s marquee features (Chapter 15).

When you hold your finger down on the shutter button, recent iPad models can snap 10 frames a second. That’s burst mode—and all those photos can fill up your iCloud storage. So Apple gives you the Upload Burst Photos option to exclude them from the backup.

• Mail. “Mail” refers to your actual email messages, plus your account settings and preferences from OS X’s Mail program.

• Contacts, Calendars. There’s nothing as exasperating as realizing that the address book you’re consulting on your iPad is missing somebody you’re sure you entered—on your iPhone. This option keeps all your address books and calendars synchronized. Delete a phone number on your computer at home, and you’ll find it gone from your iPad. Enter an appointment on your iPad, and you’ll find the calendar updated everywhere else.
• **Reminders.** This option refers to the to-do items you create in the iPad’s Reminders app; very shortly, those reminders will show up on your Mac (in Reminders, Calendar, or BusyCal) or PC (in Outlook). How great to make a reminder for yourself in one place and have it reminding you later in another one!

• **Safari.** If a Web site is important enough to merit bookmarking while you’re using your iPad, why shouldn’t it also show up in the Bookmarks menu on your desktop PC at home, your Mac laptop, or your iPhone? This option syncs your Safari Reading List, too.

• **Notes.** This option syncs the notes from your iPad’s Notes app into the Notes app on the Mac, the email program on your PC, your other i-gadgets, and, of course, the iCloud Web site.

• **Passbook.** If you’ve bought tickets for a movie, show, game, or plane flight, you sure as heck don’t want to be stuck without them because you left the barcode on your other gadget.

• **Backup.** Your iPad can back itself up online, automatically, so that you’ll never worry about losing your files along with your tablet.

  Of course, most of the important stuff is already backed up by iCloud, in the process of syncing it (calendar, contacts—all the stuff described on these pages). So this option just backs up everything else: all your settings, your Health data, your documents, your account settings, and your photo library.

  There are some footnotes. The wireless backing-up happens only when your iPad is charging and in a WiFi hotspot. And remember that a free iCloud account includes only 5 gigabytes of storage; your iPad probably requires a lot more space than that. Using iCloud Backup may mean paying for more iCloud storage. Apple’s prices are $12 a year for 20 gigabytes, $48 a year for 200 gigs, and so on.)

• **Keychain.** The login information for your Web sites (names and passwords), and even your credit card information, can be stored right on your iPad—and synced to your other iPads, iPhones, and Macs (running OS X Mavericks or later).

  Now, you could argue that Web-site passwords and credit card numbers are more important than, say, your Reminders. For this category, you don’t want to mess around with security.

  Therefore, when you turn on the Keychain switch in Settings, you’re asked to enter your iCloud password.
Then you get a choice of ways to confirm your realness—either by entering a code that Apple texts to you or by using another Apple device to set up this one. Once that’s done, your passwords and credit cards are magically synced across your computers and mobile gadgets, saving you unending headaches. This is a truly great feature that’s worth enduring the setup.

• **Find My iPad.** This is the on/off switch for the lifesaving tablet-location feature described on page 438. If you don’t turn this feature on here, you won’t be able to use it there.

To set up syncing, turn on the switches for the items you want synced. That’s it. There is no step 2.

**NOTE:** You may notice that there are no switches here for syncing stuff you buy from Apple, like books, movies, apps, and music. They’re not so much **synced** as they are **stored** for you online. You can download them at any time to any of your machines.

### Photo Stream, Photo Sharing

These iCloud features are described in glorious detail in Chapter 8—the photos chapter.

### Find My iPad

Did you leave your iPad somewhere? Did it get stolen? Has that mischievous 5-year-old left it somewhere in the house again?

Sounds like you’re ready to avail yourself of one of Apple’s finest creations: Find My iPad.

The first step is to log into iCloud.com and click **Find My iPhone.** Immediately, the Web site updates to show you, on a map, the current location of your iPad—and Macs, iPod Touches, and iPhones. (If they’re not online, or if they’re turned all the way off, you won’t see their current locations.)

If you own more than one, you may have to click **All Devices** and, from the list, choose the one you’re looking for.

If just knowing where the thing is isn’t enough to satisfy you, then click the dot representing your iPad, click the ı next to its name, and marvel at the appearance of these three buttons:
• **Play Sound.** When you click this button, the iPad starts dinging and vibrating loudly for 2 minutes, wherever it is, so you can figure out which backpack you left it in. It beeps even if the ringer switch is off, and even if the iPad is asleep. Once you find the iPad, just wake it in the usual way to make the dinging stop.

• **Lost Mode.** When you lose your iPad for real, proceed immediately to Lost Mode. Its first step: Prompting you to password protect it, if you haven’t already. Without the password, the sleazy crook can’t get into your iPad without erasing it. (If your iPad is already password-protected, you don’t see this step.)

The passcode you dream up here works just as though you’d created one yourself on the iPad. That is, it remains in place until you, with the iPad in hand, manually turn it off in **Settings** → **General** → **Passcode Lock**.

Next, the Web site asks for a phone number where you can be reached, and (when you click **Next**) for a message you want displayed on the iPad’s Lock screen. If you left the thing in a taxi or on some restaurant table, you can use this feature to plead for its return.

When you click **Done**, your message appears on the iPad’s screen, wherever it is, no matter what app was running, and the iPad locks itself.

Whoever finds it can’t miss the message, and can’t do anything without dismissing the message first.
If the finder of your iPad really isn’t such a nice person, at least you’ll get an automatic email every time the iPad moves from place to place, so you can track the thief’s whereabouts. (Apple sends these messages to your @me.com or @icloud.com address.)

**Erase iPad.** This is the last-ditch security option, for when your immediate concern isn’t so much the iPad as all the private stuff that’s on it. Click this button, confirm the dire warning box, enter your iCloud ID, and click **Erase**. By remote control, you’ve just erased everything from your iPad, wherever it may be. (If it’s ever returned, you can restore it from your backup.)

Once you’ve wiped the iPad, you can no longer find it or send messages to it using Find My iPad.

**TIP:** There’s an app for that. Download the Find My iPad app from the App Store. It lets you do everything described above from another iPad, in a tidy, simple control panel.

**Send Last Location**

Find My iPad works great—as long as your lost iPad has power, is turned on, and is online. Often, though, it’s lying dead somewhere, or it’s been turned off, or there’s no Internet service. In those situations, Find My iPad can’t help you.
Or can it?

Thanks to **Send Last Location**—a clever iOS 8 enhancement that you turn on in **Settings → iCloud → Find My iPad**—you have a prayer of finding your iPad again. Before it dies, your iPad will send Apple its location. You have 24 hours to log into **iCloud.com** and use the Find My iPad feature to see where it was at the time of death. (After that, Apple deletes the location information.) That’s a lot better than the old system, by which Find My iPad drew a blank if the iPad was dead or off.

You definitely want to turn this switch on.

**Activation Lock**

Thousands of people have found their lost or stolen iPads by using Find My iPad. Yay!

Unfortunately, thousands more will never see their tablets again. Until recently, Find My iPad had a back door the size of Montana: The thief could simply turn it off. Or, if your iPad was password-protected, the thief could just erase it and sell it on the black market, which was his goal all along. Suddenly, your iPad is lost in the wilderness, and you have no way to track or recover it.

That’s why Apple offers the ingenious Activation Lock feature. It’s very simple: Nobody can erase it, or even turn off Find My iPad, without entering your iCloud password (your Apple ID). This isn’t a switch you can turn on or off; it’s always on.

So even if the bad guy has your iPad and tries to sell it, the thing is useless. It’s still registered to you, you can still track it, and it still displays your message and phone number on the Lock screen. Without your iCloud password, your iPad is just a worthless brick. Suddenly, stealing iPads is a much less attractive prospect.

**Email**

Apple offers an email address as part of each iCloud account. Of course, you already **have** an email account. So why bother? The first advantage is the simple address: **YourName@me.com** or **YourName@icloud.com**.

Second, you can read your me.com email from any computer anywhere in the world, via the iCloud Web site, or on your iPad/iPod Touch/iPhone.

To make things even sweeter, your me.com or icloud.com mail is completely synced. Delete a message on one gadget, and you’ll find it in the Deleted Mail folder on another. Send a message from your iPad, and you’ll find it in the Sent Mail folder on your Mac. And so on.
Video, Music, Apps: Locker in the Sky

Apple, as if you hadn’t noticed, has become a big seller of multimedia files. It has the biggest music store in the world. It has the biggest app store, for both i-gadgets and Macs. It sells an awful lot of TV shows and movies. Its ebook store, iBooks, is no Amazon.com, but it’s chugging along.

Once you buy a song, movie, app, or book, you can download it again as often as you like—no charge. In fact, you can download it to your other Apple equipment, too—no charge. iCloud automates, or at least formalizes, that process. Once you buy something, it’s added to a tidy list of items that you can download to all your other machines.

Here’s how to grab them:

• iPad, iPhone, iPod Touch. *For apps:* Open the App Store icon. Tap *Purchased*. Tap *Not on This iPad*.

*For music, movies, and TV shows:* Open the iTunes Store app. Tap *Purchased*; tap the category you want. Tap *Not on This iPad*.

There they are: all the items you’ve ever bought, even on your other machines using the same Apple ID. To download anything listed here
onto *this* machine, tap the **button. Or tap an album name to see
the list of songs on it so you can download just *some* of those songs.

You can save yourself all that tapping by opening **Settings**→**iTunes & App Store** and turning on **Automatic Downloads** (for music, apps, and books). From now on, whenever you’re on WiFi, stuff you’ve
bought on other Apple machines gets downloaded to this one **automatically**, in the background.

- **Mac or PC.** Open the Mac App Store program (for Mac apps) and
  click **Purchases**. Or open the iTunes app (for songs, TV shows, books,
  and movies). Click Store and then, under Quick Links, click **Purchased**.
  There are all your purchases, ready to open or re-download if
  necessary.

  **TIP:** To make this automatic, open iTunes. Choose **iTunes**→**Preferences**→
  **Store.** Under **Automatic Downloads**, turn on **Music**, **Apps**, and
  **Books**, as you see fit. Click **OK**. From now on, iTunes will auto-
  import anything you buy on any of your other machines.

Any bookmark you set in an iBook book is synced to your other gadgets,
too. The idea, of course, is that you can read a few pages on your iPad in
the doctor’s waiting room and then continue from the same page on your
iPad on the train ride home.

**iTunes Match**

Anything you’ve ever bought from the iTunes music store is now available
for playing on any Apple gadget you own. You get it.

A lot of people, however, have music in their collections that *didn’t* come
from the iTunes Store. Maybe they ripped some audio CDs into their com-
puters. Maybe they acquired some music from, ahem, a friend.

What a sad situation! You’ve got some of your music available with you on
your iPad and some that’s stranded at home on your computer.

Enter iTunes Match. It’s an Apple service that lets you store your **entire**
collection, including songs that didn’t come from Apple, online, for $25 a
year.

The iTunes software analyzes the songs in your collection. If it finds a song
that’s also available in iTunes, then—bing!—that song becomes available
for your playback pleasure, without your actually having to transfer your
copy to Apple. Apple says, in effect: “Well, our copy of the song is just
as good as yours, so you’re welcome to listen to our copy on any of your
machines.”
Truth is, in fact, that Apple’s copy is probably **better** than your copy. You get to play back the song at iTunes’ 256 Kbps quality, no matter how grungy your copy.

If there’s a song or two in your collection **not** among Apple’s 20 million tracks, then you can upload them to Apple.

The advantages of forking over the $25 a year are (a) you can listen to **all** your music from any computer/iPad/iPhone, (b) you get that audio-quality upgrade, (c) you can listen to iTunes Radio without interruptions from ads, and (d) using the song-matching system saves you huge amounts of uploading time. (The rival services from Google and Amazon require uploading your entire music collection, which can take days.)

The disadvantage: You’re paying $25 a year.

To get started on your iPad, go to **Settings**→**iTunes & App Store**. Tap **Subscribe to iTunes Match**—and follow the instructions.

Once the synchronization process is done, any songs on the iPad that are actually sitting online are marked by a 🌊 icon in the Music app. And any song you buy on any machine shows up as available to play on any of them.

These songs behave exactly like songs that are stored physically on your iPad. (In fact, they often are; if you tap a 🌊 song to play it, the iPad downloads and stores it so it won’t have to bother the next time.)

**TIP:** Listening to streaming iTunes Match music over a cellular connection eats up your monthly data limit fast! To protect yourself, turn off **Settings**→**iTunes & App Stores**→**Use Cellular Data**; now you can listen only over a WiFi connection.

If you plan to be offline for a while (like on a flight to Tokyo), you can hide the online songs by turning off **Settings**→**Music**→**Show All Music**.

**The Price of Free**

A free iCloud account gives you 5 gigabytes of online storage. That may not sound like much, especially when you consider how big some music, photo, and video files are.

Fortunately, anything you buy from Apple—like music, apps, books, and TV shows—doesn’t count against that 5-gigabyte limit. Neither do the photos in your Photo Stream.
So what’s left? Some things that don’t take up much space, like settings, documents, and pictures you take with your iPad, iPhone, or iPod Touch—and some things that take up a lot of it, like email, commercial movies, and home videos you transferred to the iPad from your computer. Anything you put on your iCloud Drive eats up your allotment, too. (Your iPad backup might hog space, but you can pare that down in Settings → iCloud → Storage → Manage Storage. Tap an app’s name and then tap Edit.)

You can, of course, expand your storage if you find 5 gigs constraining. You can expand it to 20, 50, 500, or 1,000 gigabytes—for $12, $48, $120, or $240 a year. You can upgrade your storage online, on your computer, or right on the iPad (in Settings → iCloud → Storage → Buy More Storage).

**Apple Pay (iPad Air 2, Mini 3)**

To most people who’ve even heard of it, “Apple Pay” means paying for things at the cash register by waving your iPhone and walking away.

Unfortunately, that trick depends on a special chip in the latest iPhones: the NFC chip (near-field communication), and the iPad doesn’t have it.

There’s another, more obscure aspect to Apple Pay, though, that you can use on iPads (the latest models, anyway): paying for stuff you’re buying online from within shopping apps. A touch of your finger on the Home button (fingerprint reader) is all the identity checking the app needs to do.

**The Setup**

To set up Apple Pay, you have to teach your iPad about your credit card. To do that, open Settings → Passbook & Apple Pay.

Tap Add Credit or Debit Card. (If you haven’t already registered your fingerprint, you’re prodded to do that now. In Settings → Touch ID & Passcode, turn on Apple Pay. Then tap Add a Fingerprint and follow the instructions.)

Enter your iCloud password when asked.

If you have a credit card on file with Apple already—for buying stuff from the iTunes store—you save a few steps by tapping Use Card on File with iTunes (next page, top). To confirm that you’re not a bad guy, you then have to type in the three- or four-digit security code. Then you’re ready to go shopping.

Otherwise, tap Use a Different Credit Card or Debit Card. Now enter the card information manually (next page, middle)—or not so manually. If you tap 📸, you can aim the iPad’s camera at whatever Visa, MasterCard, or American Express card you use most often. Hold steady until the digits of
your card blink onto the screen, auto-recognized (bottom). Cool! (You still have to type in the security code.)

Next, your bank has to verify that all systems are go for Apple Pay. That may involve responding to an email or a text, or typing in a verification code. In any case, it’s generally instantaneous.

**Note:** At the outset, Apple Pay works only with MasterCard, Visa, or American Express, and only the ones issued by certain banks. The big ones are all on board—Citibank, Chase, Bank of America, and so on—and 500 more have agreed to sign on by early 2015.

**The Shopping**

Once you’ve set up Apple Pay, you can use iPad or iPhone apps that have been upgraded to work with Apple Pay. The time savings: You’re spared all that typing of your name, address, and phone number every time you buy something.
Instead, when you’re staring at the checkout screen for some app, just tap **Buy with Apple Pay**.

That button appears in a small but growing number of shopping apps, including the apps for Amazon, Lowe’s, Panera Bread, Lululemon, Airbnb, Apple Store, Disney Store, Fancy, Groupon, Hotel Tonight, Houzz, Indiegogo, Lyft, MLB.com, OpenTable, Staples, Starbucks, StubHub, Target, Tickets.com, and Uber.

**Family Sharing**

It might have taken years, but Apple has finally acknowledged a fundamental fact of American life: Many of us have **families**.

If you have kids, it’s always been a hassle to manage your Apple life. What if they want to buy a book, movie, or app? They have to use your credit card—and you have to reveal your iCloud password to them.

Or what if they want to see a movie that you bought? Do they really have to buy it again?

Not anymore. Once you’ve turned on Family Sharing and invited your family members, here’s how your life will be different:

- **One credit card to rule them all.** Up to six of you can buy books, movies, apps, and music on your master credit card.
• **Ask before buying.** When your kids try to buy stuff, your iPad or iPhone pops up a permission request. You have to approve each purchase.

• **Younger Appleheads.** Within Family Sharing, you can now create Apple accounts for tiny tots; 13 is no longer the age minimum.

• **Shared everything.** All of you get instant access to one another’s music, video, iBooks, and app purchases—again, without having to know each other’s Apple passwords.

• **Find one another.** You can use your iPad to see where your kids are, and vice versa (with permission, of course).

• **Find one another’s phones and iPads.** The miraculous Find My iPhone feature (page 438) now works for every iPad and iPhone in the family. If your daughter can’t find her iPad, you can find it for her with yours.

• **Mutual photo album, mutual calendar, and mutual reminders.** When you turn on Family Sharing, your Photos, Calendar, and Reminders apps each sprout a new category that’s preconfigured to permit access by everyone in your family.

### Setting Up Family Sharing

The setup process means wading through a lot of screens, but at least you have to do it only once. You can turn on this feature either on the Mac (in System PreferencesÆSet Up Family) or on the iPad itself. Since this book is about the iPad, here are the steps to do it that way.

In **SettingsÆiCloud,** tap **Set Up Family Sharing.** Click **Get Started.** Now the iPad informs you that you, the sage adult, are going to be the Organizer—the one with the power, the wisdom, and the credit card. **Continue** (unless it’s listing the wrong Apple ID account, in which case, you can fix it now).

On successive screens, you read about the idea of shared Apple Store purchases; you’re shown the credit card that Apple believes you want to use; you’re offered the chance to share your location with the others. Each time, read and tap **Continue.**

Finally, you’re ready to introduce the software to your family.

• **If the kid is under 13:** Tap the tiny print that says **Create an Apple ID for a Child.** On the screens that follow, you’ll enter the kid’s birth date; agree to a Parent Privacy Disclosure screen; enter the security code for your credit card (to prove that you’re you, and not, for example, your naughty kid); type the kid’s name; set up an iCloud account (name, password, three security questions); decide whether or not to turn on **Ask To Buy** (each time your youngster tries to buy something
online from Apple, you’ll be asked for permission in a notification; decide whether you want the family to be able to see where the kid is at all times; and accept a bunch of legalese.

When it’s all over, the lucky kid’s name appears on the Family screen.

- **If the kid already has an iCloud account and is standing right there with you in person:** Tap **Add Family Member**. Type in her name or email address. (Your child’s name must already be in your Contacts; if not, go add her first. By the way, you’re a terrible parent.)

  She can now enter her iCloud password on your iPad to complete her setup. (That doesn’t mean you’ll learn what her password is; your iPad stores it but hides it.) On the subsequent screens, you get to confirm her email address and let her turn on location sharing. In other words: The rest of the family will be able to see where she is (or at least where her iPhone or iPad is).

- **If the kid isn’t with you at the moment:** Click **Send an Invitation**.

  Your little darling gets an email at that address. He must open it on his Apple gadget—the Mail app on the iPad or iPhone, or the Mail program on his Mac, for example.

  When he hits **View Invitation**, he can either enter his iCloud name and password (if he has an iCloud account), or get an Apple ID (if he doesn’t).

  Once he accepts the invitation, he can choose a picture to represent himself; tap **Confirm** to agree to be in your family; enter his iCloud password to share the stuff he’s bought from Apple; agree to Apple’s lawyers’ demands; and, finally, opt in to sharing his location with the rest of the family.

You can, of course, repeat this cycle to add additional family members, up to a maximum of six. Their names and ages appear on the Family screen.

From here, you can tap someone’s name to perform stunts like these:

- **Delete a family member.** Man, you guys really don’t get along, do you? Anyway, tap **Remove**.

- **Turn Ask To Buy on or off.** This option appears when you’ve tapped a child’s name on your iPad. If you decide your kid is responsible enough not to need your permission for each purchase, you can turn this option off.

  **NOTE:** If you turn off **Ask To Buy** for someone after she turns 18, you can’t turn it on again.
• Turn Parent/Guardian on or off. This option appears when you’ve tapped an adult’s name. It gives Ask To Buy approval privileges to someone else besides you—your spouse, for example.

Once kids turn 13, by the way, Apple automatically gives them more control over their own lives. They can, for example, turn off Ask To Buy themselves, on their own phones. They can even express their disgust for you by leaving the Family Sharing group. (On her own iPad or iPhone, for example, your daughter can visit Settings ➔ iCloud ➔ Family, tap her name, and then tap Leave Family. Harsh!)

Life in Family Sharing
Once everything’s set up, here’s how you and your nutty kids will get along.

