In Full Color



11th Edition

iPhone®





Covers the latest iPhones including iPhone 8/8 Plus

Get the lowdown on iOS 11 tools and applications

Load up your iPhone with fun and useful apps

Edward C. Baig Bob "Dr. Mac" LeVitus



iPhone

11th Edition

by Edward C. Baig

USA Today Personal Tech columnist

and

Bob LeVitus

Houston Chronicle "Dr. Mac" columnist



iPhone® For Dummies®, 11th Edition

Published by: John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

Copyright © 2018 by John Wiley & Sons, Inc., Hoboken, New Jersey

Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748–6011, fax (201) 748–6008, or online at http://www.wiley.com/go/permissions.

Trademarks: Wiley, For Dummies, the Dummies Man logo, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and may not be used without written permission. iPhone is a registered trademark of Apple, Inc. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc. is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002. For technical support, please visit https://hub.wiley.com/community/support/dummies.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2017956350

ISBN 978-1-119-41717-0 (pbk); ISBN 978-1-119-41718-7 (ebk); ISBN 978-1-119-41720-0 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Contents at a Glance

Introduction	1
Part 1: Meet Your iPhone CHAPTER 1: Unveiling the iPhone CHAPTER 2: iPhone Basic Training. CHAPTER 3: Synchronicity: Getting Stuff to and from Your iPhone CHAPTER 4: Understanding the Phone-damentals.	
Part 2: The PDA iPhone CHAPTER 5: Taking Control of Your iPhone CHAPTER 6: Texting 1, 2, 3: Messages and Notes CHAPTER 7: Nine Indispensable Utilities.	99
Part 3: The Multimedia iPhone CHAPTER 8: Get in Tune(s): Audio on Your iPhone CHAPTER 9: "Smile": Taking Pictures with Your iPhone CHAPTER 10: Starring in a Blockbuster: Video on Your iPhone	151 169
Part 4: The Internet iPhone CHAPTER 11: Going on a Mobile Safari CHAPTER 12: The Email Must Get Through CHAPTER 13: Tracking with Maps, Compass, Stocks, Weather, and Files	217 235
Part 5: The Undiscovered iPhone CHAPTER 14: Setting You Straight on Settings. CHAPTER 15: Apps-O-Lutely! CHAPTER 16: When Good iPhones Go Bad	285 315
Part 6: The Part of Tens CHAPTER 17: Ten Appetizing Apps. CHAPTER 18: Ten Apps Worth Paying For. CHAPTER 19: Ten Helpful Hints, Tips, and Shortcuts	343 355
Index	381

Table of Contents

INTRODUCTION	1
About This Book	1
Foolish Assumptions	2
Icons Used in This Book	
Beyond the Book	
Where to Go from Here	
Timere to do from there is a second of the s	
PART 1: MEET YOUR iPHONE	5
CHAPTER 1: Unveiling the iPhone	7
The Big Picture	
The iPhone as a phone and a digital camera or camcord	
The iPhone as an iPod	
The iPhone as an Internet communications device	
Technical specifications	
A Quick Tour Outside	
On the top and side	
On the bottom	
On the back	
Status bar	
Home Sweet Home Screen	
The first Home screen	
The second Home screen	
The dock (all Home screens)	
CHAPTER 2: iPhone Basic Training	25
Activating the iPhone	26
Turning the iPhone On and Off	28
Pointing a finger at Touch ID	29
Continuing the setup	
Locking the iPhone	32
Understanding Pressure-Sensitive Touch	34
Mastering the Multitouch Interface	34
Discovering the special-use keys	36
One-handed keyboard	
The incredible, intelligent, and virtual iPhone keyboard.	
Anticipating what comes next	
Finger-typing on the virtual keyboards	
Correcting mistakes	
Choosing an alternative keyboard	
Cutting, copying, pasting, and replacing	
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,	

	Multitasking	46
	Navigating beyond the Home Screen	47
	Organizing Icons into Folders	48
	Proactive Searching	
	Notifications and the Today View	51
CHAPTER 3:	Synchronicity: Getting Stuff to and	
	from Your iPhone	55
	A Brief iCloud Primer	57
	The Kitchen Sync	
	First things first: About iPhone backups	
	Sync prep 101	
	Syncing Your Data with iTunes	
	Syncing contacts	
	Syncing calendars	66
	Advanced syncing	66
	Synchronizing Your Media	
	Music, movies, TV shows, and podcasts	
	Photos	
	Manual Syncing	71
CHAPTER 4:	Understanding the Phone-damentals	75
	Making a Call	76
	Contacts	76
	Favorites	78
	Recents	80
	Keypad	81
	Visual voicemail	
	Recording a greeting	
	Voice dialing	
	Receiving a Call	
	Accepting the call	
	Announcing the caller	
	Rejecting the call	
	Replying with a text message	
	Blocking callers	
	Avoiding disturbances	
	Choosing ringtones	
	While on a Call	
	Juggling calls	
	Handing off calls	
	Seeing Is Believing with FaceTime	

PART 2	2: THE PDA iPHONE	97
CHAPTER 5:	Taking Control of Your iPhone Controlling Control Center. Summoning Siri. Figuring out what to ask. Using dictation. Correcting mistakes Making Siri smarter. Type to Siri.	100102104105105106
CHAPTER 6:	Texting 1, 2, 3: Messages and Notes	109
	Getting the iMessage You send me: Sending text messages Alert: You've got messages. Being a golden receiver: Reading and replying to text messages MMS: Like SMS with media Massive multimedia effects Group messaging has never been better	109112115117
	Taking Note of Notes	121
CHAPTER 7:	Nine Indispensable Utilities	123
	Working with the Calendar Year view. Month view. Day view Week view. List view. Adding Calendar Entries. Letting your calendar push you around. Displaying multiple calendars Responding to meeting invitations. Subscribing to calendars Sharing a family calendar. Calculate This. Punching the Clock World clock. Alarm clock. Stopwatch. Timer	124 125 125 126 130 131 132 132 133 134 134 135 137

	Voicing Memos	38 39 39 40 43 44 45
PART 3	: THE MULTIMEDIA iPHONE14	49
CHADTED 9.	Get in Tune(s): Audio on Your iPhone	51
CHAPTER 6.	Introducing Your iPhone's Music Player	52 56 56 58 60 62 64 64 66 66
CHAPTER 9:	"Smile": Taking Pictures with Your iPhone16	59
	Taking Your Best Shot	72 73 74 74 75
	Binging on burst shooting	78 80
	Tracking Down Your Pictures	81 82 84 85
	Sharing your photos	26

Admiring Your Pictures	188
Maneuvering and manipulating photos	
Launching slideshows	
Storing pictures in the (i)Cloud	
Editing and Deleting Photos	
Livening Up Live Photos	
More (Not So) Stupid Picture Tricks	196
CHAPTER 10: Starring in a Blockbuster: Video on Your iPhone.	201
Finding Stuff to Watch	202
Playing Video	203
Shooting Video	
Going slow	
Going fast	
Editing what you shot	
Sharing video	
Watching video on TV	
Augmented reality	
Restricting video and other usage	213
PART 4: THE INTERNET IPHONE	215
CHAPTER 11: Going on a Mobile Safari	217
Surfin' Dude	
Exploring the browser	
Blasting off into cyberspace	
l Can See Clearly Now	
Opening multiple web pages at a time	
Looking at lovable links	
Book(mark) 'em, Dano	
Altering bookmarks	
Viewing open pages on other devices	
Letting history repeat itself	
Launching a mobile search mission	
Saving web pictures	
Reading clutter-free web pages	
Private Browsing	
3D Touch and Safari	
Smart Safari Settings	∠≾≾
CHAPTER 12: The Email Must Get Through	
Prep Work: Setting Up Your Accounts	
Setting up your account the easy way	
Setting up your account the less easy way	236

	Me, Read Me, File Me, Delete Me: Working with Messages	
	Reading messages	
	ilter mail	
	Managing messages	
	hreading messages	
	searching emails	
	ing, You Send Me (Email)	
	Makin' messages	
	ettings for sending email	
	setting your message and account settings	
S	special Mail options on 3D Touch models	263
CHAPTER 13: Tra	cking with Maps, Compass, Stocks,	
We	ather, and Files	265
Мар	s Are Where It's At	265
F	inding your current location with Maps	266
F	inding a person, place, or thing	267
V	iews, zooms, and pans	268
Т	imesaving map tools: Contacts, Recents, and Favorites \dots	270
	Smart map tricks	
	templating the Compass	
	ng Stock with Stocks	
	Adding and deleting stocks, funds, and indexes	
	Details, details, details	
	Charting a course	
	ther Watching	
Keep	oing Track of Documents with Files	281
PART 5: TH	HE UNDISCOVERED IPHONE	283
CHAPTER 14: Set	ting You Straight on Settings	285
	High Settings	
-	ıll about you	
	xirplane mode	
	vi-Fi	
	Bluetooth	
C	Cellular	291
	Emergency SOS	
	ort, Sound, and Appearance Settings	
	Notifications	
	Control Center	
	Oo Not Disturb	
	Privacy	
		205

Happy haptics (iPhone 7 and later)	
Happy Home button (iPhone 7, 7 Plus, 8, and 8 Plus)	
Brightening up your day	
Auto-lock	298
Wallpaper	298
In General	299
About About	299
Software update	300
Storage	
Background App Refresh	300
Siri & Search	300
Handoff	301
CarPlay	301
VPN	301
iTunes Wi-Fi sync	
Battery	302
Touch ID & Passcode	
iTunes & App Store	
Wallet & Apple Pay	
Restrictions	
Date & Time	
Keyboard	
Language & Region	
Dictionary	
Accessibility	
Reset	
Phoning In More Settings	
Promoting harmony through Family Sharing	
Sorting and displaying contacts	
Nothing phone-y about these settings	
Find My iPhone	313
Anna O Lutolul	245
CHAPTER 15: Apps-O-Lutely!	
Finding Apps	
Browsing for apps	
Finding more information about an app	
Downloading an app	
Updating an app	
Deleting and Organizing Your Apps	
Deleting an app	
Organizing your apps	
Books, Newspapers, and Magazines	
iBooks for your iPhone	
Newspapers and magazines	324

CHAPTER 16: When Good iPhones Go Bad
iPhone Issues 328 But first 328 Recharge your iPhone 329 Restart your iPhone 330 Reset your iPhone 330 Remove your content 331 Reset your settings and content 331 Restore your iPhone 332 Renew your iPhone with Recovery mode 333 Problems with Calling or Networks 334 Sync, Computer, or iTunes Issues 336 More Help on the Apple Website 337 If Nothing We Suggest Helps 338 Dude, Where's My Stuff? 340
PART 6: THE PART OF TENS 341
CHAPTER 17: Ten Appetizing Apps 343 Shazam 344 TurboScan 345 TripCase 346 Evernote 348 Bill Atkinson PhotoCard 349 IMDb 350 Tunity 351 iTunes U 351 Waze 352 WebMD 353
CHAPTER 18: Ten Apps Worth Paying For .355 Akinator VIP .355 Comics by Comixology .357 OldBooth. .358 Action Movie FX .359 Halide .361 iTeleport .361 Baseball Statistics .363 Dark Sky Weather .364 Wallet .365 Heads Uni .365

CHAPTER 19: Ten Helpful Hints, Tips, and Shortcuts.	367
Do the Slide for Accuracy and Punctuation	
Autocorrect Is Your Friend	
Auto apostrophes are good for you	
Make rejection work for you	
Assault on Batteries	
Tricks with Links and Phone Numbers	
Share the Love and the Links	
Choose a Home Page for Safari	
Like a Time Machine for iPhone Backups	
Create Ringtones for Free in GarageBand	
Getting Apps out of the Multitasking Screen	
Taking a Snapshot of the Screen	
INDEX	381

Introduction

recious few products ever come close to generating the kind of buzz seen with the iPhone. Its messianic arrival receives front-page treatment in newspapers and top billing on network and cable TV shows year after year. People line up days in advance just to ensure landing one of the first units. Years from now, people will still insist, "I was there on day one."