• Purchases. Whenever one of your kids (for whom you’ve turned on Ask To Buy) tries to buy music, videos, apps, or books from Apple—even free items—he has to ask you (facing page, left). On your iPad, you’re notified about the purchase—and you can decline it or tap Review to read about it on its Store page (facing page, right). If it seems OK, you can tap Approve. You also have to enter your iCloud password, or supply your fingerprint, to prevent your kid from finding your iPad and approving his own request.

(If you don’t respond within 24 hours, the request expires. Your kid has to ask again.)

Furthermore, each of you can see and download everything that everyone else has bought. To do that, open the appropriate app: App Store, iTunes Store, or iBooks. Tap Purchased, and then tap the family member’s name, to see what she’s got; tap the ❅ to download any of it yourself.
TIP: Anything you buy, your kids will see. Keep that in mind when you download a book like *Tough Love: Sending the Unruly Child to Military School*.

However, you have two lines of defense. First, you can hide your purchases so nobody sees them. On your computer, in iTunes (Chapter 14), click **iTunes Store**; then click the relevant category (музыка, Книги, whatever). Click **Purchased** (right side). Point to the thing you want to hide, click the X, and click **Hide**. (On the iPad, you can hide only one category: apps. In the App Store app, tap **Updates**, then **Purchased**, then **My Purchases**. Swipe to the left across an app’s name to reveal a **Hide** button.)

Second, remember that you can set up parental control on each kid’s iPad, shielding their impressionable eyes from rated-R movies and stuff. See page 507.

• Where are you? Open the Find My Friends app to see where in town (or in the world) your posse is right now. Or go to the Find My iPhone app (or Web page; see page 438) to see where their phones or iPads are right now, which may or may not be with their owners.

NOTE: If one of you needs secrecy for the afternoon (Apple sweetly gives, as an example, shopping for a gift for your spouse), open **Settings**→**iCloud**→**Share My Location**, and turn off the switch. Now you’re untrackable until you turn the switch on again.
• **Photos, appointments, and reminders.** In Calendar, Photos, and Reminders, each of you will find a new category, called Family, that’s auto-shared among you all. (In Photos, it’s on the Shared tab.) You’re all free to make and edit appointments in this calendar, to set up reminders in Reminders (“Flu shots after school!”), or to add photos or videos (or comments) to this album; everyone else will see the changes instantly.

### Continuity

Apple products have always been designed to work together. Macs, phones, tablets, watches: Similar software, design, wording, philosophy.

That’s nice for you, of course, because you have less to learn and to troubleshoot. But it’s also nice for Apple, because it keeps you in velvet handcuffs; pretty soon, you’ve got too much invested in its own product “ecosystem” to consider wandering over to a rival.

In iOS 8.1, Apple has taken this gadget symbiosis to an astonishing new extreme. If you have an iPhone, it can be an **accessory** to your iPad. Suddenly the iPad can be a speakerphone, using the phone as a wireless antenna. Suddenly the iPad can send and receive regular text messages. Suddenly AirDrop lets you drag files back and forth, wirelessly, from tablet to phone to computer. Suddenly a WiFi-only iPad can get onto the Internet with one click, even miles from home.

Apple’s name for this suite of symbiosis is “Continuity.” And once you’ve got it set up, the iPad game changes in a big way.

These are the primary rules:

- The iPad and iPhone must be running iOS 8.1 or later. iPads made in 2012 (4th Generation) and later are eligible.

- The iPad and the phone have to be signed into the same iCloud account. (That’s a security thing—it proves that you’re the owner of both machines, and therefore unlikely to pose a risk to yourself.) You do that in **Settings → iCloud**. But you should also make sure that you’ve entered the same iCloud address in **Settings → Messages** and **Settings → FaceTime**.

- For some of these features, Bluetooth must be turned on in **Settings → Bluetooth**. (The modern Bluetooth—called Bluetooth LE, or low energy—doesn’t drain your battery the way it once did, so it’s fine to leave it on. But older iPads don’t have Bluetooth LE, so most Continuity features work only on 2012 and later iPads.)
All right. Setup ready? Time to experience some integration!

**iPad as Speakerphone**
Continuity is responsible for the ability for your iPad to make and take phone calls—if you also have an iPhone. See page 122 for details.

**Texting from the iPad**
You can send and receive text messages (and picture, audio, and video messages) on your iPad, too. See the step-by-steps on page 135.

**Instant Hotspot**
If you have a cellular iPad, you’re lucky; it can get onto the Internet almost anywhere.

If you have a WiFi-only iPad, you can enjoy the same luxury—if you also have an iPhone. Thanks to a feature called Instant Hotspot, the phone can stay in your pocket. Its name always appears in your iPad’s Settings → WiFi list, ready for choosing at any time—even if the phone is asleep and locked, and even if Personal Hotspot is turned off! Handily enough, the WiFi list also shows the phone’s battery and signal status.

To set up this convenient arrangement, see page 349.

**Handoff**
Handoff is a new feature that passes half-finished documents between the phone, the iPad, and the Mac, wirelessly and automatically.

For example, suppose you’ve been writing an email message on your iPad (next page, top). When you then sit at your Mac, a new icon appears on the Mac’s Dock (next page, middle). When you tap it, the Mac’s Mail program opens, and the half-finished message is there for you to complete (bottom).

It doesn’t have to be an email message, either. If you were reading a Web page or a Map on your phone, then that icon on the Mac opens the same Web page or map. If you were working on a Reminder; a Calendar entry; a Contacts entry; a note in Notes; or a document in Keynote, Numbers, or Pages; you can open the same in-progress item on the Mac.
And all of it works in the other direction, too. If you’re working on something on the Mac, but you’re called away, an icon appears on the lower-left corner of your iPad’s Lock screen that opens the same item (below).
Here’s the setup: Once again, both gadgets must be signed into your iCloud account. Both must have Bluetooth turned on, and the iPad and phone have to be sitting within Bluetooth range of each other (about 30 feet).

On the iPad and iPhone, the on/off switch is in Settings→General→Handoff & Suggested Apps.

On the Mac, open System Preferences→General; turn on Allow Handoff between this Mac and your iCloud devices.

Now try it out. Start an email message on your phone. Have a look at the Dock on your iPad: There, on the Lock screen, is the little icon of whatever program can finish the job.

**AirDrop Between iPad and Mac**

AirDrop has always been pretty great. It lets you shoot photos, videos, maps, Contacts cards, PDF files, Word documents, and all kinds of other stuff—from one iPad/iPhone to another iPad/iPhone. Wirelessly. Without having to set up names, passwords, or permissions. Without even having an Internet connection. See page 281 for more on this i-device feature.

There was a similar feature on the Mac, designed to let you shoot files wirelessly from one Mac to another.

But until iOS 8 and Yosemite, you couldn’t use AirDrop between a Mac and an iPad. And now you can.

Open whatever it is you want to send to the iPad: a photo, map, Web site, contact...anything with a P button.

When you tap P, you see the AirDrop panel—and, after a moment, the icons of any nearby Yosemite Macs show up, too. Including yours.

If the Mac’s icon doesn’t show up, it’s probably because its owner hasn’t made the Mac discoverable by AirDrop.

Instruct him to open the AirDrop window on his Mac. (Click AirDrop in the sidebar of any Finder window.) See the small blue controls at the bottom? It governs who can “see” this Mac for AirDrop purposes: No One, Contacts Only (that is, people in the iPad’s address book), or Everyone.
Once that’s set up right, that Mac shows up in the iPad’s AirDrop panel (“David” in this illustration). Tap the Mac’s round icon. (Unlike the AirDrop of Macs gone by, in Yosemite, you don’t have to start by opening the AirDrop window.)

The receiving Mac displays a note like this (right):

Click **Accept** (to download the incoming item to your Mac’s Downloads folder) or **Decline** (to reject it).

**TIP:** If the iPad and the Mac are both signed into the same iCloud account, then you don’t encounter that Accept/Decline thing. The file goes directly into your Downloads folder without asking. You do get a notification on the Mac that lets you know how many files arrived, and it offers an **Open** button.

Apple figures that, since you own both the iPad and the Mac, the usual permission routine isn’t necessary. You’re probably not trying to send yourself some evil virus of death.
In its younger days, people thought of the iPad as a personal device, meant for consumers and not for corporations. But somebody at Apple must have gotten sick of hearing, “Well, the iPad is cool, but it’s got no place in the workplace.” The iPad now has the security and compatibility features your corporate technical overlords require.

Even better, the iPad can talk to Microsoft Exchange ActiveSync servers, staples of corporate computer departments that, among other things, can keep your tablet wirelessly updated with the calendar, contacts, and email back at the office. (Yes, it sounds a lot like MobileMe or iCloud. Which is probably why Apple’s MobileMe slogan was “Exchange for the rest of us.”)

The Perks

This chapter is intended for you, the iPad owner—not for the highly paid, well-trained, exceedingly friendly IT (information technology) managers at your company.

Your first task is to convince them that your iPad is now secure and compatible enough to welcome into the company’s network. Here’s some information you can use:

- **Microsoft Exchange ActiveSync.** Exchange ActiveSync is the technology that keeps smartphones wirelessly synced with the data on the mother ship’s computers. The iPad works with Exchange ActiveSync, so it can remain in wireless contact with your company’s Exchange servers exactly like BlackBerry and Windows Mobile devices do.

Your email, address book, and calendar appointments are now sent wirelessly to your iPad so it’s always kept current—and they’re sent in a way that those evil rival firms can’t intercept. (It uses 128-bit encrypted SSL, if you must know.)
NOTE: That’s the same encryption used by Outlook Web Access (OWA), which lets employees check their email, calendar, and contacts from any Web browser. In other words, if your IT administrators are willing to let you access your data using OWA, then they should also be willing to let you access it with the iPad.

• **Mass setup.** These days, iPads may wind up in corporations in two ways: They’re either handed out by the company, or you bring your own. (When employees use their own tablets for work, they call it BYOD: “Bring your own device.”)

Most companies set up employee iPads using mobile device management (MDM) software. That’s a program (for sale by lots of different security companies) that gives your administrators control over a huge range of corporate apps, settings, and restrictions: all WiFi, network, password, email, and VPN settings; policies about what features and apps you can use, and so on; and the ability to remotely erase or lock your iPad if it gets lost. Yet MDM programs don’t touch the stuff that you install on your own. If you leave the company, your old employer can delete all of its own stuff, while preserving your own personal stuff.

• **Security.** The iPad can connect to wireless networks using the latest, super-secure connections (WPA Enterprise and WPA2 Enterprise), which are highly resistant to hacker attacks. And when you’re using virtual private networking, as described at the end of this chapter, you can use a very secure VPN protocol called IPSec. That’s what most companies use for secure, encrypted remote access to the corporate network. Juniper and Cisco VPN apps are available, too.

Speaking of security: Whenever your iPad is locked, iOS 8 automatically encrypts all email, email attachments, Calendar, Contacts, Notes, Reminders, and the data of any other apps that are written to take advantage of this feature.

• **iOS 8 improvements.** Apple beefed up the corporate-iPad thing even more in iOS 8. Now you can encrypt individual email messages to people in your company (and, with some effort, to people outside your company; see http://support.apple.com/kb/HT4979). When you’re setting up a meeting, you can see your coworkers’ schedules in the Calendar app. You can set up an automatic “Out of office” reply that’s in force until a certain date. (It’s in Settings → Mail, Contacts, Calendars. Tap your Exchange account’s name and scroll down to Automatic Reply.) Lots more control for your IT overlords, too.
And what’s in it for you? Complete synchronization of your email, address book, and calendar with what’s on your PC at work. Send an email from your iPad; find it in the Sent folder of Outlook at the office. And so on.

You can also accept invitations to meetings on your iPad that are sent your way by coworkers; if you accept, these meetings appear on your calendar automatically, just as on your PC. You can also search the company’s master address book, right from your iPad.

The biggest perk for you, though, is just getting permission to use an iPad as your company-issued tablet.

**Setup**

Your company’s IT squad can set up things on their end by consulting Apple’s copious instructions for corporate administrators at [www.apple.com/ipad/business/it/](http://www.apple.com/ipad/business/it/).

This guide is filled with handy tips, like: “On the Front-End Server, verify that a server certificate is installed and enable SSL for the Exchange ActiveSync virtual directory (require basic SSL authentication).”

Your IT pros might send you a link that downloads a profile—a preconfigured file that auto-sets up all your company’s security and login information. It will create the Exchange account for you (and might turn off a few iPad features, like the ability to switch off the passcode requirement).

If, on the other hand, you’re supposed to set up your Exchange account yourself, then tap **Settings ➔ Mail, Contacts, Calendars ➔ Add Account ➔ Exchange**. Fill in your work email address and password as they were provided to you by your company’s IT person.

And that’s it. Your iPad will shortly bloom with the familiar sight of your office email stash, calendar appointments, and contacts.

**Life on the Corporate Network**

Once your iPad is set up, you should be in wireless corporate heaven:

- **Email.** Your corporate email account shows up among whatever other email accounts you’ve set up (Chapter 13). In fact, you can have **multiple** Exchange accounts on the same iPad.

Not only is your email “pushed” to the iPad (it arrives as it’s sent, without your having to explicitly check for messages), but it’s also synced with what you see on your computer at work. If you send, receive, delete, flag, or file any messages on your iPad, you’ll find them sent, received, deleted, flagged, or filed on your computer at the office. And vice versa.
All the iPad email niceties described in Chapter 13 are available to your corporate mail: opening attachments, rotating and zooming into them, and so on.

Oh—and when you’re addressing an outgoing message, the iPad’s autocomplete feature consults both your built-in iPad address book and the corporate directory (on the Exchange server) simultaneously.

**TIP:** New in iOS 8: Your iPad can warn you when you’re addressing an email to somebody outside your company (a security risk, and something that sometimes arises from autocomplete accidents).

To turn on this feature, open Settings → Mail, Contacts, Calendars. Scroll down; tap Mark Addresses. Type in your company’s email suffix (like yourcompany.com). From now on, whenever you address an outgoing message to someone outside yourcompany.com, it appears in red in the “To:” line to catch your eye.

- **Contacts.** In the address book, you gain a new superpower: You can search your company’s master name directory right from the iPad. That’s great when you need to track down, say, the art director in your Singapore branch.

To perform this search, tap Contacts on the Home screen. Tap the Groups button in the upper-left corner. On the Groups screen, your company’s name appears; it may contain some group names of its own. But below these, a new entry appears that mere mortal iPad owners never see. It might say something like Directory or Global Address Book. Tap it.
On the following screen, start typing the name of the person you’re looking up; the resulting matches appear as you type. (Or type the whole name and then tap **Search**.)

In the list of results, tap the name you want. That person’s Info screen appears so you can tap to compose a preaddressed email message.

- **Calendar.** Your iPad’s calendar is wirelessly kept in sync with the master calendar back at the office. If you’re on the road and your minions make changes to your schedule in Outlook, you’ll know about it; you’ll see the change on your iPad’s calendar.

There are some other changes to your calendar, too, as you’ll find out in a moment.

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**TIP:** Don’t forget that you can save battery power, syncing time, and mental clutter by limiting how much old calendar stuff gets synced to your iPad. (How often do you really look back on your calendar to see what happened more than a month ago?) Page 490 has the details.

- **Notes.** If your company uses Exchange 2010 or later, your notes are synced with Outlook on your Mac or PC, too.

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**Exchange + Your Stuff**

The iPad can display calendar and contact information from multiple sources at once—your Exchange calendar/address book and your own personal data, for example.

Here’s how it works: Open your iPad calendar. Tap **Calendars.** Now you’re looking at all the accounts your iPad knows about; you might find separate headings for iCloud, Yahoo, Gmail, and so on, each with calendar categories listed under it. And one of them is your Exchange account.

You can pull off a similar stunt in Contacts, Notes, and Reminders. Whenever you’re looking at your list of contacts, for example, you can tap the **Groups** button (top left of the screen). Here, once again, you can tap **All Contacts** to see a combined address book—or you can look over only your iCloud contacts, your Exchange contacts, your personal contacts, and so on. Or tap **[group name]** to view only the people in your tennis circle, book club, or whatever (if you’ve created groups); or **[your Exchange account name]** to search only the company listings.
Invitations

If you’ve spent much time in the world of Microsoft Outlook (that is, corporate America), then you already know about invitations. These are electronic invitations that coworkers send you directly from Outlook. When you get one of these invitations by email, you can click Accept, Decline, or Maybe.

If you click Accept, then the meeting gets dropped onto the proper date in your Outlook calendar, and your name gets added to the list of attendees maintained by the person who invited you. If you click Maybe, then the meeting is flagged that way, on both your calendar and the sender’s.

Exchange meeting invitations on the iPad show up in four places, just to make sure you don’t miss them. You get a standard iPad notification, a numbered “badge” on the Calendar app’s icon on the Home screen, as an attachment to a message in your corporate email account, and in the Calendar app—tap Inbox at the lower-right corner. Tapping Inbox shows the Invitations list, which summarizes all invitations you’ve accepted, maybe’d, or not responded to yet. Tap one to see the details (facing page, left).
Tip: Invitations you haven’t dealt with also show up on the Calendar’s List view or Day view with dotted shading (below, right). That’s the iPad’s clever way of showing you just how severely your workday will be ruined if you accept this meeting.

You can also generate invitations. When you’re filling out the Info form for a new appointment, you get a field called Invites. Tap there to enter the email addresses of the people you’d like to invite.

Your invitation will show up in whatever calendar programs your invitees use, and they’ll never know you didn’t send it from some corporate copy of Microsoft Outlook.

A Word on Troubleshooting

If you’re having trouble with your Exchange syncing and can’t find any steps that work, then ask your Exchange administrators to make sure that ActiveSync’s settings are correct on their end. You’ve heard the old saying that in 99 percent of computer troubleshooting, the problem lies between the keyboard and the chair? The other 1 percent of the time, it’s between the administrator’s keyboard and chair.

Tip: You can access your company’s SharePoint sites, too. That’s a Microsoft document-collaboration feature that’s also a common part of corporate online life.

The iPad’s browser can access these sites; it can also open Word, Excel, PowerPoint, and PDF documents you find there. Handy indeed!
Virtual Private Networking (VPN)

The typical corporate network is guarded by a team of steely-eyed administrators for whom Job One is preventing access by unauthorized visitors. They perform this job primarily with the aid of a super-secure firewall that seals off the company’s network from the Internet.

So how can you tap into the network from the road? Only one solution is both secure and cheap: the virtual private network, or VPN. Running a VPN lets you create a super-secure “tunnel” from your iPad, across the Internet, and straight into your corporate network. All data passing through this tunnel is heavily encrypted. To the Internet eavesdropper, it looks like so much undecipherable gobbledygook.

VPN is, however, a corporate tool, run by corporate nerds. Your company’s tech staff can tell you whether or not there’s a VPN server set up for you to use.

If there is one, then you’ll need to know what type of server it is. The iPad can connect to VPN servers that speak PPTP (Point-to-Point Tunneling Protocol) and L2TP/IPSec (Layer 2 Tunneling Protocol over the IP Security Protocol), both relatives of the PPP language spoken by modems. Most corporate VPN servers work with at least one of these protocols.

The iPad can also connect to Cisco servers, which are among the most popular systems in corporate America, and, with a special app, Juniper’s Junos Pulse servers, too.

To set up your VPN connection, visit Settings→General→VPN.

Here you may see that your overlords have already set up some VPN connections; tap the one you want to use. You can also set one up yourself, by tapping Add VPN Configuration at the bottom.

Tap L2TP, PPTP, or IPSec (that’s the Cisco one), depending on which kind of server your company uses (ask the network administrator). Fill in the Server address, the account name and password, and the Shared Secret password; your system administrators can tell you what these are.

Once everything is in place, the iPad can connect to the corporate network and fetch your corporate mail. You don’t have to do anything special on your end; everything works just as described in this chapter.
NOTE: Some networks require that you type the currently displayed password on an RSA SecurID token, which your administrator will provide. This James Bondish thing looks like either a credit card or a USB drive. It displays a password that changes every few seconds, making it rather difficult for hackers to learn “the” password.

VPN on Demand

If you like to access your corporate email or internal Web site a few times a day, having to enter your name-and-password credentials over and over again can get old fast. Fortunately, iOS offers a huge time-saving assist with VPN on Demand.

That is, you just open up Safari and tap the corporate bookmark; the iPad creates the VPN channel automatically, behind the scenes, and connects.

There’s nothing you have to do, or even anything you can do, to make this feature work; your company’s network nerds have to turn this feature on at their end.

They’ll create a configuration profile that you’ll install on your iPad. It includes the VPN server settings, an electronic security certificate, and a list of domains and URLs that will automatically turn on the iPad’s VPN feature.
When your iPad goes to sleep, it terminates the VPN connection, both for security purposes and to save battery power.

**NOTE:** Clearly, eliminating the VPN sign-in process also weakens the security the VPN was invented for in the first place. Therefore, you’d be well advised—and probably required by your IT team—to use the iPad’s password or fingerprint feature, so some evil corporate spy (or teenage thug) can’t just steal your iPad and start snooping through the corporate servers.
The Settings app is like the Control Panel in Windows or System Preferences on the Mac. It’s a tweaking center that affects every aspect of the iPad: the screen, ringtones, email, Web connection, and so on.

In this book, you can read about the iPad’s preference settings in the appropriate spots—wherever they’re relevant. And the Control Center, of course, is designed to eliminate trips into Settings.

But so you’ll have it all in one place, here’s an item-by-item walkthrough of the Settings app and its structure in iOS 8.
Two Settings Tricks

The Settings app starts as a master list of panels—left side; tap the Settings category (Notifications or General, let’s say) to view the corresponding options on the right portion of the screen.

Even then, you may find that you’re not done “drilling down.” You may have to tap, for example, General, then Keyboard, then Shortcuts, burrowing deeper into that right-side pane each time. It’s a lot of navigation.

Fortunately, you have two kinds of shortcuts.

First, you can “back out” to an earlier Settings screen by tapping the button in the upper-left corner.

Second, you can jump directly to a particular Settings screen—from within any app—using Siri (Chapter 3). You can say, for example, “Open Sound settings,” “Open Brightness settings,” “Open Notification settings,” “Open WiFi settings,” and so on. Siri promptly takes you to the corresponding screen—no tapping required.

Airplane Mode

As you’re probably aware, you’re not allowed to make cellular connections on U.S. airplanes. The WiFi-only iPad is fine at any time in flight—but according to legend (if not science), a cellular iPad’s radio can interfere with a plane’s navigation equipment.

But a cellular iPad does a lot more than get online. Are you supposed to deprive yourself of all the music, videos, movies, and email that you could be using in flight, just because cell signals are forbidden?
Nope. Just turn on Airplane mode by tapping the switch at the top of the Settings list (so the switch background turns green). The word Cellular dims there in Settings (you’ve turned off your cellular circuitry). The WiFi and Bluetooth switches turn off, too—but you’re now welcome to switch them back on even while in Airplane mode.

Now it’s safe (and permitted) to use the iPad in flight, because its cellular features are turned off completely. You can’t get online on the cellular network, but you can do anything else in the iPad’s bag of tricks (including getting online with WiFi, if the plane has it).

**TIP:** Turning Airplane mode on and off is faster if you use the Control Center (page 37). Same for WiFi, described next.

## WiFi

This item in Settings opens the WiFi Networks screen, where you’ll find three useful controls:

- **WiFi On/Off.** If you don’t plan to use WiFi, then turning it off gets you more life out of each battery charge. Tap anywhere on this On/Off slider to change its status.

  **TIP:** Turning on Airplane mode automatically turns off the WiFi antenna—but you can turn WiFi back on. That’s handy when you’re on a flight with WiFi on board.

- **Choose a Network.** Here’s a list of all nearby WiFi networks that the iPad can “see,” complete with a signal-strength indicator and a padlock icon if a password is required. An Other item lets you access WiFi networks that are invisible and secret unless you know their names. See Chapter 11 for details on using WiFi with the iPad.

- **Ask to Join Networks.** If this option is On, then the iPad is continuously sniffing around to find a WiFi network. If it finds one you haven’t used before, a small dialog box invites you to hop onto it.

So why would you ever want to turn this feature off? To avoid getting bombarded with invitations to join WiFi networks, which can happen in heavily populated areas, and to save battery power. (The iPad will still hop automatically onto hotspots it’s joined in the past, and you can still view a list of available hotspots by opening SettingsÆWiFi.)
Carrier

If you see this panel at all, then you’re triply lucky. First, you have a cellular iPad. Second, you’re enjoying a trip overseas. Third, you have a choice of cellphone carriers who have roaming agreements with AT&T, Verizon, T-Mobile, or Sprint. Tap your favorite and prepare to pay some serious roaming fees.

Bluetooth

Here’s the on/off switch for the iPad’s Bluetooth transmitter, which is required to communicate with a Bluetooth speaker, earpiece, keyboard, laptop (for tethering), or hands-free system in a car. When you turn the switch on, you’re offered the chance to pair the iPad with other Bluetooth equipment; the paired gadgets are listed here for ease of connecting and disconnecting.

TIP: The Control Center (page 37) has a Bluetooth button. It’s faster to use that than to visit Settings.

Cellular Data (Cellular iPads)

These days, not many cellular plans let you use the Internet as much as you want; most have monthly limits. For example, $20 a month might include 4 gigabytes of Internet data use.

Most of the settings on this screen are meant to help you control how much Internet data your cellular iPad uses:

- **Cellular Data.** This is the on/off switch for Internet data. If you’re traveling overseas, you might want to turn this off to avoid racking up insanely high roaming charges. Your cellular iPad becomes a WiFi-only iPad.

- **Enable LTE.** Every now and then, you’ll be in some area where you can’t connect to the Internet even though you seem to have an LTE signal; forcing your iPad to the 4G or 3G network often gives you at least some connection. Turning LTE off does just that. (Not available on iPad 2.)

- **Data Roaming.** This control can prevent staggering international roaming fees. On AT&T or T-Mobile, you can turn off Data Roaming (when you’re out of the country, you won’t get slapped with outrageous Internet fees).
• **Personal Hotspot.** Here’s where you go the very first time you turn on Personal Hotspot (page 346). Once that’s done, a new Personal Hotspot on/off switch appears on the main Settings screen, so you won’t have to dig this deep in the future. (Not available on iPad 2.)

• **SIM PIN.** Your SIM card (on cellular iPads) stores all your account information. SIM cards are especially desirable abroad, because in most countries, you can pop yours into any old cellular iPad and have working service. If you’re worried about yours getting stolen or lost, then turn this option on. You’ll be asked to enter a passcode.

Then, if some bad guy ever tries to put your SIM card into another iPad, he’ll be asked for the password. Without the password, the card (and the iPad) won’t get online over the cellular airwaves.

**TIP:** And if the evildoer guesses wrong three times, the words “PIN LOCKED” appear on the screen, and the SIM card is locked forever. You’ll have to get another one from AT&T or whatever. So don’t forget the password.

• **Cellular Data Usage.** The iPad also helps you track how much Internet data you’ve used this month, expressed as megabytes of data, including email messages and Web page material. These are extremely important statistics, because your iPad plan is probably capped at, for example, 2 gigabytes a month. If you exceed your monthly maximum,
you’re instantly charged $15 or $20 for another chunk of data. So keeping an eye on these statistics is a very good idea.

(The Current Period means so far this month; Current Period Roaming means overseas or in places where your cell company doesn’t have service.)

Now, your cell company is supposed to alert you as you get closer and closer to your monthly limit—but in iOS 8, you can check your Internet spending at any time.

• Use cellular data for: This list offers individual on/off switches for every single Internet-using app on your iPad. Each one is an item that could consume Internet data without your awareness. Now, at last, you can shut up the data hogs you really don’t feel like spending megabytes on.

VPN

VPN stands for virtual private networking, a secure way for you to connect to a corporate network from the road. You can read more about it on page 464. On this screen, you see a list of whatever VPN connections you or some network administrator you love set up, ready to use.

Personal Hotspot

Once you’ve turned this feature on (page 346) in Cellular, this command appears here, too—on the main Settings screen for your convenience.

Notifications

This panel lists all the apps that think they have the right to nag for your attention. Flight-tracking programs alert you that there’s an hour before takeoff. Social-networking programs ping you when someone’s trying to reach you. Games let you know when it’s your move. Instant-messaging apps ding to let you know that you have a new message. It can add up to a lot of interruption.

On this panel, you can tailor, to an almost ridiculous degree, how you want to be nagged. See Chapter 1 for a complete description.
Control Center

The Control Center is written up on page 37. There are two settings to change here. If you turn off Access on Lock Screen, then the Control Center isn’t available on the iPad’s Lock screen. No passing prankster can change your iPad’s settings without your password.

And if you turn off Access Within Apps, then you won’t land in the Control Center by accident when you’re playing some game that involves a lot of swiping.

Do Not Disturb

Ah, yes, here it is: one of iOS’s most useful features. See page 482.

General

The General pages offer a huge, motley assortment of settings governing the behavior of the virtual keyboard, Siri, the password-protection feature, and about 6 trillion other things:

• About. Tapping this item opens a page for the statistics nut. Here you can find out how many songs, videos, and photos your iPad holds; how much storage your iPad has; techie details like the iPad’s software and firmware versions, serial number, model, WiFi and Bluetooth addresses, and so on. (It’s kind of cool to see how many applications you’ve installed.)

At the very top, you can tap the iPad’s name to rename it.

• Software Update. When Apple releases a new software update for your iPad, you can download it directly to the iPad. You no longer need to connect to a Mac or a PC for that job.

You’ll know when an update is waiting for you, because you’ll see a little number badge on the Settings icon, as well as on the word General in

![Software Update](image-url)
Settings. Tap it, and then tap **Software Update**, to see and install the update. (If no number badge is waiting, then tapping **Software Update** just shows you your current iOS version.)

- **Siri.** Here’s the master on/off switch for Siri, the voice-commanded virtual-assistant feature, and the on/off switch for the hands-free “Hey, Siri” feature. Both are described in Chapter 3. (Unavailable on the iPad 2.)

Also on this panel: a choice of languages; a **Voice Gender** setting (male or female); an option to have Siri’s responses read aloud only when you’re on headset (so you don’t disturb those around you); an option to choose your own Contacts card, so Siri knows, for example, where to go when you say, “Give me directions home.”

- **Spotlight Search.** Here you can control which kinds of things Spotlight finds when it searches your iPad. Tap to turn off the kinds of data you don’t want it to search: Mail, Notes, Calendar, whatever.

**TIP:** You can also drag these categories into a new order, using the little ❌ as a handle. Why? Because that’s the order that things will appear in the results list when you actually perform a search. If you mainly search your text messages, for example, then by all means drag **Messages** to the top of the list, so they’ll appear first.

- **Handoff & Suggested Apps.** Handoff is the new iOS 8 feature for people who own both an iPhone and an iPad or Mac; it automatically passes half-finished documents between them when you come home, as described on page 453. This is the on/off switch. (Not available on iPad 2 or 3rd Generation.)

The Suggested Apps feature really has no business being on the same screen—it’s unrelated. It’s the new iOS 8 feature that displays the faint icon of an app that might be useful right now, based on where you are (an airline’s app when you’re in the airport, for example). Here you can turn that feature off, both for apps you already have on the iPad (**My Apps**) and apps that Apple thinks you might like to download (**App Store**).

- **Use side switch to:** Every iPad except the Air 2 has a tiny switch on the right top edge. It can be either a **Mute** switch (the iPad makes no sounds) or a **Lock Rotation** switch (the picture doesn’t turn when the tablet does). Here’s where you make your choice. (Whichever function you **don’t** choose here becomes a button in your Control Center.)

- **Accessibility.** These options are intended for people with visual, hearing, and motor impairments, but they might come in handy now and then for almost anyone. All these features are described in Chapter 6.
• **Usage.** This screen is proof that the iPad is an obsessive-compulsive. You find out here that it knows everything about you, your apps, and your iPad activity.

For example, the new **Battery Usage** screen shows which apps are killing your battery life (see page 34). The **Usage** readout here shows, in hours and minutes, how much time you’ve spent using all iPad functions since the last time it was charged up (although it’s not broken down by activity, alas). **Standby** is how much time the iPad has spent in Sleep mode.

**Battery Percentage** adds a digital readout to the battery gauge on your status bar (for example, 65%).

The **Storage** section shows how much of your iPad’s storage space is currently used and free. Tap **Manage Storage** to see a list of every single app on your iPad, along with how much space it’s eating up. (Biggest apps are at the top.) Better yet, you can tap an app to see how much it and its associated documents consume—and, for apps you’ve installed yourself, there’s a **Delete App** button staring you in the face.

The idea, of course, is that if you’re running out of space on your iPad, this display makes it incredibly easy to see what the space hogs are—and delete them.

The next section, **iCloud**, also reports on storage—but in this case, it shows you how much storage you’re using on your iCloud account. (Remember, you get 5 gigabytes free; after that, you have to pay.) If you tap **Manage Storage**, you get to see how much of that space is used up by which apps—Mail is usually one of the biggest offenders.

• **Background App Refresh.** The list that appears here identifies apps that try to access the Internet to update themselves, even when they’re in the background. Since such apps can drain your battery, you have the option here to block their background updating.

You can also turn off the master **Background App Refresh** switch here. Now the only apps that can get online in the background are a standard limited suite (music playback and GPS, for example).

• **Auto-Lock.** As you may have noticed, the iPad locks itself after a few minutes of inactivity on your part. In locked mode, the iPad ignores screen taps. Without this mode, reaching into your bag for a wallet or a pen could, at least theoretically, fire up some iPad program or even dial a call.

On the **Auto-Lock** screen, you can change the interval of inactivity before the auto-lock occurs (1 minute, 2 minutes, and so on), or you
can tap Never. In that case, the iPad locks only when you click it to sleep.

- **Restrictions.** This means “parental controls.” (Apple called it “Restrictions” instead so as not to turn off potential corporate customers. Can’t you just hear it? “‘Parental controls?’ This thing is for consumers?!”) Complete details appear on page 507.

- **Date & Time.** Here you can turn on 24-hour time, also known as military time, in which you see “1700” instead of “5:00 PM.” (You’ll see this change everywhere times appear, including at the top of the screen.)

  **Set Automatically** refers to the iPad’s built-in clock. If this item is turned on, then the iPad finds out what time it is from an atomic clock out on the Internet. If not, then you have to set the clock yourself. (Turning this option off produces two more rows of controls: The **Time Zone** option becomes available, so you can specify your time zone, and a “number spinner” appears so you can set the clock.)

- **Keyboard.** Here you can turn off some of the very best features of the iPad’s virtual keyboard. (All these shortcuts are described in Chapter 2.)

  It’s hard to imagine why you wouldn’t want any of these tools working for you and saving you time and keystrokes, but here you go: **Auto-Capitalization** is where the iPad thoughtfully capitalizes the first letter of every new sentence for you. **Auto-Correction** is where the iPad suggests spelling corrections as you type. **Check Spelling**, of course, refers to the pop-up spelling suggestions. **Enable Caps Lock** is the on/off switch for the Caps Lock feature, in which a fast double-tap on the Shift key turns on Caps Lock.

  **Predictive** refers to QuickType, the row of three word candidates that appears above the keyboard when you’re typing. **Split Keyboard** refers to the thumb-typing keyboard described on page 58; if you find yourself invoking that keyboard **accidentally**, turn it off here.

  The “.” **Shortcut** switch turns on or off the “type two spaces to make a period” shortcut for the ends of sentences, and **Enable Dictation** is the on/off switch for the ability to dictate text. (If you never use dictation, turning this switch off hides the button on the keyboard, giving the space bar more room to breathe.)

- **Language & Region.** The iPad: It’s not just for Americans anymore. The **iPad Language** screen lets you choose a language for the iPad’s menus and messages. **Region Formats** controls how the iPad displays dates, times, and numbers. (For example, in the U.S., Christmas is on 12/25; in Europe, it’s 25/12.)
Calendar lets you choose which kind of calendar system you want to use: Gregorian (that is, “normal”), Japanese, or Buddhist. Finally, the Advanced screen lets you turn off the automatic setting of date, time, and number languages to match your main iPad language. You know—for people who want their dates, times, and numbers in a different language.

- **iTunes Wi-Fi Sync.** You can sync your iPad with a computer wirelessly, as long as the iPad is plugged in and on WiFi. Details on page 416.

- **VPN.** See Chapter 16 for details on virtual private networking.

- **Reset.** On the all-powerful Reset screen, you’ll find seven ways to erase your iPad.

  **Reset All Settings** takes all the iPad’s settings back to the way they were when it came from Apple. Your data, music, and videos remain in place, but the settings all go back to their factory settings.

  **Erase All Content and Settings** is the one you want when you sell your iPad, or when you’re captured by the enemy and want to make sure they will learn nothing from you or your iPad.

  **Note:** This feature takes awhile to complete—and that’s a good thing. The iPad doesn’t just delete your data; it also overwrites the newly erased memory with gibberish to make sure the bad guys can’t see any of your deleted info, even with special hacking tools.

  **Reset Network Settings** makes the iPad forget all the memorized WiFi networks it currently autorecognizes.

  **Subscriber Services** does nothing on most modern iPads; it’s left over from older Verizon cellular iPad models.

  **Reset Keyboard Dictionary** has to do with the iPad’s autocorrection feature, which kicks in whenever you’re trying to input text. Ordinarily, every time you type something the iPad doesn’t recognize—some name or foreign word, for example—and you don’t accept the iPad’s suggestion, it adds the word you typed to its dictionary so it doesn’t bother you with a suggestion again the next time. If you think you’ve entered too many words that aren’t legitimate terms, you can delete from its little brain all the new “words” you’ve taught it.

  **Reset Home Screen Layout** undoes any icon moving you’ve done on the Home screen. It also consolidates all your Home screen icons, fitting them onto as few screens as possible.
Finally, **Reset Location & Privacy** refers to the “OK to use location services?” warning that appears whenever an iPad program, like Maps or Camera, tries to figure out where you are. This button makes the iPad forget all your responses to those permission boxes. In other words, you’ll be asked permission all over again the first time you use each of those programs.

### Display & Brightness

In iOS 8, Apple moved these controls out of the swamp of the General settings—and gave them a place of proper honor.

Ordinarily, the iPad controls its own screen brightness. An ambient-light sensor hidden behind the glass at the top of the iPad’s face samples the room brightness each time you wake the iPad and adjusts the screen: brighter in bright rooms, dimmer in darker ones.

When you prefer more manual control, here’s what you can do:

- **Brightness slider.** Drag the handle on this slider to control the screen brightness manually, keeping in mind that more brightness means shorter battery life.

  If Auto-Brightness is turned on, then the changes you make here are relative to the iPad’s self-chosen brightness. In other words, if you goose the brightness by 20 percent, then the screen will always be 20 percent brighter than the iPad would have chosen for itself.

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**TIP:** The Control Center (page 37) gives you a much quicker road to the Brightness slider. This version in Settings is just for old-timers.

- **Auto-Brightness On/Off.** Tap anywhere on this switch to disable the ambient-light sensor completely. Now the brightness of the screen is under complete manual control.

- **Text Size.** Apple has finally realized what anyone over 40 already knows: As you age, small type becomes harder to read. This universal text-size slider can boost the size of text in every app on your iPad.

  Technically, what you’re seeing is the front end for Apple’s *Dynamic Type* feature. And even more technically, not all apps work with Dynamic Type (yet). But most of the built-in Apple apps do—Contacts, Mail, Maps, Messages, Notes, Phone, Reminders, and Safari Reader—and other software companies will follow suit.
If the largest type setting here still isn’t big enough, you’re not out of luck. Hiding in the Accessibility panel described on page 153, there’s an option called Larger Type. Tap it and then turn on Larger Dynamic Type to make the large end of the type-size scale twice as big. Now you can read the iPad from the moon.

- **Bold Text.** If the spindly fonts of iOS 8 are a little too light for your reading tastes, you can flip this switch on (see page 163). After restarting, the iPad makes everything a little bolder.

## Wallpaper

*Wallpaper* can mean either the photo on the Unlock screen (what you see when you wake the iPad up), or the background picture on your Home screen. On this panel, you can change the image used for either one. Page 244 has step-by-step instructions.

## Sounds

Here’s where you choose a ringtone sound for incoming FaceTime or Continuity calls:

- **Ringer and Alerts.** The slider here controls the volume of the iPad’s ringing.

  Of course, it’s usually faster to adjust the ring volume by pressing the up/down buttons on the left edge whenever you’re not on a call or playing music or video. But if you find that your volume buttons are getting pressed accidentally, you can also turn off Change with Buttons. Now you can adjust the volume only with this slider, here in Settings.

- **Sounds.** The sound the iPad makes when it rings is up to you; by tapping Ringtone, you can view the iPad’s list of 27 built-in ringtones, plus 13 “alert tones,” plus any new ones you’ve added yourself.

  Tap a ring sound to hear it. After you’ve tapped one you like, confirm your choice by tapping Sounds to return to the Sounds screen.

*Note:* You can choose a different ringtone for each person in your Contacts (page 129).
But why stop with a ringtone? The iPad can make all kinds of other sounds to alert you: to the arrival of a new text message or email; to the successful sending of an outgoing email message, tweet, or Facebook post; to Calendar or Reminders alarms; to the arrival of AirDrop files; and so on.

This is a big deal—not just because you can express your individuality through your choice of ringtones, text tones, reminder tones, and so on, but also because you can distinguish your iPad’s blips and bleeps from somebody else’s in the same family or workplace.

For each of these events, tap the light-gray text that identifies the current sound for that event (“Tri-tone” or “Ding,” for example). On the resulting screen, tap the different sound options to find one you like; then tap Sounds to return to the main Sounds screen.

On that Sounds screen, you can also turn on or off the Lock Sounds (the sounds you get when you tap the Sleep/Wake switch on the top of the iPad) and the Keyboard Clicks that play when you type on the virtual keyboard.

**Touch ID & Passcode**

Here’s where you set up a password for your iPad, or (if you have an iPad Air 2 or mini 3) where you teach the iPad to recognize your fingerprints. Full details appear at the end of Chapter 1.
Privacy

By “privacy,” Apple means “apps and Apple accessing your data.”

Many an app works better, or claims to, when it has access to your address book, calendar, photos, and so on. Generally, when you run such an app for the first time, it explicitly asks you for permission to access each kind of data. But here, on this panel, you have a central dashboard—and on/off switches—for each data type and the apps that want it.

Location Services

Suppose, for example, that you tap Location Services. At the top of the next screen, you’ll find the master on/off switch for all Location Services. If you turn it off, then the iPad can no longer determine where you are on a map, geotag your photos, find the closest ATM, tell your friends where you’re hanging out, and so on. Below this master switch, you’ll find these options:

• **Share My Location.** Every year, Apple comes up with new ways for you to broadcast your iPad’s location—and, by extension, your own. For example, Find My Friends, Messages, and Family Sharing all have features that let certain other people (with your permission) see where you are right now.