But we trust you didn't pick up this book to read yet another account about how this year's iPhone launch was an epochal event. We trust you *did* buy the book to find out how to get the very most out of your remarkable device. Our goal is to deliver that information in an informed but light and breezy fashion. We expect you to have fun using your iPhone, and we hope you have fun spending time with us.

About This Book

Let's get one thing out of the way right from the get-go. We think you're pretty darn smart for buying a *For Dummies* book. That says to us that you have the confidence and intelligence to know what you don't know. The *For Dummies* franchise is built around the core notion that all of us feel insecure about certain topics when tackling them for the first time, especially when those topics have to do with technology.

As with most Apple products, every iPhone to date is beautifully designed and intuitive to use. And though our editors may not want us to reveal this dirty little secret (especially on the first page, for goodness' sake), the truth is you'll get pretty far just by exploring the iPhone's many functions and features on your own, without the help of this (or any other) book.

Okay, now that we spilled the beans, we'll tell you why you *shouldn't* run back to the bookstore and request a refund: This book is chock-full of useful tips, advice, and other nuggets that will make your iPhone experience all the more pleasurable. So keep this book nearby and consult it often.

But before you do that, let us tell you a bit about how we go about our business. *iPhone For Dummies*, 11th Edition makes generous use of numbered steps, bullet lists, and pictures. Web addresses look like this: www.boblevitus.com. For those reading the e-book version, links are live so you can click them.

We also include sidebars with information that is not required reading (not that any of this book is) but that we hope will provide a richer understanding of certain subjects. Overall, we aim to keep technical jargon to a minimum, under the guiding principle that with rare exceptions you need not know what any of it really means.

Foolish Assumptions

Although we know what happens when you make assumptions, we've made a few anyway. First, we assume that you, gentle reader, know nothing about using an iPhone or iOS — beyond knowing what an iPhone is, that you want to use iOS, that you want to understand your iPhone and its operating system without digesting an incomprehensible technical manual, and that you made the right choice by selecting this particular book.

And so, we do our best to explain each new concept in full and loving detail. Perhaps that's foolish, but . . . oh, well.

One last thing: We also assume that you can read. If you can't, please ignore this paragraph.

Icons Used in This Book

Little round pictures (icons) appear in the left margin throughout this book. Consider these icons miniature road signs, telling you something extra about the topic at hand or hammering a point home.

Here's what the five icons used in this book look like and mean.



This text contains the juicy morsels, shortcuts, and recommendations that might make the task at hand faster or easier.

TIP



This icon emphasizes the stuff we think you ought to retain. You may even jot down a note to yourself in the iPhone's Reminders app.

REMEMBER



TECHNICAL STUFF

Put on your propeller beanie hat and pocket protector; this text includes truly geeky stuff. You can safely ignore this material, but we wouldn't have bothered to write it if it weren't interesting or informative.



WARNING

You wouldn't intentionally run a stop sign, would you? In the same fashion, ignoring warnings may be hazardous to your iPhone and (by extension) your wallet. There, you now know how these warning icons work, for you have just received your very first warning!



NEW

Denotes a feature that's new in iOS 11, new in iTunes 12.7, or new in the latest and greatest iPhones, the iPhone 8 and 8 Plus. What do we mean by *new*? Mostly that it wasn't available last year and wasn't covered in previous editions of this book.

Beyond the Book

For details about significant updates or changes that occur between editions of this book, go to www.dummies.com, search for *iPhone For Dummies*, and open the Download tab on this book's dedicated page.

In addition, the cheat sheet for this book has tips for mastering multitouch; a list of things you can do during a phone call; managing contacts; and where to find additional help if your iPhone is acting contrary. To get to the cheat sheet, go to www.dummies.com, and then type iPhone For Dummies cheat sheet in the Search box.

Where to Go from Here

Where to turn to next? Why straight to Chapter 1, of course (without passing Go).

In all seriousness, we wrote this book for you, so please let us know what you think. If we screwed up, confused you, left something out, or — heaven forbid — made you angry, drop us a note. And if we hit you with one pun too many, it helps to know that as well.

Because writers are people too (believe it or not), we also encourage positive feedback if you think it's warranted. So kindly send email to Ed at baigdummies@gmail.com and to Bob at iPhoneLeVitus@boblevitus.com. We'll do our best to respond to reasonably polite email in a timely fashion.

Most of all, we want to thank you for buying our book. Please enjoy it along with your new iPhone.

Meet Your iPhone

IN THIS PART . . .

Get a big-picture overview of the iPhone and a quick tour of its hardware and software.

Activate the phone, turn it on and off, unlock and lock it, and master its multitouch interface.

Synchronize your data — contacts, appointments, movies, songs, podcasts, and such — between your computer, your iPhone, iCloud, and other iDevices.

Make and receive calls on the iPhone — even video calls — use visual voicemail, select a ringtone, and ignore, juggle, and merge calls.

- » Looking at the big picture
- » Touring the outside of the iPhone
- » Checking out the iPhone's apps

Chapter **1**Unveiling the iPhone

ongratulations. You've selected one of the most incredible handheld devices we've ever seen. Of course, the iPhone is one heck of a wireless telephone, but it's actually *four* handheld devices in one. At least it's four devices right out of the box. Add some iPhone apps, and your iPhone becomes a PDA, an e-book reader, a handheld gaming device, a memory jogger, an exercise assistant, and ever so much more. We discuss optional apps — how to obtain, install, and delete them — throughout the book and particularly in Chapters 15, 17, and 18.

For now, we focus on the four awesome handheld devices your iPhone is the day you take it out of the box. In addition to being a decent cellular telephone, the iPhone is a gorgeous widescreen video player, a fantastic 8- or 12-megapixel camera/camcorder, as well as a tiny-yet-powerful Internet communications device.

In this chapter, we offer a gentle introduction to all four devices that make up your iPhone, plus overviews of its revolutionary hardware and software features.

The Big Picture

The iPhone has many best-of-class features, but perhaps its most unusual feature is the lack of a physical keyboard or stylus. Instead, it has a super-high-resolution (326 pixels per inch for all but Plus models, which have an astonishing 401 pixels per inch) touchscreen that you operate using a pointing device you're already intimately familiar with: your finger.