  Here's the on/off switch for the whole feature. If it’s off, nobody can find you right now. If Share My Location is on, then this screen also shows you the names of people to whom you’ve given permission to track you—a handy reminder.

• **App Store, Camera, Maps…**. This screen goes on to list every single app that uses your location information, and it lets you turn off this feature on a by-app basis. You might want to do that for privacy’s sake—or you might want to do that to save battery power, since the location searches sap away a little juice every time.

  Tap an app’s name to see when it wants access to your location. You might see Always, Never, or While Using the App (the app can’t use your location when it’s in the background). On the same screen, you can see a description of why the app thinks it needs your location. Why does the Calendar need it, for example? “To estimate travel times to events.”
The little  🗺️ icon indicates which apps have actually used your location data. If it’s gray, that app has checked your location in the past 24 hours; if it’s purple, it’s locating you right now; if it’s hollow, that app is using a geofence—it’s waiting for you to enter or leave a certain location, like Home or Work. The Reminders app uses the geofencing feature, for example.

• System Services. Here are the on/off switches for the iPad features that use your location.

A few examples: Cell Network Search (lets a cellular iPad tap into Apple’s database of cellular frequencies by location, which speeds up connections); Location-Based iAds (advertisements that Apple slaps at the bottom of certain apps—or, rather, their ability to self-customize based on your current location); Setting Time Zone (permits the iPad to set its own clock when you arrive in a new time zone).

In the Product Improvement list, the options include Diagnostics and Usage (sends location information back to Apple, along with diagnostic information so that, for example, Apple can see where calls are being dropped); Popular Near Me (the section of the App Store that lists apps downloaded by people around your current spot); Routing & Traffic (sends anonymous speed/location data from your iPad, which is how Maps knows where there are traffic tie-ups); and so on.

Contacts, Calendars, Reminders...

This list (on the main Privacy screen) identifies the kinds of data that your apps might wish to access; we’re going way beyond location here. For example, your apps might want to access your address book or your calendar.
Tap a category—Contacts, for example—to see a list of the apps that are merrily tapping into its data. And to see the on/off switch, which you can use to block that app’s access.

**Twitter, Facebook**

Similarly, new apps you download may sometimes want access to your Facebook and Twitter accounts. Lots of apps, for example, harness your existing Facebook account for the purpose of logging in or finding friends to play games with. Tap Twitter or Facebook to see which apps are using your account information.

**Diagnostics & Usage**

Do you give Apple permission to collect information about how you’re using your iPad and how well the iPad is behaving each day? On this screen, you can choose Don’t Send or Automatically Send. And if you tap Diagnostic & Usage Data at the bottom, you can see the actual data the iPad intends to send. (Hint: It’s programmery gibberish.)

**Advertising**

The final Privacy option gives you a Limit Ad Tracking switch. Turning it on won’t affect how many ads you see within your apps—but it will prevent advertisers from delivering ads based on your interests. You’ll just get generic ads.

There’s a Reset Advertising Identifier button here, too. You may not realize that, behind the scenes, you have an Ad Identifier number. It’s “a non-permanent, non-personal device identifier” that advertisers can associate with you and your habits—the things you buy, the apps you use, and so on. That way, the advertisers can insert ads into your apps that pertain to your interests—without ever knowing your name.

But suppose you’ve been getting a lot of ads that seem to mischaracterize your interests. Maybe you’re a rustic shepherd, and you keep seeing ads for hyperviolent games. Or maybe you’re a nun, and you keep getting ads for marital aids.

In those cases, you might want to reset your Ad ID with this button, thus starting from scratch as a brand-new person about which the advertisers know nothing.

**iCloud**

Here’s where you enter your iCloud name and password—and where you find the on/off switches for the various kinds of data synchronization that iCloud can perform for you. Chapter 15 tells all.
## iTunes & App Store

If you’ve indulged in a few downloads (or a few hundred) from the App Store or iTunes music store, then you may well find some settings of use here. For example, if you tap your **Apple ID** at the top of the panel, you get these buttons:

- **View Apple ID.** This takes you to the Web, where you can look over your Apple account information, including credit card details.

- **Sign Out.** Tap when, for example, a friend wants to use her own iTunes account to buy something on your iPad. As a gift, maybe.

- **iForgot.** If you’ve forgotten your Apple ID password, tap here. You’ll be offered a couple of different ways of establishing your identity—and you’ll be given the chance to make up a new password.

### Show All

This option is handy if you own more than one Apple gadget. It means that, in your lists of **Music** and **Videos**, you’ll see the names of songs and movies you’ve bought using your **other** Apple phones, tablets, and com-

<table>
<thead>
<tr>
<th>Settings</th>
<th>iTunes &amp; App Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHOW ALL</td>
<td><strong>Music</strong></td>
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<tr>
<td></td>
<td><strong>Videos</strong></td>
</tr>
<tr>
<td>Show all store purchases and iTunes Match uploads in your music and video libraries, even if they have not been downloaded to this iPad.</td>
<td></td>
</tr>
<tr>
<td>Subscribe to iTunes Match</td>
<td>Store all your music in iCloud and listen to music on iTunes Radio ad-free. Learn more...</td>
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<tr>
<td>AUTOMATIC DOWNLOADS</td>
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<td><strong>Updates</strong></td>
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<td>Automatically download new purchases (including free) made on other devices.</td>
<td></td>
</tr>
<tr>
<td>Use Cellular Data</td>
<td>Use cellular network for automatic downloads, iTunes Match, and iTunes Radio.</td>
</tr>
</tbody>
</table>

![iTunes & App Store Settings](image)
puters—even though they’re not on this iPad yet. Seeing them listed makes it easy to download them to your iPad, no extra charge.

In related news, the iTunes Match option gives your iPad access to your entire music collection online—if you’ve signed up for Apple’s iTunes Match service ($25 a year; see page 443).

**Automatic Downloads**

If you have an iCloud account (and you probably should), then a very convenient option is available to you: automatic downloads of music, apps, and ebooks you’ve bought on other iOS gadgets. For example, if you buy a new album on your iPhone, turning on Music here means that your iPad will download the same album automatically next time it’s in a WiFi hotspot.

Updates means that if you accept an updated version of an app on one of your other Apple gadgets, it will be auto-updated on this iPad, too.

Those downloads are, however, big. On a cellular iPad, they can eat up your monthly data allotment right quick and send you deep into Surcharge Land. That’s why the cellular iPad does that automatic downloading only when you’re in a WiFi hotspot—unless you turn on Use Cellular Data. Hope you know what you’re doing.

Finally, the Suggested Apps section offers a duplicate set of on/off switches for the Suggested Apps feature described on page 474.

**Passbook and Apple Pay**

Here’s everything the iPad needs to know in order to help you buy stuff online with your fingerprint (page 445): your credit or debit card details and your contact information. Appears on the iPad Air 2 and mini 3 only.

**Mail, Contacts, Calendars**

There’s a lotta stuff going on in one place here. Breathe deeply; take it slow.

**Accounts**

Your email accounts are listed here; this is also where you set up new ones. See page 379 for details.
Fetch New Data

More than ever, the iPad is a real-time window into the data stream of your life. Whatever changes are made to your calendar, address book, or email back on your computer at home (or at the office) can magically show up on your iPad, seconds later, even though you’re across the country.

That’s the beauty of “push” email, contacts, and calendars. You get push email if you have a free Yahoo Mail account. You get all three if you’ve signed up for an iCloud account (Chapter 15), or if your company uses Microsoft Exchange (Chapter 16).

Having an iPad that’s updated with these critical life details in real time is amazingly useful, but there are several reasons why you might want to turn off the Push feature. You’ll save battery power, save money when you’re traveling abroad (where every “roaming” Internet use can run up your cellular bill), and avoid the constant “new mail” jingle when you’re trying to concentrate (or sleep).

And what if you don’t have a push email service, or if you turn it off? In that case, your iPad can still do a pretty decent job of keeping you up to date. It can check your email every 15 minutes, every half-hour, every hour, or only on command (Manually). That’s the decision you make in the Fetch New Data panel here. (Keep in mind that more frequent checking means shorter battery life.)

TIP: The iPad always checks email each time you open the Mail app, regardless of your setting here. If you have a push service like iCloud or Exchange, it also checks for changes to your schedule or address book each time you open Calendar or Contacts—again, no matter what your setting here.

Mail

Here you set up your email account information, specify how often you want the iPad to check for new messages, how you want your Mail app to look, and more.

• Preview. It’s cool that the iPad shows you the first few lines of text in every message. Here you can specify how many lines. More lines mean you can skim your inbound messages without having to open many of them; fewer lines mean more messages fit without scrolling.

• Show To/Cc Label. If you turn this option on, then a tiny, light-gray logo appears next to many of the messages in your inbox. The To logo indicates that this message was addressed directly to you; the Cc logo means you were merely “copied” on a message primarily intended for someone else.
If there’s no logo at all, then the message is in some other category. Maybe it came from a mailing list, or it’s an email blast (a Bcc), or the message is from you, or it’s a bounced message.

- **Swipe Options.** Which colorful insta-tap buttons would you like to appear when you swipe across a message in a list? See page 391 for details.

- **Flag Style.** You can flag messages to draw your own attention to them, either with the old-style flag icon—or, for visual spark, an orange dot. Here’s where you choose.

- **Ask Before Deleting.** Ordinarily, you can delete an open message quickly and easily, just by tapping the icon. But if you’d prefer to encounter an additional confirmation step before the message disappears, then turn this option on.

**NOTE:** The confirmation box appears only when you’re deleting an open message—not when you delete one from the list of messages.

- **Load Remote Images.** Spammers, the vile undercrust of lowlife society, have a trick. When they send you email that includes a picture, they don’t actually paste the picture into the message. Instead, they include a “bug”—a piece of code that instructs your email program to **fetch** the missing graphic from the Internet. Why? Because that gives the spammer the ability to track who has actually opened the junk mail, making those email addresses much more valuable for reselling to other spammers.
If you turn this option off, then the iPad does not fetch “bug” image files at all. You’re not flagged as a sucker by the spammers. You’ll see empty squares in the email where the images ought to be. (Graphics sent by normal people and legitimate companies are generally pasted right into the email, so they’ll still show up just fine.)

- **Organize By Thread.** This is the on/off switch for the feature that clumps related back-and-forths into individual items in your Mail inbox.

- **Always Bcc Myself.** If this option is on, then you’ll get a secret copy of any message you send. That’s handy if you want your computer to have a record of replies you sent from your iPad.

- **Mark Addresses.** The iPad can make an email address appear in red type if it’s somebody outside your company (page 460). That’s to help you avoid making costly security errors.

- **Increase Quote Level.** Each time you reply to a reply, it gets indented more, so you and your correspondents can easily distinguish one reply from the next.

- **Signature.** A signature is a bit of text that gets stamped at the bottom of your outgoing email messages. Here’s where you can change yours.

- **Default Account.** Your iPad can manage an unlimited number of email accounts. Here you can tap the account you want to be your default—the one that’s used when you create a new message from another program, like a Safari link, or when you’re on the All Inboxes screen of Mail.

**Contacts**

Contacts is a first-class citizen with an icon of its own on the Home screen, so it gets its own little set of options in Settings:

- **Sort Order, Display Order.** How do you want the names in your Contacts list sorted—by first name or by last name?

  Note that you can have them sorted one way but displayed another way. Not all the combinations make sense.

- **Show in App Switcher.** The app switcher now displays icons for the people you contact most (or contacted most recently). You can turn that feature off here.
• **Short Name.** When this switch is on, the Mail app may fit more email addressees’ names into its narrow To box by shortening them. It may display “M. Mouse,” for example, or “Mickey,” or even “M.M.”—whatever you select here.

**Prefer Nicknames** is similar. It instructs Mail to display the *nicknames* for your friends (as determined in Contacts) instead of their real names.

• **My Info.** Tap here to tell the iPad which card in Contacts represents *you.* Knowing who you are is useful to the iPad in a number of places—for example, it’s how Siri knows what you mean when you say, “Give me directions home.”

• **Default Account.** Here again, the iPad can manage multiple address books—from iCloud, Gmail, Yahoo, and so on. Tap the account you want new contacts to fall into, if you haven’t specified one in advance. (This item doesn’t appear unless you have multiple accounts.)

**Calendars**

Your iPad’s calendar can be updated by remote control, wirelessly, through the air, either by your company (via Exchange, Chapter 16) or by somebody at home using your computer (via iCloud, Chapter 15).

• **Time Zone Override.** Whenever you arrive in a new city, the iPad, if it can get online, learns what time zone it’s in and changes its own clock automatically.

So here’s a mind-teaser. Suppose there’s a big meeting in California at 2 p.m. tomorrow—but you’re in New York right now. How should that event appear on your calendar? Should it appear as 2 p.m. (that is, its local time)? Or should it appear as 5 (your East Coast time)?

It’s not an idle question, because it also affects reminders and alarms.

Out of the box, **Time Zone Override** is turned off. The iPad slides appointments around on your calendar as you travel to different time zones. If you’re in California, that 2 p.m. meeting appears at 2 p.m. When you return to New York, it says 5 p.m. Handy—but dangerous if you forget what you’ve done.

If you turn on the Override, though, the iPad leaves all your appointments at the hours you record them—in the time zone you specify with the pop-up menu here. This option is great if you like to record events at the times you’ll be experiencing them; they’ll never slosh around as you travel. If you, a New Yorker, will travel to San Francisco next week for a 2 p.m. meeting, write it down as 2 p.m.; it will still say 2 p.m. when you land there.
• **Alternate Calendars.** If you prefer to use the Chinese, Hebrew, or Islamic calendar systems, go nuts here.

• **Week numbers.** This option makes Calendar display a little gray notation that identifies which week you’re in (out of the 52 this year). It might say, for example, “W42.” Because, you know, some people aren’t aware enough of time racing by.

• **Show Invitee Declines.** You can invite someone to a meeting, as described on page 292. If they click Decline (they can’t make it), maybe you don’t need your iPad to alert you. In that case, turn this switch off.

• **Sync.** If you’re like most people, you refer to your calendar more often to see what events are **coming up** than to see the ones you’ve already lived through. Ordinarily, therefore, the iPad saves you some syncing time and storage space by updating only relatively recent events on your iPad calendar. It doesn’t bother with events that are older than 2 weeks, or 6 months, or whatever you choose here. (Or you can turn on **All Events** if you want your entire life, past and future, synced each time—storage and wait time be damned.)

• **Default Alert Times.** If you like to set reminder alarms for calendar appointments, then these options can save you some steps. Here you can set it up so that every new appointment has the reminder alarm turned on—and set how much in advance it rings. For **Birthdays** and **All-Day Events,** you can request an alarm at 9 a.m. on the day of the event, a day or two before, or a week ahead. For regular **Events,** your choices range from **1 week before** to **5 minutes before**—or even **At time of event.**

• **Start Week On.** This option specifies which day of the week appears at the **left edge of the screen** in the calendar’s Day and Month views. For most people, that’s Sunday, or maybe Monday—but for all iOS cares, your week could start on a Thursday.

• **Default Calendar.** This option lets you answer the question: “When I add a new appointment to my calendar on the iPad, which **calendar** (category) should it belong to?” You can choose Home, Work, Kids, or whatever category you use most often.

**Notes**

Notes can sync with various online services: iCloud, Gmail, Yahoo, and so on. Tap **Default Account** here to specify which one should receive new notes you create if you haven’t specifically chosen one.
Reminders

Here are the preference settings for the Reminders app:

• **Sync.** How far back do you want Reminders to go when it syncs its to-do lists with your computer, iCloud, and various other calendar programs?

• **Default List.** Suppose you’ve created multiple Reminder lists (Groceries, Movies to Rent, To Do, and so on). When you create a new item—for example, by telling Siri, “Remind me to fix the sink”—which list should it go on? Here’s where you specify.

Messages

These options govern text messages (SMS) and iMessages, both of which are described in Chapter 5:

• **iMessage.** This is the on/off switch for iMessages. If it’s off, then your iPad never sends or receives these handy, free messages—only regular text messages.

• **Send Read Receipts.** If this is on, then people who send you iMessages will know when you’ve seen them. They’ll see a tiny gray text notification beneath the iMessage bubble that contains their message. If you’re creeped out by people being able to know when you’re ignoring them, then turn this item off.

• **Send & Receive.** Here you can enter additional email addresses that people can use to send your iPad iMessages.

This screen also offers a **Start new conversations from** item that lets you indicate what you want to appear on the other guy’s iPad when you send a text: your cellphone number or email address.

• **Show Subject Field.** If email messages can have subject lines, why not text messages? Now they can; the message arrives with a little dividing line between the subject and the body, offering your recipient a hint as to what it’s about.

• **Blocked.** Here’s a way to build up a list of people you don’t want to hear from.

• **Keep Messages.** In iOS 8, you can now specify how long you want Messages to retain a record of your exchanges: 30 days, a year, or forever.
• **Audio Messages.** You can now shoot audio utterances to other people just as easily as you can type them. Here you can set them to auto-delete after 2 minutes. Why? First, because audio files take up space on your iPad. Second, because you may consider them *spoken text messages*—not *recordings* to preserve for future generations.

• **Video Messages.** Same deal here. You can set up video clips you send in Messages to auto-delete after a couple of minutes for the same reasons.

**FaceTime**

These options pertain to FaceTime, the video calling feature described in Chapter 4. Here, for example, is the on/off switch for the entire feature; the on/off switch for making FaceTime calls over a *cellular* connection, via an iPhone (which would eat up your monthly data plan); a place to enter your Apple ID, so people can make FaceTime calls to you; and a place to enter email addresses and a phone number, which can also be used to reach you.

The **Caller ID** section lets you specify how you want to be identified when you place a call to somebody else: either as a phone number or an email address.

Finally, here yet again is the **Blocked** option—another way to edit the list of people you don’t want to hear from (page 491).

**Maps**

The Maps app has a few settings of its own:

• **Navigation Voice Volume.** As Siri gives you spoken navigational instructions, how loud do you want her to be? Or would you like her to shut up entirely?

• **Distances.** Measured in miles or kilometers, sir/madam?

• **Map Labels.** Would you like place names to appear in English—or in their native spellings?

**Safari**

Here’s everything you ever wanted to adjust in the Web browser but didn’t know how to ask.
Search

- **Search Engine.** Your choice here determines who does your searching from the search bar: Google, Bing, Yahoo, or DuckDuckGo (a limited search service famous for its refusal to collect your data or track your searches).

- **Search Engine Suggestions.** As you type into Safari’s search box, it tries to save you time in two ways. First, it sprouts a list of common search requests, based on what millions of other people have sought. This list changes with each letter you type. Second, Safari may auto-complete the address based on what you’ve typed so far, using suggestions from your History and bookmarks list. This switch shuts off those suggestions. (It’s here primarily for the benefit of privacy hounds, who object to the fact that their search queries are processed by Apple in order to show the suggestions.)

- **Spotlight Suggestions.** In iOS 8, Spotlight searches (Chapter 2) can now find matches from the iTunes, iBooks, and App stores; from databases of local businesses, restaurants, and theaters; and from the Web. Unless you turn this off.

- **Quick Website Search.** You can search *within* a site (like Amazon or Reddit or Wikipedia) using only Safari’s regular search bar, as described on page 361. If, that is, this switch is on.

- **Preload Top Hit.** As you type into the search box, Safari lists Web sites that match. The first one is the Top Hit—and if this switch is on, then Safari secretly downloads that page while you’re still finishing your search. That way, if the Top Hit *is* the page you wanted, it appears almost instantly when you tap.

  But here’s the thing: Safari downloads the Top Hit with *every* search—which uses up data. Which could cost you money if you’re using a cellular iPad.

General

- **Passwords & AutoFill.** Safari’s AutoFill feature saves you tedious typing by filling in your passwords, name, address, and phone numbers on Web forms automatically (just for the sites you want). It can even store your credit card information, which makes buying things online much easier and quicker.

  This screen lists the different kinds of data that Safari can auto-fill for you: Your contact info. Web site account names and passwords. (Tap **Saved Passwords** to see the complete list of the passwords it’s mem-
orized; tap Edit to delete certain ones.) Your credit cards. (Again, tap Saved Credit Cards to see or delete the memorized cards.)

- **Favorites.** As described on page 361, your Favorites in Safari are just ordinary bookmarks in an extraordinary folder. Here you can choose a different folder as the home of your Favorites.

- **Open New Tabs in Background.** When you tap a link with your finger, should the new page open in front of the current page—or behind it? Answer here.

- **Show Favorites Bar.** Turn on this switch if you’d like Safari to display a button bar of your bookmarks, just below the address bar. Eats up screen space but saves you some digging every time you want to visit one of your favorites.

- **Show Tab Bar.** Do you want to see a little strip of filing-folder tabs, representing all your open windows (as you would on a computer)?

- **Block Pop-ups.** In general, you want this turned on. You really don’t want pop-up ad windows ruining your surfing session. Now and again, though, pop-up windows are actually useful. When you’re buying concert tickets, for example, a pop-up window might show the location of the seats. In that situation, you can turn this option off.