WHAT'S IN THE BOX?

Somehow we think you've already opened the elegant box that the iPhone came in. But if you didn't, here's what you can expect to find inside:

- **EarPods:** Use them for music, videos, and, yes, phone calls. EarPods for iPhone 7 and later models have a Lightning connector; all previous models have standard 3.5mm headphone plugs.
- Lightning-to-USB cable: Use this handy cable to sync or charge your iPhone. You
 can plug the USB connector into your PC or Macintosh to sync or into the included
 USB power adapter. By the way, if you prefer to have your iPhone standing up on
 your desk while you charge or sync it, as we do, check out one of the optional
 charging/syncing docks available from Apple and others.
- Lightning-to-3.5 mm headphone jack adapter (iPhone 7 and later): An adapter that lets you use headphones sporting traditional 3.5 mm audio jacks with an iPhone 7 and later (which have no headphone port).
- USB power adapter: Use this adapter to recharge your iPhone from a standard AC power outlet.
- Some Apple logo decals: Of course.
- A quick start guide: Not much to it. You see the names of the buttons; how to
 turn on the phone; and where to learn more and get support. We save you the
 time of looking; you can learn more at www.apple.com/iphone and get help at
 www.apple.com/support/iphone. You're welcome.
- **iPhone info sheet:** Here's where you find safety warnings, legalese, warranty information, and regulatory and compliance gobbledygook, among other things.
- **SIM eject tool:** Just kidding. Apple once put a SIM eject tool in the box but hasn't in many years. No worries just use a straightened paper clip or safety pin if you need to remove your SIM card. (See Chapter 16 for more on the SIM card.)
- **iPhone:** You were starting to worry. Yes, the iPhone itself is also in the box.

And what a display it is. We venture that you've never seen a more beautiful screen on a handheld device in your life.

The iPhone's built-in sensors also still knock our socks off. An accelerometer detects when you rotate the device from portrait to landscape mode and adjusts what's on the display accordingly. A proximity sensor detects when the iPhone gets near your face, so it can turn off the display to save power and prevent accidental touches by your cheek. A light sensor adjusts the display's brightness in

response to the current ambient lighting situation. The iPhone even has a gyroscope for advanced motion sensing and GPS sensors so your phone can determine where in the world you are. Our favorite example of motion sensing is that our iPhones rarely ask if we want to join a Wi-Fi network when we're in a moving car. That's a smart smartphone.

In this section, we take a brief look at some of the iPhone's features, broken down by product category.

The iPhone as a phone and a digital camera or camcorder

On the phone side, the iPhone synchronizes with the contacts and calendars on your Mac or PC, as well as contacts and events on iCloud, Google, Yahoo!, Outlook. com, and Exchange servers. It includes a full-featured QWERTY soft, or virtual, keyboard, which makes typing text easier than ever before — for some folks. Granted, the virtual keyboard takes a bit of time to get used to. But we think that many of you eventually will be whizzing along at a much faster pace than you thought possible on a mobile keyboard of this type.

The 12-megapixel camera (iPhone 6s and newer) is now paired with iOS 11's improved Camera and Photos apps, so taking and managing digital photos and videos on your iPhone is a pleasure rather than the nightmare it can be on other phones. Plus, you can automatically synchronize iPhone photos and videos with the digital photo library on your Mac or PC.

The iPhone 8 and 8 Plus cameras are the best ever, with all the features of the preceding generation (iPhone 7 and 7 Plus) cameras, including autofocus with focus pixels to help prevent out-of-focus pictures. But the 6 Plus and later models have one of the coolest features we've seen on any camera-in-a-phone: optical image stabilization, which uses data from the processor, gyroscope, and motion coprocessor to determine camera motion when you're shooting. It then provides precise lens movement to compensate for your shaky hands or low light. The iPhone 8 models also shoot better low-light photos than any previous iPhone, and the iPhone 8 Plus, which has two lenses and true optical zoom, shoots the best pictures and videos ever.



The iPhone 8 Plus adds a new Portrait Lighting feature that uses its dual lenses and facial landmarking to create studio-like lighting effects.

Finally, don't miss the Live Photos feature (all current iPhone models), which captures a bit of video before and after the still image. This brings images to life when viewed, and iOS 11 adds three new effects — loop, bounce, and our favorite,

9

long exposure — which make Live Photos perhaps the coolest iPhone camera feature since, well, whatever we called the coolest iPhone camera feature in the previous edition.

Another of our favorite phone accounterments is visual voicemail. (Try saying that three times fast.) This feature lets you see a list of voicemail messages and choose which ones to listen to or delete without being forced to deal with every message in your voice mailbox in sequential order. Now, *that's* handy!

Finally, all iPhone models include Siri, an intelligent voice-controlled assistant that understands what you tell him or her (most of the time). We say "him or her" because you can (since iOS 7) choose the optional man's voice for Siri (see Chapter 5). Regardless of which gender you choose, Siri is even more useful and natural in iOS 11. Siri can figure out what you mean and determine which (if any) iPhone app should be used to find the right answer. And, like a real personal assistant, Siri replies in a natural sounding human voice. Furthermore, he or she has become even smarter in iOS 11 with *proactive assistance*, which provides the most relevant information and suggestions at a particular moment and *on-device learning*, which helps Siri deliver a more personalized experience based on your usage of Safari, News, Mail, Messages, and other apps.

One last thing: Both flavors of Siri — male and female — take dictation!

If you've tried voice control before, forget everything you've learned and give Siri a try. We think you'll be as impressed as we are (as long as you have a good Internet connection when you try it — Siri can be close to useless if your connection is slow) — and are in a relatively quiet environment or are using a headset.

We've mentioned just the highlights of the iPhone's superb set of features. But because we still have the entire book ahead of us, we'll put the extended coverage on hold for now (phone pun intended).