**Privacy & Security**

- **Do Not Track.** If you turn this on, then Web sites agree not to secretly track your activity on the Web. The problem is, of course, that this program is voluntary—and the sleazy operators just ignore it.
• **Block Cookies.** You can learn all about cookies—and these options to tame them—on page 376.

• **Fraudulent Website Warning.** This option makes Safari warn you when you try to visit what it knows to be a *phishing* site. (Phishing is a common Internet scam. The bad guy builds a fake version of Amazon, PayPal, or a bank’s Web site—and tries to trick you into “logging in.” You therefore unwittingly give up your name and password.)

• **Clear History and Website data.** Like any Web browser, Safari keeps a list of Web sites you’ve visited recently to make it easier for you to revisit them: the History list. And like any browser, Safari therefore exposes your activities to any suspicious spouse or crackpot colleague. If you’re nervous about that prospect, then tap **Clear History and Website data** to erase your tracks. This feature deletes all the cookies that Web sites have deposited on your “hard drive.”

• **Use Cellular Data.** The Reading List feature (page 364) is wonderful. But because it requires downloading entire Web pages to your iPad—and then syncs them to all your other Apple gadgets—it uses a lot of data. If you have a cellular iPad, and you fear going over your cellphone plan’s monthly data allotment, then turn this off. You’ll be allowed to save sites to your Reading List only when in a WiFi hotspot.

• **Advanced.** Safari recognizes HTML5, a Web technology that lets Web sites store data on your iPad, for accessing even when you’re not online (like your Gmail stash). In **Website Data**, you can see which Web apps have created these databases on your iPad and delete them if necessary.

JavaScript is a programming language whose bits of code frequently liven up Web pages. If you suspect some bit of code is choking Safari, however, you can turn off its ability to decode JavaScript here.

The **Web Inspector** is for Web-site programmers. You connect your iPad to a Mac with a USB cable; then, in Safari on the computer, you choose **Debug ➔ iPad ➔ [the name of the Web site currently on the iPad’s screen]**. You’ll be able to examine errors, warnings, tips, and logs for HTML, JavaScript, and CSS—great when you’re designing and debugging Web pages or Web apps for the iPad.

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**Music**

On this panel, you can adjust a bunch of iPod playback features. Most of them—**Sound Check**, **EQ**, **Volume Limit**, and **Group By Album Artist**—are described starting on page 190.
Then comes Show All Music. It makes the Music app list all the music you’ve acquired from Apple, even the songs you haven’t actually downloaded to your iPad.

Genius, iTunes Match, and Home Sharing are described in Chapter 7.

Videos

Here’s what you can adjust for the Videos app:

- **Start Playing.** When you play a video you’ve seen before, you can have it begin either from Where Left Off or From Beginning.

- **Show All Videos.** Do you want the Videos app to show all the TV shows and movies you’ve ever bought from Apple—even the ones you haven’t actually stored on the iPad?

- **Home Sharing.** You can also access your iTunes video collection, as described on page 195.

Photos & Camera

Here’s a motley collection of photo-related settings:

- **iCloud Photo Library, My Photo Stream, iCloud Photo Sharing, Upload Burst Photos.** These options are described on page 436.

- **Summarize Photos.** In the Photos app, the Years and Collections screens generally display one tiny thumbnail for every single photo. This feature is designed to make those displays more manageable by displaying fewer, but representative, thumbnails. (You won’t see any difference unless you have a pretty huge collection of photos.)

- **Play Each Slide For.** How long do you want each photo to remain on the screen? You can choose 2, 3, 5, 10, or 20 seconds. (Hint: 2 is plenty, 3 at most. Anything more than that will bore your audience silly.)

- **Repeat, Shuffle.** These options work just as they do for music. Repeat makes the slideshow loop endlessly; Shuffle plays the slides in random order.

- **Grid** turns the “Rule of Thirds” grid on or off on the camera’s viewfinder screen (page 208).

- **Keep Normal Photo.** See the tip on page 209.
iBooks

Why, it’s every setting imaginable that pertains to the iBooks ebook reading app. They’re described on page 304.

Podcasts

These settings affect the Podcasts app described on page 332. They govern how often the app auto-downloads new episodes, and how many; whether it can do so using cellular data (instead of WiFi) on a cellular iPad; and whether you want the app to auto-delete podcasts you’ve already listened to.

Game Center

You can read about the Game Center on page 301. This page of preferences offers options like these:

Game Invites

More security stuff. Do you want your iPad to permit invitations from other people to play games? How about people in the same room or building, inviting you to play over WiFi or Bluetooth? Here are the on/off switches for Allow Invites and Nearby Players.

Game Center Profile

Here’s your Game Center player name. Tap it to edit your nickname, make your Game Center listing invisible to strangers (Public Profile), or associate a new email address with your account.

Friend Recommendations

Playing games isn’t much fun without friends to play against, so Game Center is happy to suggest fellow Game Center participants from your Contacts list or your Facebook account. Unless you turn off these switches.

Twitter, Facebook, Flickr, Vimeo

These pages let you enter your name and password just once, in this one place, for each of these popular Web services—so that the iPad, and other apps, can freely access those accounts without having to bother you.
Each of these panels also offers an **Install** button, making it quick and easy to download the official Twitter, Facebook, Flickr, and Vimeo apps.

The Twitter and Facebook options offer some additional choices:

- **Twitter.** **Update Contacts** adds your friends’ Twitter account names to their cards in Contacts, saving you that tedious data entry.

- **Facebook.** Tapping **Settings** lets you tell the iPad how to alert you when new Facebook posts arrive: with a sound, for example. You can also limit Facebook video recordings to standard definition, to avoid massive data charges.

The **Allow These Apps** items let you control which built-in apps can access your Facebook account; for example, turn off **Calendar** if you don’t want to see your friends’ Facebook birthdays on your calendar.

Finally, **Update All Contacts** is the powerful button that adds photos and Facebook account names to the corresponding friends’ cards in your Contacts app, as described on page 128.

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### App Preferences

At the bottom of the Settings app screen, you see a list of apps that have installed setting screens of their own. For example, here’s where you can edit your screen name and password for the AIM chat program, change how many days’ worth of news you want the NY Times Reader to display, and so on. Each one offers an assortment of changeable preference options.

It can get to be a very long list.
You gotta admit it: Opening up a new iPad brings a certain excitement. There’s a prospect of possibility, of new beginnings. Even if you intend to protect your iPad with a case, there are those first few minutes when it’s shiny, spotless, free of fingerprints or nicks—a gorgeous thing.

This chapter is all about getting started, whether that means buying and setting up a new iPad, or upgrading an older model to the new iOS 8 software that’s described in this book.

**Buying a New iPad**

Each year’s new iPad model is faster, has a better camera and screen, and comes packed with more features than the previous one. Still, “new iPad” doesn’t have to mean the iPad Air 2 ($500 and up) or mini 3 ($400 and up). You can buy an earlier model for much less, like an iPad Air ($400 and up) or mini 2 ($300 and up).

If you decide to get a cellular iPad, you’ll pay $130 extra, but you’ll be able to get online almost anywhere you go. In that case, you have to choose a cell carrier (Verizon, AT&T, Sprint, or T-Mobile). See page 349 for some guidance.

**Setting Up a New iPad**

In the olden days, you couldn’t use a new iPad at all without hooking it up to a computer. Now, though, the setup process takes place entirely on the tablet’s screen.

You don’t need a computer to back up your iPad, because iCloud backs it up. You don’t need a computer to store your music and video collections, because the App Store remembers what you’ve bought and lets
you re-download it at any time. You don’t need a computer to download and install app updates, because they come straight to the iPad now. You don’t even need a computer to edit photos or to create mail folders; that’s on the iPad, too.

The first time you turn on a brand-new iPad—or an older one that you’ve erased completely—the setup wizard appears. Swipe your finger where it says slide to set up. Now you’re asked about 16 important questions:

• Language; Country. You won’t get very far setting up your iPad if you can’t understand the instructions. So the very first step here is to tell it what language you speak. When you tap a language, you’re next asked to tell the iPad where in the world you live. (It proposes the country where you bought the iPad. Clever, eh?)

• Wi-Fi Networks. Tap the name of the WiFi network you want, enter the password if required, and tap Join.

Or, if there’s no WiFi you can (or want to) hop onto right now, and you have a cellular iPad, tap Choose Cellular Connection.
• **Location Services.** The iPad knows where you are. That’s how it can pinpoint you on a map, tag the photos you take with their geographic locations, find you a nearby Mexican restaurant, and so on.

Some people are creeped out by the iPad’s knowing where they are, worrying that Apple, by extension, also knows where they are. So here’s your chance to turn off all the iPad’s location features. Tap either **Enable Location Services** or **Disable Location Services**.

• **Set Up Your iPad.** If you’ve owned an iPad before, or if you backed up this iPad and then erased it, you don’t have to load it up with all your apps and settings by hand. This screen offers to reload all your stuff from your most recent backup. (See Chapter 14 for details on iPad backups.)

   Tap **Restore from iCloud Backup** (if your backup was on iCloud) or **Restore from iTunes Backup** (if your backup was on your computer).

   And if you’ve never owned an iPad before, you can choose **Set Up as New iPad** to start fresh.

• **Apple ID.** A million features require an Apple ID—just about any transaction you make with Apple online. Buying anything from Apple, from a song to a laptop. Using iCloud (Chapter 15). Playing games against other people online. Making an appointment at an Apple Store.

   If you already have an Apple ID, tap **Sign In with Your Apple ID** and enter it here. If not, tap **Create a Free Apple ID**. You’ll be asked to provide your name, birthday, email address (or you can create a new iCloud email address), a password of your choice, and answers to a few security questions (you’ll have to get them right if you ever forget your password). You also get to decide if you’d like the honor of receiving junk email from Apple.

   On the screen full of legalese, tap **Agree**, and then **Agree**.

   (You can tap **Skip This Step** if you don’t want an Apple ID, at least for now. You can get one later in Settings.)

• **Use iCloud.** You get this screen, and the next two, only if you did sign in with your Apple ID.

   Since you’ve had a glance at Chapter 15, you already know how useful Apple’s free iCloud service can be. Here’s where you indicate whether or not you want to use iCloud at all.
• **Find My iPad.** If you did opt into iCloud, you’re also asked if you’d like to **Use Find My iPad.** If you do, you’ll be able to locate your lost iPad on a map, using any Web browser. You’ll also be able to command it to start pinging loudly, so you can find where you left it in the house. It’s a pretty great feature.

If you turn Find My iPad on, you’re also asked to make up a four-digit password so that the bad guys can’t get around you just by turning Find My iPad off.

• **iCloud Drive.** Here’s the new iOS 8 feature described on page 283. It’s a “folder in the sky,” whose files you can access from any Apple gadget at any time. By all means use choose **Upgrade to iCloud Drive**—unless you have non-iOS 8 devices, or pre-OS X Yosemite Macs, in which case you have a decision to make. Those older devices won’t be able to access the iCloud Drive.

• **Touch ID.** If you have an iPad Air 2 or mini 3, you’re now invited to teach it your fingerprint, for the purposes of unlocking it without having to type a password. See 50 for more on registering fingerprints. (You can also tap **Set Up Touch ID Later.** When the time comes, you can revisit this process in **Settings→Touch ID & Passcode.**)

• **Passcode.** Whether you opted to store a fingerprint or not, you’re now asked to make up a four-digit **passcode** (password) for unlocking your iPad. You’ll need it whenever the iPad won’t accept Touch ID—for example, after you’ve restarted the iPad. Passcode-protecting your iPad is a good idea but not required. If you don’t worry about its falling into bad guys’ hands, or you don’t want to have to enter a password every time you wake the iPad, you can tap **Don’t Add Passcode.**

• **iCloud Keychain** is a terrific feature. It stores all your Web user names and passwords—and even credit card numbers—so you don’t have to memorize them and type them in over and over. It’s all synchronized across all your Apple machines (iPad, iPhone, Mac, and so on).

If you take this opportunity to set it up, you’re asked what you want to use as your iCloud Security Code. That’s yet another four-digit passcode, which you may need someday to recover all your passwords if you have a really lousy day and lose **all** your Apple gadgets. Fortunately, you can use your iPad passcode (the one you’ve already set up) as your iCloud Security Code, so you don’t have another code to remember.

On the next screen, you’re supposed to enter a phone number—of “someone you trust”—which Apple will use as a secondary way to verify your identity if you have to recover your iCloud Keychain without having any of your Apple gadgets available.
• **Use Siri.** Here’s your chance to turn off Siri, the greatest feature in 15 years. So why would you ever want to turn it off? Because it works by sending your voice utterances to Apple’s computers for processing, and that thought alarms the privacy-obsessed.

• **Diagnostics.** Behind the scenes, your iPad sends records back to Apple, including your location and what you’re doing on your iPad. By analyzing this data en masse, Apple can figure out where the dead spots in the cellular network are, how to fix bugs, and so on. The information is anonymous—it’s not associated with you. But if the very idea seems invasive, here’s your chance to prevent this data from being sent.

• **App Analytics.** A related question: Is it OK for Apple to send statistics about how you use your apps to the makers of those apps?

• **Welcome to iPad.** Your iPad is set up. Tap *Get Started* to jump to the Home screen.

## Upgrading an iPad to iOS 8

If you bought an iPad Air 2 or mini 3, great! iOS 8 comes on it preinstalled. But you can also upgrade many earlier iPad models to this new software: the iPad Air, iPad 3, iPad 3rd Generation, iPad 4th Generation, iPad mini 2, and original iPad mini.

You can upgrade in any of three ways:

• **Upgrade it wirelessly.** *Upgrading* means installing iOS 8 on top of whatever is already on your iPad. You don’t lose any data or settings.

  This is the easiest way to upgrade. You’ve probably already seen the little red number on your Settings app icon, and on the word “General” inside it; the iPad is trying to tell you that iOS 8 is ready to download. Tap **Settings**→**General**→**Software Update** to see the iOS 8 logo; tap **Download and Install**. (You have to be on a WiFi network, and it’s wise to have your iPad plugged into power.)

• **Upgrade it from iTunes.** If you wish, you can also perform the upgrade using the iTunes program on your computer. This method takes less time, but, of course, it requires being at your computer.

  To begin, connect your iPad and click its icon at top left (see Chapter 14). On the **Summary** tab, click **Check for Update**, and then click **Download and Update**.
• **Restore it.** This is a more dramatic step, which you should choose only if you’ve been having problems with your iPad or if, for some other reason, you would like to start completely fresh. This step backs up the iPad, erases it completely, installs iOS 8, and then copies your stuff back onto the iPad.

Connect the iPad to your computer, open iTunes, and then click **Restore iPad.**

The updating or restoring process takes awhile. You’ll see the iPad restart. When it’s all over, the PC-free setup process described on the previous pages begins automatically.

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**NOTE:** Not all features work on all iPad models. For example, even with iOS 8, the iPad 3rd Generation, iPad 2, and original iPad mini don’t get the Continuity features described on page 452.

Older iPads may also be very slow with iOS 8—you’ve been warned—and there’s no way to go back to iOS 7.

If you find your iPad crawling, especially when you type, consider turning off **Background App Refresh** in **Settings** → **General.** And leave some space free; a full iPad is a slow iPad.

If your iPad is **still** crawling along like an anesthetized slug, there’s always the nuclear option: Erase it completely and load it up again. Many people report happier tidings after that extreme procedure.

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**Software Updates**

As you’re probably aware, software like the iPad’s is a perpetual work in progress. Apple constantly fixes bugs, adds features, and makes tweaks to extend battery life and improve other services.

**Updating Directly on the iPad**

One day you’ll be minding your own business, and you’ll see a red numbered badge appear on the Settings app’s icon. Open **Settings** → **General** → **Software Update** to read about the new update and install it. Note, though, that unless it’s plugged into a power source, your iPad won’t install an iOS update unless its battery is at least half full.

**Install Updates from Your Computer**

Maybe you’re not that adventurous and you’d prefer to install your software update the old-fashioned way. No problem: Connect the iPad to iTunes, wirelessly or not (Chapter 14). Then click the iPad’s icon in iTunes; on the **Summary** pane, tap **Check for Update.**
Restrictions and Parental Controls

If you’re issuing an iPad to a child, or someone who acts like one, you’ll be gratified to discover that iOS offers a good deal of protection. That’s protection of your offspring’s delicate sensibilities (it can block pornography and profanity) and protection of your bank account (it can block purchases of music, movies, and apps without your permission).

To set this up, visit Settings -> General -> Restrictions. When you tap Enable Restrictions, you’re asked to make up a four-digit password (not necessarily the same as the regular iPad passcode) that permits only you, the all-knowing parent, to make changes to these settings. (Or you, the corporate IT administrator who’s doling out iPads to the white-collar drones.)

Once you’ve changed the settings described below, the only way to change them again (when your kid turns 18, for example) is to return to the Restrictions page and correctly enter the password. That’s also the only way to turn off the entire Restrictions feature (tap Disable Restrictions and correctly enter the password). To turn it back on, you have to make up a password all over again.

Once Restrictions is turned on, you can put up data blockades in a number of different categories.
Allow

For starters, you can turn off access to iPad features that locked-down corporations might not want their employees—or parents might not want their children—to use, because they’re considered either security holes, time drains, or places to spend your money: Safari (can’t use the Web at all), the Camera, FaceTime, Siri & Dictation, and AirDrop.

A second list of options lets you block access to iTunes Store and the iBook Store, and turn off the option to download Podcasts. You can stop your kid from Installing Apps or Deleting Apps, too. And In-App Purchases permits you to buy new material (game levels, book chapters, and so on) from within an app that you’ve already bought. In other words, even if you’ve shut down access to your offspring’s ability to install new apps, as described above, this loophole remains.

Many of these restrictions work by removing icons altogether from the iPad’s Home screen: Safari, iTunes, and Camera, for example. When the switch says Off, the corresponding icon has been taken off the Home screen and can’t be found even by Spotlight searches.

Allowed Content

Here you can spare your children’s sensitive eyes and ears by blocking inappropriate material.

Ratings are a big deal; they determine the effectiveness of the parental controls described below. Since every country has its own rating schemes (for movies, TV shows, games, song lyrics, and so on), you use the Ratings For control to tell the iPad which country’s rating system you want to use.

Once that’s done, you can use the Music & Podcasts, Movies, TV Shows, Books, and Apps controls to specify what your kid is allowed to watch, play, and listen to. For example, you can tap Movies and then tap PG-13; any movies rated “higher,” like R or NC-17, won’t play on the iPad now. (And if your sneaky offspring try to buy these naughty songs, movies, or TV shows wirelessly from the iTunes Store, they’ll discover that the Buy button is dimmed and unavailable.)

For some categories, like Music & Podcasts and Siri, you can turn off Explicit to prevent the iPad from playing iTunes Store songs that contain naughty language, or speaking them.

Websites lets you shield impressionable young eyes from pornography online. It offers four settings:

- All Websites. No protection at all.
- Limit Adult Content. Apple will apply its own judgment in blocking dirty Web sites, using a blocked-site list that it has compiled.
That doesn’t mean you can’t override Apple’s wisdom, however. The **Always Allow** and **Never Allow** controls let you add the addresses of Web sites that you think should be OK (or should not be OK).

- **Specific Websites Only.** This is a “whitelist” feature. It means that the entire Web is blocked except for the few sites listed here: safe bets like Disney, PBS Kids, Smithsonian Institution, and so on. You can add your own sites to this list, but the point is clear: This is the Web with training wheels.

- **Require Password.** Ordinarily, once you’ve entered your Apple account password to download something from Apple’s online stores, the iPad doesn’t ask you for the password again for 15 minutes. During that time, you can buy more stuff without any further security blockades.

  That’s great for you—but a huge opportunity for naughty youngsters, who might be tempted to go nuts buying stuff within that window. This option lets you require a password for every purchase, even ones you make 2 minutes apart (turn on **Immediately**).

**Privacy**

These switches can prohibit the unauthorized user from making changes to the iPad’s privacy settings, which are described on page 481.

**Allow Changes**

These items (**Accounts**, **Cellular Data Use**, **Background App Refresh**, **Volume Limit**) are safeguards against your offspring fiddling with limits you’ve set.

**Game Center**

These controls let you stop your kid from playing multiplayer games (against strangers online) or adding game-playing friends to the center.

**Cases and Accessories**

The iPad has inspired a torrent of accessories. Stylish cases, speakers, docks, cables, keyboards, cases with keyboards—the list goes on.

Just be sure you’re buying something that fits your iPad. For example, the Lightning connector (where the charging cable connects) on the iPad Air and later doesn’t fit any of the charging accessories that came before it—at least not without the help of Apple’s $30 adapter (or the $40 adapter that has an 8-inch cable “tail”).
Slowly, accessory companies are introducing Lightning-compatible gear. But for now, buyer beware—or buyer stock up on $30 adapters.

So what might you add to your iPad?

- **Cases.** It’s the iPad Paradox: People buy the thinnest, sleekest tablet in existence—and then bury it in a bulky carrying case. There’s just something so wrong about that. On the other hand, the iPad is made of glass; the instinct to protect it is understandable. Hundreds of different iPad cases are available; most double as stands, which is supremely useful. Some have a Bluetooth keyboard built in, so your iPad can become a handy little laptop.

  Apple, of course, would love to interest you in its own iPad Smart Cover. Its hinge snaps magnetically onto the iPad’s edge; the cover protects the screen; and the iPad wakes up and sleeps when you open and close the cover. Oh, and the scored panels of the cover fold up in creative ways to prop up the iPad when you’re using it.