The iPhone as an iPod

We agree with the late Steve Jobs on this one: The iPhone is a better iPod than any iPod Apple has ever made. (Okay, we can quibble about the iPod touch and the iPad, as well as wanting more storage, but you know what we mean.) You can enjoy all your existing iPod media content — music, audiobooks, audio and video podcasts, iTunes U courses, music videos, television shows, and movies — on the iPhone's gorgeous high-resolution color display, which is bigger, brighter, and richer than any iPod display before it.

Bottom line: If you can get the content — be it video, audio, or whatever — into iTunes on your Mac or PC, you can synchronize it and watch or listen to it on your iPhone.

The iPhone as an Internet communications device

But wait — there's more! Not only is the iPhone a great phone and a stellar media player, but it's also a full-featured Internet communications device with — we're about to drop a bit of industry jargon on you — a rich HTML email client that's compatible with most POP and IMAP mail services, with support for Microsoft Exchange ActiveSync. (For more on this topic, see Chapter 12.) Also on board is Safari, a world-class web browser that, unlike on most other phones, makes web surfing fun and easy.

Another cool Internet feature is Maps. By using GPS, Maps can determine your location, let you view maps and satellite imagery, and obtain driving directions and traffic information for much of the United States. You can also find businesses, such as gas stations, pizza joints, hospitals, and Apple Stores, with just a few taps. Plus, you can get information on public transit for more cities than ever and indoor maps of some large spaces such as airports and convention facilities.

Finally, the Compass app not only displays your current GPS coordinates but also orients Maps to show the direction you're facing.

You might also enjoy using Stocks, an included app that delivers near real-time stock quotes and charts any time and any place, or Weather, another included app that obtains and displays the weather forecast for as many cities as you like.

The Internet experience on an iPhone is far superior to the Internet experience on any other handheld device we've seen, except the iPad. (Technically, we'd call a full-sized iPad a "two-hands-held device" because it's difficult to hold in one hand for more than a few minutes. But we digress.)

WHAT ABOUT IPHONE X?

The iPhone X, which Apple calls "the future," offers so many new and advanced features there was no way to cover them all in this book. Okay, that's only half the story. The truth is that the iPhone X had not yet shipped when we finished updating this book for iOS 11 and the new iPhone 8 models (which we've had for weeks.) That's the bad news.

The good news is that by the time you read this, we'll have received our iPhone Xs and will have put everything you need to know online at www.dummies.com/go/iphoneX.

Technical specifications

One last thing before we proceed. Here's a list of everything you need before you can actually *use* your iPhone:

- >> An iPhone
- >> In the United States, a wireless contract with AT&T, Verizon, Sprint, one of the smaller carriers, such as C Spire or Cricket, or a contract-free T-Mobile or other service
- >> An Apple ID
- Internet access (required) broadband wireless Internet access recommended

If you decide to introduce your iPhone to your computer, here's what's required for syncing with iTunes:

- >> For Macs: A Mac with a USB 2.0 or 3.0 port, OS X v10.9.5 or later, and iTunes 12.7 or later (free download at www.itunes.com/download)
- >> For Windows: A PC with a USB 2.0 or 3.0 port; Windows 7 or later; and iTunes 12.7 or later (free download at www.itunes.com/download)

A Quick Tour Outside

The iPhone is a harmonious combination of hardware and software. In this section, we take a brief look at what's on the outside. In the next section, we peek at the software.

On the top and side

The top edge of the iPhone 6, 7, and 8 models is as smooth as a baby's bottom, as shown in Figure 1-1. If you have one of the iPhone 6 models, your sleep/wake button is on the side. For all models, the SIM card tray is on one side, and the ring/silent switch and volume buttons are on the other side. We describe these elements more fully in the following list:

Microphone: Used for FaceTime calls and noise suppression during phone calls.



>> SIM card tray: The SIM card tray is where you remove or replace the SIM card inside your iPhone.

A SIM (Subscriber Identity Module) card is a removable smart card used to identify mobile phones. Users can change phones by moving the SIM card from one phone to another — kind of. The iPhone uses a nano-SIM.

- >> Side button: This button is used to lock or unlock your iPhone and to turn your iPhone on or off. When your iPhone is locked, you can still receive calls and text messages, but nothing happens if you touch its screen. When your iPhone is turned off, all incoming calls go directly to voicemail.
- >> Ring/silent switch: This switch, which is on the left side of your iPhone, lets you quickly swap ring mode and silent mode. When the switch is set to ring mode the up position, with no orange showing on the switch your iPhone plays all sounds through the speaker on the bottom. When the switch is set to silent mode the down position, with orange visible on the switch your iPhone doesn't make a sound when you receive a call or when an alert pops up on the screen.



Silent mode is overridden, however, by alarms you set in the built-in Clock app, music, audiobooks, and other purposeful audio, and selecting sounds such as ringtones and alert sounds in the Settings app.

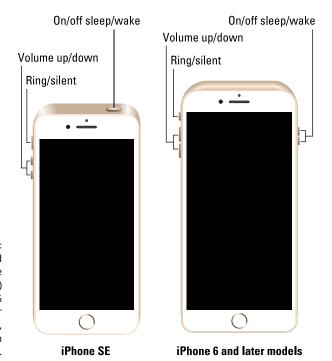


FIGURE 1-1:
The front and sides of the iPhone SE (left) and iPhone 6 and later models (right), as seen from the top.



TIF

If your phone is set to ring mode and you want to silence it quickly, press the sleep/wake button or press one of the volume buttons.

>> Volume up/down buttons: Two volume buttons are just below the ring/silent switch. The upper button increases the volume; the lower one decreases it. You use the volume buttons to raise or lower the loudness of the ringer, alerts, sound effects, songs, and movies. And during phone calls, the buttons adjust the voice loudness of the person you're speaking with, regardless of whether you're listening through the receiver, the speakerphone, or a headset.

On the bottom

On the bottom of your iPhone, you find a microphone, the Lightning connector, the speaker (or speakers), and the headset jack (iPhone 6 and SE models only), as shown in Figure 1-2:

- >> Headset jack (iPhone SE and all iPhone 6 and 6s models): The headset jack lets you plug in the included iPhone headset, which looks a lot like EarPods but with an elliptical shape.
- **Microphone:** The microphone lets callers hear your voice when you're not using a headset.



The iPhone sports three microphones (top front, top back, and bottom). The top ones are used for FaceTime calls and also work with the main mic (located on the bottom) to suppress unwanted and distracting background sounds on phone calls using dual-mic noise suppression or beam-forming technology.

- >> Lightning connector: The Lightning connector has three purposes for most iPhones and four for iPhone 7 and later models:
 - You can use it to recharge your iPhone's battery. Simply connect one end
 of the included Lightning-connector-to-USB cable to the iPhone and the
 other end to the USB power adapter.
 - You can use the port to synchronize. Connect one end of the cable to the port on your iPhone and the other end to a USB port on your Mac or PC.
 - You can use the Lightning (or dock connector) port to connect your iPhone to other devices, such as a camera or television using an adapter such as the Camera Connection Kit or one of Apple's A/V adapter cables.
 - (iPhone 7 and higher only) You use the Lightning port to connect EarPods
 (or the included 3.5 mm headphone jack adapter and your favorite
 headset), so you can listen to audio or talk on the phone without holding a
 slab of glass and metal in front of your face.

Little-known fact: The EarPods with Lightning connector that come with iPhone 7 and higher will work with any iOS device with a Lightning connector.

>> Speaker: The speaker is used by the iPhone's built-in speakerphone and plays audio — music or video soundtracks — if no headset is plugged in. It also plays the ringtone you hear when you receive a call. iPhone 7 and newer models have stereo speakers.

FIGURE 1-2:
The front side of the iPhone SE (left), all iPhone 6 and 6s models (center), and all iPhone 7 and 8 models (right), as seen from the bottom.







iPhone SE

All iPhone 6 and 6s models

All iPhone 7 and 8 models

On the front

On the front of your iPhone, you find the following (labeled in Figure 1-3):

- >> Camera: The camera on the front of the iPhone is tuned for FaceTime, so it has just the right field of view and focal length to focus on your face at arm's length, which presents you in the best possible light.
- **Receiver:** The receiver is the speaker that the iPhone uses for telephone calls. It naturally sits close to your ear whenever you hold your iPhone in the "talking on the phone" position.



WARNING



TID

You should be the only one who hears sound coming from the receiver. If you have the volume set above about 50 percent and you're in a location with little or no background noise, someone standing nearby may be able to hear the sound, too. So be careful.

If you require privacy during phone calls, use the included Apple headset (or any compatible third-party wired or wireless headset — as discussed in Chapter 14).

- >> Status bar: The status bar displays important information, as you discover in a page or two.
- >> Touchscreen: You find out how to use the iPhone's gorgeous high-resolution color touchscreen in Chapter 2. All we have to say at this time is try not to drool all over it.

- >> Home button and Touch ID sensor: No matter what you're doing, you can press the Home button at any time to display the Home screen, which is the screen shown in Figure 1-3. The iPhone's Touch ID sensor can use your fingerprint to unlock the phone (see Chapter 2).
- >> App icons: Each icon on the (first) Home screen launches an included iPhone app or one you've acquired from the App Store.



FIGURE 1-3: The iPhones are a study in elegant simplicity.

iPhone SE iPhone 6, 7, and 8

Photo courtesy of Apple, Inc.

On the back

On the back of your iPhone is a camera lens. It's the little circle or oval in the top-left corner. The iPhone also has one or more little LEDs next to the camera lens for use as a flash for still photos, as a floodlight for videos, and as a flashlight (turn it on and off in Control Center). For more on using the camera and shooting videos, see Chapters 9 and 10, respectively; for more on the flashlight and Control Center, see Chapter 5.

Finally, all current iPhone models have a third microphone on the back (refer to Figure 1-1).

Status bar

The status bar, which is at the top of every Home screen and displayed by many (if not most) apps, displays tiny icons that provide a variety of information about the current state of your iPhone:

••••

whether you're within range of your wireless telephone carrier's cellular network and therefore can make and receive calls. The more filled circles you see (five is the highest), the stronger the cellular signal. If you're out of range, the circles are replaced with the words No Service. And if your iPhone is looking for a cellular signal, the circles are replaced with Searching.

If your screen shows only one or two filled circles, try moving around a little bit. Even walking a few feet can sometimes mean the difference between no service and three or four filled circles.



>> Airplane mode: All wireless features of your iPhone — the cellular, 4G, 3G, GPRS (General Packet Radio Service), and EDGE networks, Wi-Fi, and Bluetooth — are turned off. You're allowed to use your iPod on a plane after the captain gives the word. But you can't use your cellphone except when the plane is in the gate area before takeoff or after landing. Fortunately, your iPhone offers an airplane mode, which turns off all wireless features of your iPhone and makes it possible to enjoy music or video during your flight.

Some flights now offer on-board Wi-Fi. If you're on such a flight, you can turn on Wi-Fi even when airplane mode is enabled. Just don't turn it on until the



TIP

LTE

>> LTE: Your wireless carrier's high-speed LTE network is available.

captain says it's okay.

>> 4G: Your wireless carrier's high-speed UMTS network is available.

3G

3G: Your wireless carrier's 3G UTMS or EV-DO data network is available and your iPhone can connect to the Internet via 3G.

Ε

>> EDGE: Your wireless carrier's slower EDGE (Enhanced Datarate for GSM Evolution) network is available and you can use it to connect to the Internet.

GPRS

GPRS/1xRTT: Your wireless carrier's slower GPRS data network is available and your iPhone can use it to connect to the Internet.



>> Wi-Fi: Your iPhone is connected to the Internet over a Wi-Fi network. The more semicircular lines you see (up to three), the stronger the Wi-Fi signal. If your screen displays only one or two semicircles of Wi-Fi strength, try moving around a bit. If you don't see the Wi-Fi icon in the status bar, Internet access is not currently available.



Wireless (that is, cellular) carriers may offer one of four data networks. The fastest are the so-called 4th generation networks such as LTE and 4G UMTS; the next fastest is 3G; and the slowest are EDGE and GPRS. The device looks for the fastest available network. If it can't find one, it looks for a slower network.