The iPad is a computer, and you know what that means: Things can go wrong. This particular computer, though, is not quite like a Mac or a PC. It runs a spin-off of the OS X operating system, but that doesn’t mean you can apply the same troubleshooting techniques. Therefore, let this appendix be your guide when things go wrong.

First Rule: Install the Updates

There’s an old saying: “Never buy version 1.0 of anything.” In the iPad’s case, the saying could be: “Never buy version 8.0 of anything.”

The very first version (or major revision) of anything has bugs, glitches, and things the programmers didn’t have time to finish the way they would have liked. The iPad is no exception.

The beauty of the iPad, though, is that Apple can send it fixes, patches, and even new features through software updates. One day you’ll glance at your Home screen’s Settings icon, and—bam!—there’ll be a badge indicating that new iPad software is available.

So the first rule of trouble-free iPadding is to accept these updates when they’re offered. With each new software blob, Apple removes another few dozen tiny glitches.

And sure enough: Within the first few weeks of iOS 8’s existence, software updates 8.0.1 and 8.0.2 came down the pike. Then 8.1 came, a month later, offering Apple Pay, Continuity, and other features. And more will come.
Seven Ways to Reset the iPad

The iPad runs actual programs, and as actual programs do, they actually crash. Sometimes, the program you’re working in simply vanishes and you find yourself back at the Home screen. Just reopen the program and get on with your life.

If the program you’re in just doesn’t seem to be working right—it’s frozen or acting weird, for example—then one of these seven resetting techniques usually clears things right up.

**NOTE:** Proceed down this list in order! Start with the easy ones.

- **Exit the app.** On an iPad, you’re never aware that you’re launching and exiting programs. They’re always just there, like TV channels, when you switch to them. There’s no Quit command. But if a program starts acting glitchy, you can make it quit.

  To do that, double-press the Home button to bring up the app switcher. Find the “card” that represents your balky app, and then flick it upward to quit it. Try reopening it to see if the problem has gone away.

- **Force quit the app.** If the iPad is so frozen that you can’t even bring up the app switcher, you’ll have to force quit the stuck app. Hold down the Sleep switch until the slide to power off message appears. Then hold down the Home button for 10 seconds, or until the frozen program quits. The next time you open the troublesome program from the Home screen, it should be back in business.

- **Turn the iPad off and on again.** If it seems something more serious has gone wrong, then hold down the Sleep switch for a few seconds. When the screen says slide to power off, confirm by swiping. The iPad shuts off completely.

  Turn it back on by pressing the Sleep switch for a second or two.

- **Force restart the iPad.** If you haven’t been able to force quit the program, and you can’t shut the iPad off either, you might have to force a restart. To do that, hold down the Home button and the Sleep switch for 10 seconds. Keep holding, even if the screen goes black or you see the “power off” slider. Don’t release until you see the Apple logo appear, meaning that the iPad is restarting.

- **Reset the iPad’s settings.** Relax. This procedure doesn’t erase any of your data—only the iPad’s settings. In Settings, tap General→Reset→Reset All Settings.
• **Erase the whole iPad.** From the Home screen, tap **Settings**→**General**→**Reset**→**Erase All Content and Settings.** Now, **this** option zaps your stuff—*all* of it. Music, videos, email, settings, apps, all gone, and all overwritten with random 1’s and 0’s to make sure it’s completely unrecoverable. Clearly, you’re getting into last resorts here. Of course, you can then sync with your backup (iTunes or iCloud) to copy all that stuff back onto your iPad.

• **Restore the iPad.** If none of these steps seem to solve the iPad's glitchiness, it might be time for the nuclear option: erasing it completely, resetting both hardware and software back to a factory-fresh condition.

**TIP:** If you’re able to sync the iPad with iCloud or iTunes *first,* do it! That way, you’ll have a backup of all those intangible iPad data bits: text messages, Recents list, and so on. iTunes will put it all back onto the iPad the first time you sync after the restore.

*If you backed up to iTunes:* Connect the iPad to your computer, as described in Chapter 14. In iTunes, click the iPad icon and then, on the Summary tab, click **Restore.**

The first order of business: iTunes offers to make a backup of your iPad (all of its iPad settings, text messages, and so on) before proceeding. Accepting this invitation is an excellent idea. Click **Back Up.**

*If you backed up to iCloud:* You can restore your iPad this way only if your iPad is completely wiped empty. If it’s not, then manually erase it using iTunes first.

During the setup screens described on page 503, tap **Restore from iCloud Backup.** You’re shown the three most recent backups; tap the one you want. The iPad goes right to work downloading your settings.
and account information. Then it restarts and begins to download your apps; if you’re in a hurry for one particular app, tap its icon to make iCloud prioritize it. At any time, you can check the restore process’s status in Settings → iCloud → Storage and Backup.

When that’s all over, you can get to work downloading your music (if you’re an iTunes Match subscriber).

### iPad Doesn’t Turn On

Usually, the problem is that the battery’s dead. Just plugging it into the USB cord or USB charger doesn’t bring it to life immediately, either; a completely dead iPad doesn’t wake up until it’s been charging for about 10 minutes. It pops on automatically when it has enough juice to do so.

If you don’t think that’s the trouble, try the force-restarting trick described on page 512. And if that doesn’t work, read on.

### The Force Restore

If your iPad gets stuck starting up at the Apple logo, or it just stays black, then something more serious may have happened. Tablets, like the best of us, sometimes get confused.

The solution is the drastic, but effective, force restore process (known to techies as the Default Firmware Update mode).

Open iTunes on your computer. Connect the iPad with its white USB cable.

Now hold down the Sleep switch and Home button simultaneously for 10 seconds—then release only the Sleep switch.

Keep the Home button pressed until iTunes tells you that an iPad in Recovery mode has been detected; click OK. (If you see anything but blackness on your iPad’s screen—an Apple logo, for example—then the process didn’t work. If the problem has not, in fact, gone away, then you should start again.)

Now iTunes tells you again that you’re in Recovery mode and offers only one button: Restore iPad. Click that, and then confirm by clicking Restore & Update. The process of reinstalling the latest, fresh copy of iOS begins.

Once everything’s running fine, you can restore all your apps and settings from the latest backup as described at the end of Chapter 14.
Battery Life Is Terrible

If your battery seems to drain faster after you’ve installed iOS 8, maybe it’s because you’re using the iPad more, checking out the cool new features.

If that’s not the problem, or if you’re getting a “Not charging” message, consult the battery-saving tips on page 31.

Out of Space

It happens all the time. You couldn’t imagine filling up 32, 64, or 128 gigabytes of storage, so you saved some money by buying an iPad with less. And now you can’t even take a video or a photo, because your iPad reports that it’s full. You’re frozen out until you have the time and expertise to delete some less important stuff.

The biggest space hogs on your iPad are video files, photo files, apps, and music files. Heck, deleting just one downloaded movie or TV show could solve your storage crunch instantly.

Fortunately, iOS makes it very easy to see what’s eating up your space—and to delete the fattest ones to make the most room with the least effort. The key is to visit Settings ➔ General ➔ Usage ➔ Manage Storage.
The list here shows what’s using up your space, biggest first; by tapping the > button, you can see the details and, in most cases, make some deletions on the spot.

**Delete Photos and Recorded Videos**

Unfortunately, this display shows how much space your Camera videos and photos take up, but it doesn’t let you delete them. To purge your photos, the quickest method is to hook up to iTunes, import the photos, and take advantage of the option to delete the freshly imported photos from the iPad (page 416).

Turning off your Photo Stream can give you back an instant gigabyte, too (page 246).

**Delete “Other” Items**

You know the colored graph of what’s on your iPad that shows up in iTunes (page 416)? Often, the biggest item here is the mysterious Other category. What is that stuff? It’s caches (Internet data stored on the iPad to make repeated visits faster), backups, partial downloads, and data from iOS’s built-in apps—all your text messages and email, for example. Here’s how you clean them out:

- **Delete the Web browser cache.** The iPad saves Web pages into its own memory, so that they’ll appear faster the next time you try to visit them. If you’ve had your iPad awhile, those cache files can really add up. Open **SettingsÆSafari**; tap **Clear History and Website Data**. You may get a speed boost as a side effect.

- **Delete text messages.** In the Messages app, you can delete individual texts or entire conversations; because they frequently include photo, audio, or video files, you can reclaim a lot of space.

- **Delete email attachments.** Files downloaded with your email take up a lot of space, too. The solution is to delete the email account (**SettingsÆMail, Contacts, CalendarÆ[account name]**; scroll down and tap **Delete Account**)—and then add it again.

  In the process, you’ll vaporize all the attachment files and message caches that you’ve ever downloaded and opened on your iPad. When you add the account back again, those files will still be online, ready to download—but only when you need them. (This trick works for most account types—just not for POP3 accounts.)

- **Delete voice memos, music files, and ebooks.** Audio files and iBooks eat up a lot of space, too. Consider purging the recordings, books, and songs you can do without (from within the Voice Memos, iBooks, and Music apps). You can re-download them later from the App, iTunes, or iBooks stores—no charge—whenever you like.
Warranty and Repair

The iPad comes with a one-year warranty and 90 days of iPad tech support. If you buy an AppleCare+ contract ($100), you’re covered for a second year.

If, during the coverage period, anything goes wrong that’s not your fault, Apple will fix it free. In fact, AppleCare+ covers damage even if it is your fault, for $50 each time—even if you drop the iPad or get it wet. Maximum: twice.

You can either take the iPad to an Apple Store, which is often the fastest route, or call 800-APL-CARE (800-275-2273) to arrange shipping back to Apple. In general, you’ll get the fixed iPad back in 3 business days.

**NOTE:** _Sync the iPad before it goes in for repair._ The repair process generally erases the iPad completely—Apple very often simply hands you a new (or refurbished) iPad instead of your original. In fact, if you’re worried that someone at Apple might snoop around, you might want to back up and then erase the iPad _first._ (Use the Restore option—page 506.)

Out-of-Warranty Repairs

Once the year or two has gone by, or if you damage your iPad in a way that’s not covered by the warranty (backing your car over it comes to mind), Apple charges $200 to $380 to repair an iPad, depending on the model. (Apple usually just replaces it.)

The Battery Replacement Program

Why did Apple seal the battery inside the iPad, anyway? Everyone knows lithium-ion batteries don’t last forever. After 300 or 400 charges, the iPad battery begins to hold less charge (perhaps 80 percent of the original). After a certain point, the iPad will need a new battery. How come you can’t change it yourself?

Apple’s reply: A user-replaceable battery takes up a lot more space inside the iPad. It requires a plastic compartment that shields the guts of the iPad from you and your fingers; it requires a removable door; and it needs springs or clips to hold the battery in place.

In any case, you can’t change the battery yourself. If the iPad is out of warranty, you must send it to Apple (or take it to an Apple Store) for a $100 battery-replacement job. (As an eco-bonus, Apple properly disposes of the old batteries, which consumers might not do on their own.)
What to Do about a Cracked Screen

Keeping your iPad in a case may lower the chances of your dropping it or scratching it—but it can’t prevent bad luck. An good number of iPad screens meet an untimely end, even with cases on.

Apple will happily replace your iPad’s screen for $200 to $380, depending on the model. It’ll do it the same day if you take the iPad into an Apple Store, or you can mail it in and get a replacement in 3 to 5 days. (If you’ve bought the AppleCare+ extended-warranty service, a replacement is $50, as described above.)

There are plenty of other companies that can repair a cracked screen, though. The reps from iCracked.com, for example, send a technician to you and perform the fix on the spot.

And then there’s the do-it-yourself technique. You can buy a screen-replacement kit for about $80 online, complete with the special tools you need to open the iPad and do the job yourself. It’s a job that requires care, patience, and some dexterity (Google can help you find the step-by-steps), but it’s a good option if you’re technically savvy.

Where to Go from Here

At this point, the iPad is such a phenomenon that there’s no shortage of resources for getting more help, news, and tips. Here are a few examples:

- **Apple’s official iPad User Guide.** Yes, there is an actual downloadable PDF user’s manual. [http://support.apple.com/manuals/](http://support.apple.com/manuals/)

- **Apple’s official iPad help Web site.** Online tips, tricks, and tutorials; troubleshooting topics; downloadable PDF help documents; and, above all, an enormous, seething treasure trove of discussion boards. [http://www.apple.com/support/ipad/](http://www.apple.com/support/ipad/)

- **Apple’s service site.** All the dates, prices, and expectations for getting your iPad repaired. Includes details on getting a temporary replacement unit. [https://www.apple.com/support/ipad/repair/](https://www.apple.com/support/ipad/repair/)

- **iMore blog.** News, tips, tricks, all in a blog format. [www.imore.com/](http://www.imore.com/)

- **iLounge.** Another great blog-format site. [www.iLounge.com/](http://www.iLounge.com/)

- **MacRumors/ipad.** Blog-format news; accessory blurbs; help discussions; iPad wallpaper. [http://ipad.macrumors.com/](http://ipad.macrumors.com/)
Symbols

1xRTT networks 350
3G networks 22, 350
speed of 351
4G LTE. See LTE networks
4G networks 22. See also LTE networks
30-pin connector 26

A
abbreviation expanders 64–84
AC adapter 27
accented characters 63–84
accessibility 153–172
 AssistiveTouch 169–172
compatible hearing aids 165
dictation 70–77
Dynamic Type 163
gray scale 160
hearing aids 165
increasing screen contrast 164
inverted colors (white on black) 160
large text 163
monaural mode 165
phonetic feedback 156
Reduce Motion feature 164
resources for the blind 157
Rotor 155–156
Screen Curtain 155
Speak Auto-text 161–163
subtitles 166
switch control 168–169
typing in Braille 155
typing options 156
video descriptions for the blind 166
VoiceOver 154–157
white-on-black mode 160
zooming the screen 157–160

accessories 509–510
Bluetooth 131–133
Lightning-connector compatible 510
accounts
 Family Sharing 447–456
managing multiple email accounts 406
parental controls 509
POP and IMAP email accounts 381–382
setting up email 379–382
Activation Lock 441
Add Call. See conference calling
address bar 357
 jump to by tapping 357
keyboard tips 357–358
loupe (magnifying glass) 57–58
Quick Website Search 361
address-book groups 122
Add to iTunes Wish List 175
advertising
 removing from Web articles 374–375
settings 483
AirDrop 281–283
 between an iPad and a Mac 455–456
defined 281
step by step 281
turn off 283
who can see you 283
Airplane mode 33, 346
 Control Center 346
controlling by voice 89
settings 468–469
vs. Do Not Disturb 121
AirPlay 199–200
 switching among speakers 190
AirPrint 278–279
alarm clock 298–300
 alarm names 299
deleting or editing alarms 299
status bar icon 22
voice control (Siri) 90
wake to chosen song 299

All Photos 223, 255, 256

Amazon
Kindle app 305
music sales 412
searching 361

answering calls 113-115. See also calling
multitasking 114
silencing the ring 114
using earbuds 113-114

AOL mail accounts 380-381

App Analytics 505

Apple ID 264
acquiring during setup 503
creating for a child under 13 448-449
forgotten 484
signing out 484
viewing account information 484

Apple Pay 445-447
setting up 445-446
shopping online 446-447

Apple TV
AirPlay 199
Photo Stream 249

apps. See also App Store
automatic updates 273, 485
background app refresh 475
Bump 131
Calendar 287-296
Clock 296-301
defined 259
Find My Friends 342
Find My iPad 440
folders 270-271
force quitting 276-278
for text messaging 152
free Apple apps 342
free re-downloading 442-443
Game Center 301-304
Google Voice 152
how to buy 263
iBooks 304-314
iMovie 342
in-app purchases 508
iPhone apps on iPad 266
iTunes U 342
Keynote 342
location based 16
location tracking controls 481
Maps 315-328
Newsstand 328-330
Notes 330-332
Numbers 342
organizing 268-269

Pages 342
Photo Booth 332-333
Photos 220-228
Podcasts 333-336
preferences 272
privacy settings 482-483
Reflector 200
Reminders 336-341
running in the background 278-283
storage report 475
switching among 18-19
syncing 422
Textfree with Voice 152
third-party photo editing 235-236
Tips 341
turning off automatic updates 32
updates 261, 272-273

App Store. See also apps
App Details page 262-264
auto backups 264-265
defined 259
deleting apps 267-269
file-size limit 264
how to find good apps 273-275
in-app purchases 508-510
iTunes purchases 264
+ on price button 263
organizing your downloads 266-269
shopping from iPad 260-264
shopping in iTunes 265-266
troubleshooting 265

app switcher 275-278
background apps 278
contacts icons 277-278

arrow notation 4-5

AssistiveTouch 169-172

AT&T
4G network 350-351
data network speeds 350
EDGE network 350
LTE network 350-351

attachments
deleting 516
opening 396-397
photos or videos 402
saving graphics and pictures 397
viewing in Messages 140
ZIP files 397

Audible.com 414-415
audiobooks 414-416
troubleshooting 425

audio messages 146-147
delisting 147
auto-capitalization 476
Autocomplete 358–361
 autocorrect 476
   make it stop replacing certain words 65
AutoFill
   passwords and credit card numbers 369–371
   settings 493
auto-lock
   on/off 475–476
automatic app updates 273, 485

B
Back button
   gesture 30
background apps 278–283
Backspace key 56
Back to My Mac 434
backups
   automatic 434
   automatic app backups 264–265
   backing up a backup 432
   deleting 432
   Encrypted iPad Backup 431
   iCloud Backup 437
   iCloud Drive 283–286
   preventing a backup 419
   restoring from backup 431–432
   using backups to set up new iPad 503
   via iTunes 430–432
Bad Piggies 275
banners 47
battery
   Battery Usage screen 34
   brightness settings 478–479
   charging 30–31
   improving battery life 31–34, 318, 515
   replacement program 517
   status bar icon 23
   turning off auto app updates 32
   using Airplane mode 33
   using Bluetooth LE 132
Bcc 401
blindness. See accessibility
blue dot
   in email 398–399
   in Maps 316
   in Newsstand 330
   next to an app icon 273
Bluetooth 131–133
   4.0 132–133
   address 473
   AirDrop 281–283
   Bluetooth LE 132
   car kits 133
   connecting a physical keyboard 69–84
   controlling by voice 89
   pairing 132–133, 188–189
   status bar icon 22
   stereo headphones 188–190
   turning off to save power 32, 33
   turning on and off 470
bookmarks 361–364
   creating 362–363
   creating folders 364
   defined 361
   editing 363
   editing folders 363
   Favorites page 373–374
   iCloud syncing 437
   in iBooks 311
   in Maps 320
   Web clips 366–369
Braille keyboard 155
brightness controls 478–479
   auto-brightness switch 478
   controlling by voice 89
   in iBooks 310
   in Maps 325
Bump app 131
buttons
   adding outlines 163–164
C
Calendar 287–296
   alerts 292
   color-coded categories 294–296
   Day view 288–289
   editing and deleting events 293
   Exchange plus personal data 461–463
   Exchange syncing 461
   Facebook integration 294
   iCloud syncing 436
   invitations 292
   limiting past events 490
   making appointments 289–293
   Month view 289
   notes 292
   Outlook invitations 462–463
   repeating events 291
   rescheduling events 293–294
   searching 296
   setting default category 490
   settings 489–492
   sharing in Family Sharing 452
   showing week numbers 490
   snagging appointments from Mail 397–398
   third-party alternatives 296
time zones 489–490
Travel Time settings 291
voice control (Siri) 94–95

Caller ID
FaceTime 492

calling
Blocked list 150
FaceTime audio calls 111–115
FaceTime video calls 117–120
incoming while you’re on a call 116
merging calls 117
Remind Me Later 115
two calls at once 116
usage statistics 475–476
while using WiFi 114
with a Mac 122–123
camcorder. See videos
camera 23–24. See also photos
burst mode 211–212
exposure control 206
exposure lock 206–207
face detection 204
firing up 201–202
focus lock 206–207
front camera 212–213, 217–220
HDR mode 209–210
hiding photos 225
macro mode 205
modes 202–203
open from Lock screen 15, 16, 202
opening photos 220–228
Photo Stream 246–249
quick access to 40
reviewing a photo 210–211
Rule of Thirds grid 208
screen captures 257
self-timer 212–216
setting up photos 201–203
shortcut 202
slideshows 242–243
still photos 204–213
using with FaceTime 120
volume-key shutter 210
white balance 204–205
yellow box 204–205
zooming 207–208
Camera Roll 223. See also photos
vs. All Photos 255
capitalization
Caps Lock 56, 476
keyboard shortcuts 56, 60, 63
turning off 58
with dictation 75
with voice control 75–77
carriers
selection of 470
universal SIM card 25
Cc 401
cell signal
status bar icon 21
cellular data
for iBooks videos 314
for store purchases 444
managing 470–472
networks 22
on/off switches 472
turning off to save power 33
cellular iPad 349–351
cellular networks
1xRTT network 350
3G 350
4G and 4G LTE 350–351
EDGE network 350
settings 470–472
cellular triangulation 317–342
charging 30–31
connector 26–27
while using the iPad 31
with AC adapter 31
with USB cable 27, 31
children
Family Sharing 447–456
Guided Access (kiosk mode) 166–172
parental controls 507–509
Clock 296–301
alarm clock 298–300
auto-time zone on/off 482
Date & Time 476
settings 476
stopwatch 300
timer 300–301
voice control (Siri) 91
World Clock 296–298
closed captioning 496
conference calling
swapping 116–117
configuration profiles. See profiles
Contacts
adding from email 396
adding photos 127
address-book groups 122
deleting 131
designating VIPs 387–389
editing 130
exchanging with Bump app 131
Facebook groups 125
filling in photos from Facebook 128
iCloud syncing 436
importing from Twitter  129
in app switcher  277–278
My Info  488, 489
navigating  123
personalizing fields  129
recording relatives  128
searching your company’s directory  460–461
settings  488–489
sharing  131
snagging from Mail  397–398
sort order  488–489
unified  129–130
using to address email  400–401
VIP list  19
voice control (Siri)  91–92

Continuity  452–456
  calling from a Mac  122–123
  Instant Hotspot feature  453
texting from a Mac  453–456

data caps
  controls for  470–472

data speeds  22

date
  setting  476

deadness. See also accessibility
depleting
  all content and settings  477
  an iTunes Radio station  179
  apps  268–269, 269
  attachments  516
  audio messages  492
  auto-fill information in Safari  493
  batches of email messages  395
  bookmarks  363
  calendar appointments  293
  email accounts  382
  email messages  394
  family member from Family Sharing  449
  Favorites bookmarks  373
  Genius playlists  182
  iBooks  308
  iBooks notes  312
  iPad backup file  432
  iTunes playlists  181
  mailboxes  382
  notes  331
  “other” items  516
  photos and videos  227, 516
  podcasts  335
  RSS feeds  366
  Safari history  367
  saved passwords  370
  shared Photo Albums  254
  songs and playlists  412
  songs from Genius playlist  182
  space-hogging apps  475
  text messages  142, 516
  To Do items  339
  video messages  492
  videos  197

D

date
  setting  476

deadness. See also accessibility
depleting
  all content and settings  477
  an iTunes Radio station  179
  apps  268–269, 269
  attachments  516
  audio messages  492
  auto-fill information in Safari  493
  batches of email messages  395
  bookmarks  363
  calendar appointments  293
  email accounts  382
  email messages  394
  family member from Family Sharing  449
  Favorites bookmarks  373
  Genius playlists  182
  iBooks  308
  iBooks notes  312
  iPad backup file  432
  iTunes playlists  181
  mailboxes  382
  notes  331
  “other” items  516
  photos and videos  227, 516
  podcasts  335
  RSS feeds  366
  Safari history  367
  saved passwords  370
  shared Photo Albums  254
  songs and playlists  412
  songs from Genius playlist  182
  space-hogging apps  475
  text messages  142, 516
  To Do items  339
  video messages  492
  videos  197

Index  523
VIPs in email 388
Web browser cache 516
diacritical marks 63–84
dialing
  with Siri 90
dictation 70–77
  capitalization commands 75–77
  correcting errors 72
  punctuation 73–77
dictionary
  definitions 79–80
  iBooks 311
  resetting custom 61
  resetting keyboard 477
  spelling 61
  using Google as 361
directions. See Maps
disabilities. See accessibility
DiskAid 145
display controls 478–479
distance units in Maps 492
Dock 35–36
Do Not Disturb 121–122
  allowing special callers through 121–122
  controlling by voice 89
  defined 121
  in Messages 140
  repeated calls 122
  Silence option 122
  status icon 22
  turning on or off 121
double-tapping 30
downloads
  automatic app updates 485
  email attachments 396–397
  finding purchased items 193–195
  over cellular network 193
Drafts folder 404–406
dragging 28
driving directions 319
  voice control (Siri) 95
DuckDuckGo 360
Dynamic Type 163

E
earbuds
  answering calls with 113–114
  music playback control 187, 188
  Siri 87
  taking a photo with 210
ebooks. See iBooks
  Audible.com 414–415
EDGE network 22, 350
  speed of 351
editing
bookmarks 363–364
calendar events 293–294
contacts 130–131
Home screen folders 270–271
iBooks covers 307
iTunes playlists 181, 412
iTunes Radio stations 179
music collection icons 184
music scrubbing controller 186
photos 228–236
Safari Favorites 373–374
video 219–220
viewed email accounts 385–386
email
address-book groups 122
addressing from Contacts 400–401
addressing groups 400, 401
add sender to Contacts 396
Always Bcc Myself 488
AOL 380–381
ask before deleting 487
attaching photos or videos 402
avoiding spam 405–406
Cc and Bcc 401
checking 382
composing and sending 400–405
customizing unified folders 385–386
deleting batches of messages 395
deleting single messages 394
designating VIPs 387–389
Details screen 398
downloading 382–387
Exchange syncing 459–460
filining 394
flagged messages 389–390
flag style 487
formatting text 403–404
forwarding 393
frequency of checking 486
gestures for reading 391–392
Gmail 380–381, 406
hide/show To/Cc badges 486–487
iCloud 433, 441
IMAP accounts 381–382
inbox gestures 390–391
large text options 163
load remote images 487–488
managing accounts 406
mark as read 390
mark as unread 398–399
message preview 406
Notify Me option 393
opening attachments 396–397
opening Drafts folder 404–406
photo or video attachments 402
POP accounts 381–382
“push” data on/off 486
quote level (indentation) 404
replying 392
reply notifications 393
saving contacts and calendar info 397–398
saving graphics and pictures 397
searching 399–400
selecting the sending account 401
sending attachments 402
set default account 488, 489
set lines to show in preview 486
setting default account 406
settings 486–488
setting up your account 379–382
sharing attachments 397
sharing contacts 131
showing the To/Cc label 406
signatures 405
signature settings 488
subject line 402
swipe gesture options 487
threading 386–387
unified inbox 385–386
viewing header details 398
VIP list 387–389
virtual private networking 464–466
voice control (Siri) 93–94
warn when emailing someone outside the company 460
Yahoo 380–381
emoji keyboard 69
Encrypted iPad Backup 431–432
enterprise features. See corporate features, Exchange ActiveSync
ePub files 304–314
EQ (equalization) 190
erase iPad 477
Exchange ActiveSync 457–466
calendar invitations 462–463
e-mail 459–460
iPad Configuration Utility 458
limiting past events on Calendar 490
Outlook Web Access (OWA) 458
“push” data on/off 486
troubleshooting 463
explicit lyrics
in iTunes Radio 178
parental controls 508
Extensibility
photo editing 236

F
Facebook 352
account settings 352
alert sounds 480
app 352
apps accessing your account 483
calendar integration 294
Contacts groups 125
Game Center 303
importing photos from 128
names added to Contacts 128
posting photos to 239–240
posting with Siri 103
privacy 483
settings 483
Share button 352
sharing Web links 365
face detection 204
FaceTime 131
audio calls 111–115
capturing a screenshot 119
ending a call 120
initiating a call 118–119
Leave a Message option 115
muting audio or video 119–120
on/off switch 492
Remind Me button 115
rotating the screen 119
settings 492
switching to back camera 120
Family Sharing 447–452
appointments, photos, and reminders 452
approving purchases 450–451
hiding your purchases 451
locating family members 451
setting up 448–450
using 450–453
Favorites page (bookmarks) 373–374
editing 373–374
Find My Friends 342
parental controls 509
voice control (Siri) 100
Find My iPad 342, 438–441
defined 438
display a message 439
initial setup 504
Lost Mode 439
on a map 438
remote wipe 440
Send Last Location 441
Send Last Location feature 440–441
fingerprint sensor 5–6. See also Touch ID
flagged email messages 389–390
flag vs. orange dot 487
Flash plug-in 353
flicking 28
Flickr
posting photos to 239–240
Flyover 326–327
Tours feature 327–328
folders 270–272
creating and editing 270–271
deleting 271
moving 271
renaming 271
fonts
in iBooks 310
Larger Type option 478, 479
making type bolder 163
force quitting apps 276–278, 512
force restarting 13, 512
force restoring 514
full-screen mode 356
funny things Siri says 105–106

Game Center 301–304
Facebook integration 303
finding games 303–304
friends 303
getting started 302
history 301
parental controls 509
playing games 304
points and achievements 303
settings 497
Genius playlists 181–182
gestures
customizing inbox gestures 391
defining your own 171
double-tapping 30
dragging 28
Finger Browse photos 222–223
flicking 28
Flyover 327
Home button press speed 172
in AssistiveTouch mode 170
in VoiceOver mode 154
jump to address bar in Safari 357
magnify sections of a Web page 356
managing your inbox 390–391
momentary touch 18
Notification Center 42–44
pinching and spreading 29
punctuation with one gesture 62–63
reading email 391–392
rightward swipe in Mail 383
rotating in Maps 317
scroll up or down in Safari 356
selecting text in Safari 78
swiping 27
swiping in from the edge 30
working with photos 225–226
zooming 158
zooming in Maps 316
getting online 343–352. See also Safari
3G network 350
Airplane mode 346
cellular iPad 349–351
EDGE network 350
Instant Hotspot 349
Personal Hotspot 346–349
Safari 353–378
Safari settings 492–495
Twitter 352
WiFi 343–345
WiFi Off mode 346
Gmail 380–381
using to avoid spam 406
Google Maps 315
Google Mobile 274
Google search 358
Google Voice 152
Gorilla Glass 21
GPS. See also navigation
how the iPad does it 317
location-based reminders 339–341
location information 320–321
Navigation mode 324–325
status bar icon 23
turning off to save power 33
graphics
fetched images in email 487–488
saving from Safari 368
Grayscale mode 19
grid (camera) 208
group by album artist 191
groups
in Contacts 124–125
Guided Access (kiosk mode) 166–168

Handoff 453–455
settings 474
setting up 455–456
hashtags 352
HDR (high dynamic range) photos 209–210
headphone jack 25
HealthKit. See Health
hearing aids 165
“Hey, Siri” 88–104
turning off 109

hiding
flagged email folder 390
microphone button 476
photos 225
purchases from Family Sharing 451
VIP email folder 389

highlighting 311

History list 367–369
clearing 495
erasing 367–369

Home button 17–19
accessibility 19, 172
accessing the VIP list 19
app switcher 18–19
change click speed 172
defined 17
functions 17–19
gets sticky 170
in AssistiveTouch mode 170
multitasking (two presses) 18–19
trip-click 172
voice control shortcut 18
VoiceOver 19
waking the tablet 17
zooming 19

Home screen 35–36
background 36
badges 35
Dock 35–36
folders 270–272
icons 35
leaving the first screen empty 36
multiple 35
organizing your downloads 266–269
Reduce Motion feature 164
resetting layout 477
restoring 269
Web clips 366–369

Home Sharing
settings 496
videos 195, 496

HTML5 495

iAds
location privacy 482

iBackup Viewer 145

iBooks 304–314
alternatives to 305
bookmarks 311
brightness 310
controls 309–311
dictionary 311–314
downloading 305–306
free audiobook reader 313–314
free re-downloading 442–443
highlighting 311
notes 312
organizing your library 307–309
reading and turning pages 309–311
Scrolling view 310
searching 310
settings 314
sources of free books 307
syncing 425
syncing bookmarks 314
type size 310
white text on black 309

iCloud 433–456
acquiring during setup 503
automatic app updates 485
automatic backups 434
Back to My Mac 434
calendar syncing 436
Contacts syncing 436
defined 433–435
e-mail 433, 441
Find My iPad 438–441
free music, video, apps storage 442–443
iCloud Backup 437
iCloud Drive 283–286
iCloud Photo Library 255–257
iCloud Photo Sharing 250–254
Keychain syncing 437
limiting past events on Calendar 490
Lost Mode 439
notes sync 437
password syncing 437
Photo Stream 246–249, 437
“push” data on/off 486
Reminders syncing 336, 437
settings 435–438, 483
sharing calendars 296
signing up 433
storage prices 444–445
storage remaining 475
syncing 435–438
syncing Safari browser tabs 373
VIPs 388

iCloud Drive 283–286
accessing 284
expanding storage limit 286
initial setup 504
turning on 284

iCloud Keychain
initial setup 504
iCloud Photo Library  255–257
accessing your photos  256–257
All Photos  255, 256
icons  35
for internet connections  351
IMAP accounts  381–382
iMessages  136–145. See also text messages
advantages  136–137
Blocked list  150
defined  136–137
distinguishing from text messages  138
finding chat transcripts  145
improvements in iOS 8  146–149
on/off switch  149, 491
read receipts  149
sharing contacts  131
smileys palette  69
vs. text messages  136–137
iMovie for iPad  220
in-app purchases  508–510
Instagram  203, 275
Internet  343–352. See also getting online
parental controls  507–509
Safari  353–378
speeds  22
invert colors  19, 160
invitations  462–463
iOS 8
design  162–165
upgrading to  505–506
what’s new  7–9
iPad
accessories  27
Air 2  5–7
backing up  430–432
cellular  349–351
charging  30–31
defined  1–3
erase  477
information about  473
iPod features  173–200
locking and unlocking  13
mini 3  7
on/off switch  12
powering off  512
projecting the screen  200
recording the screen  200
screen  20–23
serial number  473
seven ways to reset  512–514
SIM card slot  24–25
sources for news, tips, and tricks  518
status bar icons  21–23
syncing  416–420
troubleshooting  511–518
turning off  12
usage statistics  475–476
used as a watch  15
waking  17
iPad Air 2
Apple Pay  445–447
camera  201
fingerprint scanner  48–53
price  501
slo-mo video  203, 217
universal SIM card  25
what’s new  5–7
iPad mini 3
Apple Pay  445–447
fingerprint scanner  48–53
price  501
what’s new  7
iPhone
iPhone apps on iPad  266
using to make calls on iPad  122–123
iPhoto  427–428
make it stop opening  428
opens automatically  427
replacement  428
iPod features  173–200. See also music
album art  185
albums list  183
artists list  183
compilations list  183
composers list  183
equalization  190
Genius playlists  181–182
genres list  183
looping  187
multitasking while playing music  188
Now Playing screen  184–188
opening  173
playback controls  186
playlists  180–181
scrubber  185
shuffle mode  188
songs list  183
Sound Check  190
switching among speakers  190
TV output  199
volume limit  191
iTunes  407–432
audiobooks  414–416
backing up the tablet  430–432
creating smart playlists  423–424
downloading  27
Encrypted iPad Backup 431
erase and restore tablet 513
Genius mix 182
Genius playlists 181-182
getting media onto your computer 410
importing from CD 410
Info tab 429
iTunes Match 443–444
iTunes Radio 173–179
iTunes Store 192–195
movies and TV shows 424
On My Device options 429
organizing apps 267–268
playlists 180–181, 410–412
podcasts 425
syncing with iPad 416–420
tabs 420–421
three apps in one 408–409
Tones tab 425–426
turn off autosyncing 419–420
upgrading the iOS 505
iTunes Match 443–444
iTunes Radio 173–179
controlling with Siri 99
creating a station 176
defined 173
deleting or editing stations 179
History button 179
Never Play This Song 175
New Station from Artist 177
New Station from Song 177
Now Playing screen 174–176
playback controls 176
playing 174
Play More Like This 175
play, pause, skip 176
Siri voice commands 179–180
skipping songs 176
iTunes Store 192–195, 412–416
alternative music stores 412
authorizing computers 415–416
defined 192
free re-downloading 442–443
iTunes U 414
Not in This iPad 194
podcasts 414
purchased items list 193–195
Redeem button 193
searching 193
settings 484–485
TV and movies 414
Wish List 175
iTunes U 414

J
Java 353
JavaScript 495

K
keyboard 55–70
auto-capitalization 476
autocorrect 476
Backspace 56
Caps Lock 56, 476
connecting a physical keyboard 69–84
emoji keyboard 69
hiding 143
international keyboards 67–68
loupe (magnifying glass) 57–58
numbers layout 56
period shortcut 56
QuickType settings 476
QuickType suggestions 59–60
resetting dictionary 477
Return key 57
selecting text 77–78
settings 476
Shift key 55
Speak Auto-Text command 161
spelling checker on/off 476
switching among keyboards 67
third-party 66–67
tips and tricks 57–84
typing shortcuts 64–84, 476
Typing Style options 156
widescreen mode 62–84
Keychain 437–438
Keynote Remote app 275
Kindle Reader 275
kiosk mode. See Guided Access (kiosk mode)

L
language
dictation 70–77
for video subtitles 197
initial setup 502
international keyboards 67–68
settings 476
Siri 86, 109
switching with the Rotor 156–157
Larger Type option 163, 478, 479
letterboxing 198–199
Lightning connector 26–27, 509–510
adapter plug 26
light sensor 24
links
  in email 392
  live in Messages 139
  settings 494
location-based reminders 339–340
  blue circle 340
Location Services 33, 481–482
  cellular triangulation 317–342
  how the iPad knows where it is 317
  initial setup 503
  location-based apps 16
  privacy settings 481
  resetting warnings 478
  Share My Location feature 481
  turn apps on and off 481–482
locking the tablet
  auto-lock on/off 475–476
locking the tablet 13–14
Lock screen 13–16
  functions of 14
  in AssistiveTouch mode 170
  Maps navigation 14
  missed calls and texts 15
  notifications 15, 45–54
  opening camera from 202
  security 16
  unlocking with Home button 18
  watch 14
Lost Mode 439
loupe (magnifying glass) 57–58
LTE networks 22, 350
  defined 350–351
  limited coverage 350–352
  turning off LTE 470

M
macro mode 205
Macs
  Handoff feature 453–456
  texting from 453–456
  using to make calls 122–123
magazines. See Newsstand
Mail app. See email
MapQuest 274
Maps 315–328
  bugs and controversy 315
  cellular positioning 317
  data problems 315
  driving directions 319
  finding friends and businesses 321–322
  finding yourself 318
  Flyover 326–327
  Flyover Tours 327–328
GPS 317
  Location page 320–321
  Navigation mode 324–325
  Night mode 325
  on Lock screen 14
  orienting the map 318
  searching for addresses 318–319
  settings 492
  spoken instructions volume 492
  Street vs. Satellite view 316
  tracking 318
  traffic reports 326
  voice control (Siri) 95
  WiFi positioning 317–318
memory
  freeing up 515–516
Messages. See text messages
microphones 26
  hiding the microphone button 476
Mint 275
MMS messaging. See text messages
mobile device management 458
moon icon. See Do Not Disturb
movies
  info from Siri 101
  playing in iTunes 424
multitasking 475
  background app refresh 475
  getting online while on a call 114
  in AssistiveTouch mode 170
  master on/off switch 475
music. See also iPod features, iTunes
  Radio, playlists
  control with Siri 99
  creating smart playlists 423–424
  equalization 190
  group by album artist 191
  iTunes Match 443–444
  iTunes Radio 173–179
  iTunes Store 192–195, 412–416
  iTunes Store alternatives 412
  monaural mode 165
  Now Playing screen 174–176
  playback settings 495–496
  scrubber 185
  Show All Music option 191–192
  song identification 99
  Sound Check 190
  storage 423–424
  switching among speakers 190
  syncing 416–417
  volume limit 191
  working in other apps 188
mute switch 114, 116
My Photo Stream 223
N

navigation. See also Maps, GPS
  in Maps app  324–325
  location-based reminders  339–340
networks
  resetting settings  477
  status bar icon  22
network speeds  22
newspapers. See Newsstand
Newsstand  328–330
  defined  328
  subscribing  329–330
Notes  330–332
  accounts (Google, Yahoo, etc.)  331–332
  defined  330
  iCloud syncing  437
  searching  331
  settings  490
  syncing  331, 461
  table of contents  331
  voice control (Siri)  97
Notification Center  42–54
  customizing  44–46
  gesture to open  30
  managing Lock screen  45–54
  Missed tab  44
  Notifications tab  44
  open from Lock screen  15
  redesign in iOS  8  43–44
  settings  472
  Today tab  43
notifications  41–48
  alerts  47
  answering  41
  banners  47
  customizing  44–46
  defined  41
  hiding  41
  Notification Center  42–54
  on Lock screen  15
  opening  41
  responding to  41–42
  spoken  157
  turning off  47
numbers layout  56

O

oleophobic screen  21
on/off switch  12
OpenTable  99
Outlook
  calendar invitations  462–463
  Encrypted iPad Backup  431
  Erase Data option  50
  fingerprint access to apps  52–53
  Keychain  437–438
  requiring for online purchases  509
  Safari suggestions  376
  turning off auto-lock  475
PDF files. See also iBooks
  open in iBooks  307
  zooming  311
period shortcut  56
Personal Hotspot  346–349
  defined  346
  fee for  347
  Instant Hotspot  349
  turning on  348
  via WiFi  348–349
phishing
  warning setting  495
Photo Booth  332–333
photos  201–203. See also camera
  adjusting color  232–234
  albums  223–224
  assigning to Contacts  127, 244
  attaching in Mail  402
  calendar invitations  462–463
  Outlook Web Access (OWA)  458
P

panoramas  214–215
parallax wallpaper
  on/off  164–165
parental controls  476–477, 507–509
  accounts  509
  blocking inappropriate material  508–509
  blocking websites  508–509
  explicit language  508
  Family Sharing  447–452
  Find My Friends  509
  Game Center  509
  Guided Access (kiosk mode)  166–168
  in-app purchases  508, 508–510
  movies, TV shows, games, raunchy song lyrics  508
  requiring password for purchase  509
  restricting apps  508
  Safari  377
  volume limit  509
Passbook
  iCloud syncing  437
passwords  369–371
  Encrypted iPad Backup  431
  for parental controls  507
  for online purchases  509
  Keychain  437–438
  Safari suggestions  376
  turning off auto-lock  475
PDF files. See also iBooks
  open in iBooks  307
  zooming  311
period shortcut  56
Personal Hotspot  346–349
  defined  346
  fee for  347
  Instant Hotspot  349
  turning on  348
  via WiFi  348–349
phishing
  warning setting  495
Photo Booth  332–333
photos  201–203. See also camera
  adjusting color  232–234
  albums  223–224
  assigning to Contacts  127, 244
  attaching in Mail  402