Wi-Fi networks, however, are even faster than any cellular data network. So all iPhones will connect to a Wi-Fi network if one is available, even if a 4G, 3G, GPRS, or EDGE network is also available.

Last but not least, if you *don't* see one of these icons — LTE, 4G, 3G, GPRS, EDGE, or Wi-Fi — you don't currently have Internet access.

Wi-Fi

>> Wi-Fi call: Your iPhone is making a call over Wi-Fi.



>> Do Not Disturb: The Do Not Disturb feature (see Chapter 4) is enabled.



>> Personal Hotspot: The iPhone is providing a personal hotspot connection to another iPhone or another device.



>> Syncing: Your iPhone is syncing with iTunes.



>> Network activity: Some network activity is occurring, such as over-the-air synchronization, sending or receiving email, or loading a web page. Some third-party apps use this icon to indicate network or other activity.



>> Call forwarding: Call forwarding is enabled on your iPhone.



>> VPN: Your iPhone is currently connected to a virtual private network (VPN).



>> TTY: Your iPhone is set up to work with a teletype (TTY) machine, which is used by those who are hearing or speech impaired. You need an optional Apple iPhone TTY Adapter (suggested retail price \$19) to connect your iPhone to a TTY machine.



>> Portrait orientation lock: The iPhone screen is locked in portrait orientation. Swipe up from the bottom of the screen to reveal Control Center and then tap the portrait orientation lock icon to lock your screen in portrait orientation.



>> Alarm: You've set one or more alarms in the Clock app.



>> Location Services: An application is using Location Services, a topic we discuss in Chapter 13.



>> Bluetooth: The icon displays the current state of your iPhone's Bluetooth connection. If the icon is blue, Bluetooth is on and a device (such as a wireless headset or car kit) is connected. If the icon is gray, Bluetooth is turned on but no device is connected. If you don't see a Bluetooth icon, Bluetooth is turned off. Chapter 14 goes into more detail about Bluetooth.



>> Bluetooth battery: A tiny battery icon next to the Bluetooth icon displays the battery level of some Bluetooth devices.



>> Battery: This battery icon displays the level of your battery's charge. The icon is completely filled with green or white when your battery is fully charged and then empties as your battery becomes depleted. You see a lightning bolt next to the icon when your iPhone is recharging.

Home Sweet Home Screen

The first page of your Home screen offers a bevy of icons, each representing a different bundled app or function. Because the rest of the book covers each and every one of these babies in full and loving detail, we merely provide brief descriptions here.

To get to the first Home screen, press the Home button. If your iPhone is asleep when you press the button, the Unlock screen appears. Once unlocked, you'll see whichever page of icons was on the screen when it went to sleep. If that screen happens to have been the first Home screen, you're golden. If it wasn't, merely press the Home button again to summon your iPhone's first (main) Home screen.



Three steps let you rearrange icons on your iPhone:

TIP

- 1. Press and hold down on any icon until all icons begin to jiggle.
- 2. Drag the icons around until you're happy with their positions.
- Press the Home button to save your arrangement and stop the jiggling.

The first Home screen

If you haven't rearranged your icons, you should see the following apps on your first Home screen, starting at the top left:

- Mail: This app lets you send and receive email with most POP3 and IMAP email systems and, if you work for a company that grants permission, Microsoft Exchange accounts, too.
- >> Calendar: No matter what calendar program you prefer on your Mac or PC (as long as it's Calendar, Microsoft Entourage, Outlook, or Exchange, or the online calendars from Google or Yahoo!), you can synchronize events and alerts between your computer and your iPhone. Create an event on one, and it's automatically synchronized with the other the next time they're synced. Neat stuff.
- >> Photos: This app is the iPhone's terrific photo manager. You can view pictures that you took with the iPhone's built-in cameras, transferred from your computer, received through email, saved from Safari, or acquired as part of your Photo Stream. You can zoom in or out, create slideshows, email photos to friends, and much more. Other phones may let you take pictures; the iPhone lets you enjoy them in many ways.
- >> Camera: Use this app when you want to shoot a picture or video with one of the iPhone's built-in cameras.
- >> Maps: This app is among our favorites. View street maps or satellite imagery of locations around the globe, or ask for driving, walking, or public transportation directions, traffic conditions, or even the location of a nearby pizza joint.
- >> Clock: This program lets you see the current time in as many cities as you like, set one or more alarms for yourself, and use your iPhone as a stopwatch or a countdown timer.
- >> Weather: This app monitors the six-day weather forecast for as many cities as you like.
- >> News: Apple's next-generation News app is designed to deliver the news you want to read in a beautiful, uncluttered format. You read more about News in Chapter 15.
- >> Home: This app lets you control HomeKit-compatible lights and appliances.
- >> Notes: This program lets you type notes while you're out and about. New in iOS 11 are finger-sketching tools, checklists, and support for images in notes. You can send the notes to yourself or anyone else through email or save them on your iPhone until you need them. And now your notes can be synced with your other devices via iCloud if you so desire.

- **>> Stocks:** This app lets you monitor your favorite stocks, which are updated in near real-time.
- >> Reminders: This app may be the only to-do list you'll ever need. It integrates with Calendar, Outlook, and iCloud, so to-do items and reminders sync automatically with your other devices, both mobile and desktop. You'll read much more about this great app and its shiny location-based reminders, but you have to wait until Chapter 7.
- >> App Store: This icon enables you to connect to and search the iTunes App Store for iPhone apps you can purchase or download for free over a Wi-Fi or cellular data network connection.
- >> iTunes Store: Tap here to access the iTunes Store, where you can browse, preview, and purchase songs, albums, movies, and more.
- >> iBooks: Tap here to purchase and read iBooks.
- Health: This app gathers info from fitness devices and other health apps to provide a clear and current overview of your health on an easy-to-read dashboard.
- >> Wallet: This app stores Apple Pay credit cards as well as gift cards, coupons, tickets, boarding passes, and other passes, all in a single convenient location.
- >> Settings: Use this app to adjust your iPhone's settings. If you're a Mac user, think System Preferences; if you're a Windows person, think Control Panel.