Index  531
auto-enhance 229
burst mode 211–212
collections 222
copying to Mac or PC 427–428
cropping 229–231, 230–231
deleting 227, 516
delivering 227, 516
drafts 78
emulating 379, 494
emailing 238–239
excluding bursts from iCloud 496
Faces 224
favoriting 228
filters 234–236
Finger Browse gesture 222–223
hiding 225
iCloud Photo Library 255–257
iCloud Photo Sharing 250–254
moments, collections, years 221–222
My Photo Stream 246–249
nondestructive editing 228
opening 220–228
panning 225–226
panoramas 214–215
Photo Booth effects 332–333
Recently Deleted folder 224
rotating and zooming 225–226
saving 236, 243
searching 226–227
sending to Facebook 239
settings 496
sharing in Family Sharing 452
sharing via AirPlay 243
sharing via email 238–239
sharing via text 238
sharing via third-party apps 241–242
sharing via Twitter 239–240
slideshow controls 242–243
slideshow settings 496
Square mode 213–214
syncing to iPad 426–428
texting recent 143–144
transferring to Mac or PC 427–428
using third-party editing apps 235–236
wallpaper 244–246
years 222
Photo Stream 246–249
defined 246
erasing all 249
iCloud syncing 437
on a Mac or PC 248–249
on Apple TV 249
on/off switch 314, 436, 496
opening 248
saving from deletion 248
Picasa 427–428
pinching and spreading 29
photos 225–226
playback controls 39, 186
in Control Center 39
iTunes Radio 176
scrubber 185
skip song 187
switching among speakers 190
videos 195
playlists 180–181, 410–412
creating 180–181
creating in iTunes 411
defined 180
editing or deleting 181, 412
Genius playlists 181–182
using 181–183
pods 333–336, 414
creating stations 336
playing 335–336
settings 335
subscribing to 335
POP3 accounts 381–382
popup blocker 375–377, 494
printing. See AirPrint
privacy
advertising settings 483
by app 482–483
Do Not Track 494
DuckDuckGo search engine 360
hiding notifications on Lock screen 15
hiding texts on Lock screen 150
Location Services settings 481–482
Private Browsing 377
settings 481–483
turning off search engine suggestions
359, 493
private browsing 377
projecting from iPad 200
pronunciation
fixing Siri’s 108–109
proximity sensor 24
punctuation
dictating 73–77
typing shortcuts 62–84
"push" email
on/off 486
turning off to save power 32
QuickType keyboard 59–60
settings 476
turning off 60
Quick Website Search 361
R
radio. See iTunes Radio
Reader mode (Safari) 374–377
Reading List 364–369
- iCloud syncing 437
Read Receipts
- on/off switch 491
Reddit
- searching 361
Redeem button 193
Reflector app 200
region
- settings 476–477
relatives
- recording in Contacts 128
Reminders
- adding a new task 338–339
- creating new lists 338
- Details screen 339–342
- iCloud syncing 437
- lists 337–341
- location-based reminders 339–340
- Scheduled list 338–341
- settings 491
- sharing in Family Sharing 452
- timed reminders 339
- voice control (Siri) 96, 337
Remind Me button 115
Remote app 275
repair service 517
resetting
- all settings 477, 512
- complete tablet erase 477
- erase and restore tablet 513
- force quitting 512
- force restoring 514
- location warnings 478
- network security 477
- troubleshooting steps 512–514
restarting
- force restart 512
restaurants 98
restoring the iPad 513
restoring the iPad 431–432, 503
- vs. upgrading 505–506
Restrictions. See parental controls
Retina display 21
Return key 57
ringtones 425–426, 479
- different for each person 129
- for text messages 129
- settings 479, 479–480
- volume 479
Rotate Screen
- in AssistiveTouch mode 170
Rotation Lock 38–39
- status bar icon 23
Rotor 155–156
RSS feeds 361, 366
Rule of Thirds grid 208
S
Safari 353–378
- address bar 357
- Autocomplete 358–361
- AutoFill contact information 369
- AutoFill on/off 493
- AutoFill passwords 369
- Back button 353
- bookmarks 361–364
- cache 377
- clearing cache 516
- clearing History list 495
- combined search/address bar 354–355
- cookies 376–377, 495
- credit cards (stored) 369–371
- Favorites page 373–374
- full-screen mode 356
- graphics 368
- History list 367–369
- iCloud syncing of bookmarks 437
- iCloud tabs 373
- loupe (magnifying glass) 57–58
- memorized credit card info 369
- multiple pages 371–372
- open new window 371–372
- parental controls 377
- passwords 369–371
- password suggestions 376
- phishing warning setting 495
- popup blocker 375–377, 494
- private browsing 377
- Quick Website Search 361
- Reader mode 374–377
- Reading List 364–369
- Reload button 355
- rotating 356
- RSS feeds 366
- search engine choice 492, 493
- searching 358–361
- security 375–377
- selecting text 78
- settings 492–495
- Stop button 355
- Subscriptions (RSS feeds) 366
- switch among open windows 372–373
- switch to desktop version of Web sites 375
- switch to Google 358
tabbed browsing 371–372
tapping links 367–368
Top Hits 358
Web clips 366–369
Web Inspector 495

saving
emailed graphics and pictures 397
graphics from Web 368
photos 243

screen 20–23
brightness settings 478–479
dimming to save power 32
fixing cracks 518
Grayscale mode 160
increasing contrast 164
protecting 21
turning off 33, 34, 155
turning off auto-brightness 32
wallpaper 479
white-on-black mode 160

Screen Curtain 155
screeshots 257
how to capture 257
in AssistiveTouch mode 170

scrubber
music 185
videos 195

searching 81–84
available apps 81–82
e-mail 399–400
iBooks 309, 310
limiting scope 83–84
Maps 318–319
Notes 331
personalizing 83–84
photos 226–227
Quick Website Search 361
settings 474, 478, 479
text messages 141
turning off suggestions 493
what Spotlight searches 81–82
within a website 493
your calendar 296

security
Activation Lock 441
clearing History list 495
cookies 376–377, 495
corporate concerns 458–459
Family Sharing 447–452
fingerprint access to apps 52–53
online parental controls 377
parental controls 507–509
passwords and credit cards 369–371
phishing warning setting 495
popup blocker 375–377, 494
private browsing 377
protecting the Lock screen 16
restrictions (parental controls) 476–477
Safari 375–377
Send Last Location feature 440–441
setting up a password 48–50
setting up fingerprints 50–54
Touch ID 50–54

selecting text 77–78
Send Last Location 441
serial number 421

Settings
advertising 483
AirDrop 283
Airplane mode 468–469
app preferences 272
background apps 278
Bluetooth 470
brightness 478–479
Calendars 489–490
carrier 470
cellular 470–472
change with Siri 89–90, 109–110
Contacts 488–489
Control Center 37–40
Date & Time 476
Diagnostics & Usage 483
dictionary 477
Display & Brightness 478–479
Facebook 483
FaceTime 492/Game Center 497
General 473–478
Home screen 477
iCloud 483
iTunes Store 484–485
keyboard 476
Location Services 481–482
Mail 486–488
Mail, Contacts, Calendars 485–490
manage storage space 515–516
Maps 492
Music app 495–496
Notes 490
Notification Center 44–46
notifications 472
On/Off labels 165
password 48–50
photos 496
Podcasts app 335
privacy 480, 481–483
“push” data 486
Reduce Motion 164
Reminders 491
Reset buttons 477
setting up a new tablet 501–505
setup assistant 501
shake to undo 79
shared photo streams
adding to 254
changing invitees 254
creating 250–251
deleting 254
receiving 253–254
settings 251–253
subscriber posting 251
technical requirements 250
SharePoint 463
Share sheet 279–280
  AirDrop 281
  bookmarks 374
  calendars 296
defined 279
  file attachments 397
  iBooks highlighting and notes 312
  Safari links 365
  third-party sharing options 280
sharing
  AirDrop 281–283
  contacts 131
  Contacts 131
  iCloud calendars 296
  iCloud Photo Sharing 250–254
  iTunes Radio stations 178
  photos from texts 145
  Share sheet 279–280
  Twitter and Facebook 352
  uploading or sending videos 240
Shift key 55
shortcuts
  abbreviation expanders 64–65
  double-tap to scroll in Safari 356
from Lock screen to app 15
getting information from Google 361
in Settings 468
jump to next Reading List article 365
opening the camera quickly 201–202
putting a folder in the Dock 271
responding to emails 398
set alarms with Siri 299
smoother video zooming 217
tapping links 367–368
typing “.com” 355
signatures 405
SIM card 24–25
  set PIN 471
  universal 25
Siri 86–110
  alarm clock 90
  and iTunes Radio 179–180
  appointments 94–95
  booking restaurants 98
  business lookups 97–98, 98–99
  calendar lookups 94–95
  changing settings with 37–38, 89–90
  changing voice gender 110
  clock 91
  Contacts lookup 91
  controlling radio 99
  dialing by voice 90
  driving directions 95
  email 93–94
  Facebook and Twitter commands 103
  finding facts 102–103
  Find My Friends 100
  fixing name comprehension 108–109
  funny things Siri says 105–106
  gender of 87
  “Hey, Siri” feature 88–104
  history of 86
  Home button 18
  how to trigger 87
  in AssistiveTouch mode 170
  language and accent 86, 109
  making to-do lists 337
  movie info 101
  music playback 99
  notes 97
  opening Settings panels 90
  personality 105–106
  price lookups 99
  pronunciation learning 108
  relationships (mom, boss, etc.) 108
  Reminders 96
  searching Twitter 104
  security 104
  settings 109–110
restoring from a backup 503
restrictions (parental controls) 476–477
ringtones 479
Safari 492–495
Shared Photo Stream 251–253
SIM card PIN 471
Siri 474
slideshows 496
sounds 479–480
Spotlight 474, 478, 479
text messages 149–150, 491–492
text-size slider 478–479, 479
threading on/off 488
time zones 489–490
Twitter 483
wallpaper 479
WiFi 469
song identification 99
sports scores 101
step by step 87
stock lookups 100
text messages 92–93
timer 91
troubleshooting 105
voice control of settings 468
weather 99–100
Web searches 100–101
what to say 88–104
Wolfram Alpha 101, 101–102, 102–103
skip song
iTunes Radio 176
on your iPad 187
Skype 275
Sleep switch 11, 12–13
slideshows 242–243
looping 496
music 242
playback 243
shuffle mode 496
transitions 242
slide to power off 12
slow-motion video 203
smart playlists 423–424
smiley s
emoji keyboard 69
SMS text messages 151–152
software updates 473, 506–510, 511
sounds
alarms and alerts 479–480
spam 405–406
Speak Auto-text 161–163
speakerphone 26, 116
speakers 188–190
switching among 190
speaking. See voice control
speech 161
Alex voice 155
dictation 70–77
iBooks reads to you 313
Speak Auto-Text command 161
Speak Screen command 161
Speak Selection command 80–81, 161
speech rate 156
speech to text. See dictation
spelling checker 61
dictionary 61
on/off 476
sports scores 101
Spotlight. See also searching
gesture to open 35
how to use 81–83
settings 493
Suggestions feature 82–83
Sprint
data network speeds 350
LTE network 350–351
standby mode
waking the iPad 17
status bar 21–23
Airplane mode 22
battery meter 23
cell signal 21
clock 22
GPS 23
lock 22
Lock Rotation 23
network speeds 22
network type 22
syncing 23
VPN 23
WiFi signal 22
stocks
voice control (Siri) 100
stopwatch 300
storage 423–424
iCloud Drive 283–286
optimizing 256
subtitles 166
font, size, and color 166
language 197
on/off 166
Suggested Apps
settings 474
swapping calls 116
swiping 27, 30
swipe options 487
Switch Control 19, 168–169
syncing 416–420
applications 422
automatic 416–417
Continuity 452–456
defined 416
drag and drop 420
ebooks and audiobooks 425
from tablet to computer 427–428
Handoff feature 453–456
iBooks bookmarks 314
iTunes tabs 420–421
manually 419–420, 420
multiple iPads 430
Notes 331
photos 426–428
Reminders to iCloud 336
turn off autosyncing in iTunes 419–420
via iCloud 435–438
via WiFi 417–418
wirelessly with Exchange 457–466
tethering. See Personal Hotspot

text
cutting, copying, pasting 78
reading 80–81
selecting 77–78.

Textfree with Voice 152
text messages 135–152
addressing and sending 143
audio texting 146–147
Blocked list 150
deleting 516
Do Not Disturb feature 140
Google Voice 152
hiding on Lock screen 150
iMessages 136–145
iMessages on/off 491
improvements in iOS 8 146–149
jump into a phone call 139
list of conversations 141–142
mark all messages as read 143
marking as read 143
preserving 145
preview on/off 150
Read Receipts on/off 491
receiving 138–139
repeat alert 145, 150
Reply with Text option 114–115
saving incoming photos or videos 145
searching 141
sending recent photos 143–144
sending regular SMS messages 151–152
settings 149–150, 491–492
sharing photos and videos 238
sharing your location 140
smileys palette 69
texting from a Mac 453–456
text tones 150
third-party apps 152
video messaging 147–148
viewing attachments 140
voice control (Siri) 92–93
text tones 150
distinct for each person 129
text to speech
Speak Auto-text 161–163
VoiceOver 154–163
third-party keyboards 66–67
installing 67
limitations 67
threading
e-mail 386–387
time
setting 476
using iPad as watch 15
Timer 40, 300–301
turning off music or video 300
voice control (Siri) 91
time zones 489–490
auto-set on/off 482
Tips app 341
Today screen 43
to-do lists 336–341. See also Reminders
Touch ID 50–54, 504
access to apps and Web sites 52–53
fingerprint access to apps 52–53
renaming or deleting fingerprints 52
training a fingerprint 51
troubleshooting 52
where fingerprints are stored 52
traffic reports 326
data-sending controls 481
troubleshooting 511–518
battery life 515
battery replacement 517
cracked screen 518
device identifiers 421
diagnostics preferences 505
Diagnostics & Usage settings 483
erase and restore tablet 513
Exchange ActiveSync 463
first rule of 511
force quitting 512
force restarting 512
force restoring 514
installing updates 511
photo program opens by itself 428
reset all settings (preserve data) 512
restoring from backup 431–432
running out of memory 515–516
Siri 105
steps to reset 512–514
tablet won’t turn on 514
Touch ID 52
warranty and repair 517
Web Inspector 495
turning iPad off 12
TV shows
free re-downloading 442–443
watching in iTunes 424
Twitter 275, 352
account settings 352
alert sounds 480
app 352
apps accessing your account 483
defined 352
hashtags 352
importing Contacts 129
posting photos to 239–240
posting with Siri 103
privacy 483
searching with Siri 104
settings 483
Share button 352
Shared Links button 365–366
sharing Web links 365
special keyboard 352
Update Contacts button 498

typefaces. See fonts
typing
abbreviation expander shortcuts 64–65
accented characters 63–84
in non-English languages 67–68
punctuation 62–84
resetting dictionary 61
selecting text 77–84
smiley 69
spelling checker 61–84
third-party keyboards 66–67
turning shortcuts on and off 476
Undo 79

U

Undo 79
unified inbox 385–386
customizing 385–386
unlocking the iPad 13
Update All Contacts 128
updates
install from computer 506–507
installing 511
turning off auto app updates 32
upgrading
an older tablet to iOS 8 505–506
via a restore 506
via iTunes 505
vs. restoring 505–506
wirelessly 505
usage statistics 475–476
USB cable 27

V

Verizon
data network speeds 350
LTE network 350–351
video calling. See FaceTime
video messages 147–148
auto-deleting 492
videos
aspect ratios 198
attaching in Mail 402
closed captioning 496
deleting 516
descriptions for the blind 166
earbuds clicker 196
editing 219–220
focus and zoom while rolling 217
free re-downloading 442–443
iCloud Photo Sharing 250–254
language (subtitles) 197
pausing and skipping 196
playback controls 195
posting to Vimeo 241
posting to YouTube 240–241
Recently deleted folder 224
recording 216–217
rewind, fast forward 196
scrubber 195
settings 496
sharing via email 238–239
sharing via text 238
Slo-Mo mode 217–218
storage 423–424
subtitles 166
Time-Lapse mode 218–219
TV output 199
Videos app 195–200
zooming 198
zooming while recording 217
Videos app 195–200
Vimeo
posting videos to 241
VIPs 277–278
accessing VIP list 19
email alerts 388
in email 387–389
voice control. See also Siri
shortcut 18
VoiceOver 154–163
Alex voice 155
gestures 154
Navigate Images options 157
on/off with Home button triple-click 172
phonetic feedback 156
Rotor 155–156
special finger gestures 154
speech rate 155–156
typing in Braille 155
volume 155–156
voice recognition. See dictation
volume
limit 191, 509
of Maps spoken instructions 492
of ringer 479, 479–480
turning off volume keys 479
VoiceOver 155–156
volume keys
  camera-shutter shortcut 210
    in AssistiveTouch mode 170
VPN (virtual private networking) 464–466
  status bar icon 23
  VPN on Demand 465–466

W

waking the tablet 12
wallpaper 479
  dynamic (animated) 244–246
  parallax effect (turning off) 164–165
  photos 244–246
warranty 517
  battery replacement 517
Web browser. See Safari
Web clips 366–369
Web sites about the iPad 518
what's new in iOS 8 7–9
  add outlines around buttons 163–164
  Alex voice 155
  Apple Pay 445–447
  apps' adding sections to Today screen 43
  audio texting 146–147
  Battery Usage screen 34
  beefed-up corporate features 458
  Bluetooth LE 132
  Camera app improvements 201, 202–203
  camera exposure control 206
  camera self-timer 212–213, 212–216
  changes to Albums tab in Photos 223–224
  compatibility with third-party keyboards 66–67
  Continuity 452–456
  Details screen in Messages 139–140
  Do Not Disturb feature in Messages 140
  entering credit cards with the camera 370
  Family Sharing 447–452
  favoriting photos 228
  fingerprint access to apps 52–53
  Flyover Tours 327–328
  formatting in Notes app 330
  Grayscale mode 160
  Handoff 453–456
  “Hey, Siri” 88–104
  hiding photos 225
  iCloud Drive 283–286
  iCloud Photo Library 255–257
  iCloud Photo Sharing 250–254
  improvements to AirDrop 455–456
  improvements to iMessages 146–149
  inbox gestures 390–391
  Keep Messages setting 491
  leaving the first Home screen empty 36
  location-based apps 16
  location-sending features 140
  manage email from alert banner 383
  more accurate dictation 70
  new photo editing tools 228–236
  Notification Center redesign 43–44
  Notify Me option in email 393
  phonetic feedback 156
  photo search feature 226–227
  photo sharing via third-party apps 241–242
  Podcasts app 333–336
  QuickType keyboard suggestions 59–60
  Quick Website Search 361
  recent contacts in app switcher 277–278
  Recently Deleted photos folder 224
  saved credit cards 369–371
  saving emailed calendar/contact info 397–398
  Scrolling view in iBooks 310
  Send Last Location feature 440–441
  Show All Music option 191–192
  song identification 99
  Speak Auto-Text command 161
  Speak Screen command 161
  Spotlight Suggestions 82–83
  Subscriptions (RSS feeds) 366
  switch to desktop version of Web sites 375
  texting from a Mac 453–456
  texting your most recent photos 143–144
  third-party photo editing 235–236
  third-party sharing options 280
  time-lapse video 218–219
  time limits in Guided Access mode 168
  Tips app 341
  Touch ID 50–52
  Travel Time settings in Calendar 291
  turning off search engine suggestions 493
  typing in Braille 155
  Typing Style options 156
  using a Mac to make calls 122–123
  video messaging 147–148
  viewing text message attachments 140
  VIP list 19
white cable 27
white-on-black mode 160
widescreen keyboard 62–84
WiFi 343–345
    address 473
    Airplane mode 346
    commercial hotspots 345
    controlling by voice 89
    corporate security 458–459
    hotspot connection data 345
    hotspot invitations 344
    hotspot speeds 351
    initial setup 502
    in Maps app 317–318
    Instant Hotspot feature 453
    list of hotspots 345, 469
    location triangulation 317
    on/off 469
    printing with AirPrint 278–279
    sequence of connections 344–345
    settings 469
    speed of 351
    tethering 346–349
    turning off 32
    using while on a call 114
    WiFi Off mode 346
    wireless syncing with iTunes 417–418
Wikipedia
    searching 361
Windows AutoPlay
    make it stop opening 428
Wish List (iTunes Store) 175
Wolfram Alpha 101, 101–102, 102–103
World Clock 296–298

Y

Yahoo
    email 380–381
    free email groups 401
Yelp 320

Z

ZIP files 397
zooming 19, 157–160
    camera 207–208
    email type size 391–392
    Follow Focus command 159
    gestures 158
    on/off with Home button triple-click 172
    open the Zoom menu 159
    photos 225–226
    Show Controller command 159–160
    video 196
    world clocks 297
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