The second Home screen

You probably won't find the icons we're about to describe on your Home screen — at least not on the first (main) one. These apps usually appear on the *second* Home screen (which you find out about in Chapter 2). If you just can't wait to see them, swipe your finger across the screen from right to left and they'll appear like magic.

Inside the Extras Folder

In the Extras folder you find these icons:

- >> Compass: The Compass app is kind of like having a magnetic needle compass inside your iPhone, but better.
- >> Tips: This app provides tips for using your iPhone and iOS 11.
- >> Voice Memos: This handy little app turns your iPhone into a convenient handheld recording device.

- >> Contacts: This app stores contact information, which can be synced with iCloud, macOS Contacts, Yahoo! Address Book, Google Contacts, and many more.
- >> Find Friends: This app shows a map with the locations of friends who have consented to being tracked by Find My Friends.
- >> Find iPhone: This app displays a map with the last known locations of your family's iPhones (assuming it's enabled on each misplaced phone before it was misplaced).

Outside the Extras Folder

In addition to the Extras folder, you find several additional icons on the second Home screen:

- >> FaceTime: This app is used to make FaceTime video or voice calls to others using Apple devices.
- >> Podcasts: Podcasts used to be included in the Music app but was moved to this stand-alone app in iOS 7. Use it to manage and consume podcasts on your iPhone.
- >> Calculator: The Calculator app lets you perform addition, subtraction, multiplication, and division. Give the phone a quarter turn, however, and you'll find a nifty scientific calculator that does all that and much more.
- >> Watch: This app is used to manage features on your Apple Watch. It's useless unless you have an Apple Watch.



NEW

- >> Files: This new app displays documents saved on your iPhone or saved in the cloud to iCloud, Dropbox, or several other cloud-based storage services.
- >> TV: This handy app is the repository for your movies, TV shows, music videos, video podcasts, and some iTunes U courseware. It's also a path to streamed programming available from myriad sources, including Comedy Central, HBO, and every major TV network.

The dock (all Home screens)

Finally, four icons at the bottom of the Home screen are in a special area known as the *dock*. When you switch Home screens (see Chapter 2), all the icons above the dock change. The four items on the dock, which follow, remain available on all Home screens:

- **>> Phone:** Tap this app icon to use the iPhone as a phone. What a concept!
- >> Safari: Safari is your web browser. If you're a Mac user, you know that already. If you're a Windows user who hasn't discovered the wonderful Safari for Windows, think Internet Explorer on steroids.
- **>> Messages:** The Messages app lets you exchange text messages (SMS) and multimedia messages (MMS) with almost any other cellphone user. The app also lets you exchange Apple-exclusive iMessages with anyone using any Apple device with iOS 5 or higher (iDevice) or a Mac running Mountain Lion (OS X 10.8) or higher, as described in Chapter 6. We've used a lot of mobile phones in our day, and this app is as good as it gets.
- >> Music: This icon unleashes all the audio power of an iPod right on your phone.



If the four apps on the dock aren't the ones that you use most, move different apps to the dock, as described in Chapter 2.

TIP

Last, but certainly not least, you can delete most preinstalled apps. See Chapter 15 for details.

Okay, then. Now that you and your iPhone have been properly introduced, it's time to turn it on and actually use it. Onward!

- » Mastering multitouch
- » Multitasking with your iPhone
- » Spotlighting search
- » Keeping alert through notifications

Chapter 2 iPhone Basic Training

f you were caught up in the initial iPhone frenzy of 2007, you may have plotted for months about how to land one. After all, the iPhone quickly emerged as the ultimate fashion phone. And the chic device hosted a bevy of cool features.

Owning the hippest and most-hyped handset on the planet came at a premium cost compared with rival devices. To snag the very first version, you may have saved your pennies or said, "The budget be damned."

That's ancient history now. A decade later, the iPhone went mainstream and, through many versions, you got more bang for your buck. We're also obliged to point out that the tenth anniversary iPhone, known as the iPhone X (and not yet available when this book went to press), was the first to crack \$1,000. It has plenty of bang too. But it's gonna cost you.

We can list a bunch of prices here, but pricing for the wireless industry, and accordingly the iPhone, is in a state of flux. You used to be able to buy an iPhone for a subsidized and relatively low upfront price that was tied to a two-year contract with your carrier. As of this writing, however, such contracts are no longer the norm. Instead, wireless companies are pushing installment pricing options, in which you can choose to put little or no money down but are then obligated to pay for the device over typically a two-year term. In some cases you lease the phone; in others, you buy the phone outright.

Of course you still must pay for cellular and data coverage and data from a wireless carrier.

For existing iPhone customers, the upgrade price for a new model may depend on how far you're into your previous contract, how prompt you are at paying your bill, and other factors. And as they say in the fine print, taxes and fees are extra.

You may also get a nice trade-in deal on your existing phone, from Apple or other retailers.

Activating the iPhone

You will typically activate the iPhone where you bought the thing, just as you do with other cellphones. However, if you buy your iPhone from Apple's online store, the folks there will ship it to you and you activate it through iTunes, just like the old days, or through iCloud. If you're already a customer upgrading from an earlier iPhone or a different phone, you can convert your plan during the ordering process.

As mentioned, we aren't going to go through all the wireless options here. Suffice to say that plans vary by wireless carrier and are subject to change. At the time this book was written, ironclad two-year contracts were rapidly becoming far less, well, ironclad. Of course, you're still obligated to pay what you owe your carrier. Indeed, the carriers all are moving away from contracts to installment pricing.

Unlimited data plans are also in a state of flux, but they're also more common than they used to be, thanks to industry competition.



WARNING

Many "unlimited" plans are subject to data-speed throttling after a customer reaches a certain threshold of data, though such levels are being raised in the consumer's favor.



WARNING

If you plan on tapping into the faster 4G LTE (Long Term Evolution) networks that the iPhone 5 and later models are capable of making nice with, you may end up consuming more data and ultimately paying more.

You may also have to fork over extra coin for a plan that includes *tethering*, or the capability to use your iPhone as a broadband modem for other devices you might carry, such as laptops and netbooks.



TID

iPhones are available also from smaller regional carriers such as C Spire and U.S. Cellular.