

S E C O N D E D I T I O N

# Android<sup>™</sup> Tips and Tricks



COVERS

**Android 5**  
(Lollipop) and  
**Android 6**  
(Marshmallow)  
devices

QUE<sup>®</sup>

Guy Hart-Davis

FREE SAMPLE CHAPTER

SHARE WITH OTHERS



# Android™ Tips and Tricks

Second Edition



Guy Hart-Davis

**que**®

800 East 96th Street  
Indianapolis, Indiana 46240 USA



# ANDROID TIPS AND TRICKS SECOND EDITION

GUY HART-DAVIS

COPYRIGHT © 2016 BY PEARSON EDUCATION, INC.

All rights reserved. Printed in the United States of America. This publication is protected by copyright, and permission must be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permissions, request forms, and the appropriate contacts within the Pearson Education Global Rights & Permissions Department, please visit [www.pearsoned.com/permissions/](http://www.pearsoned.com/permissions/). No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-13: 978-0-7897-5583-4

ISBN-10: 0-7897-5583-1

Library of Congress Control Number: 2016937243

First Printing May 2016

## TRADEMARKS

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que Publishing cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

## WARNING AND DISCLAIMER

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an “as is” basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book or from the use of the CD or programs accompanying it.

## SPECIAL SALES

For information about buying this title in bulk quantities, or for special sales opportunities (which may include electronic versions; custom cover designs; and content particular to your business, training goals, marketing focus, or branding interests), please contact our corporate sales department at [corpsales@pearsoned.com](mailto:corpsales@pearsoned.com) or (800) 382-3419.

For government sales inquiries, please contact [governmentsales@pearsoned.com](mailto:governmentsales@pearsoned.com).

For questions about sales outside the U.S., please contact [intlcs@pearson.com](mailto:intlcs@pearson.com).

EDITOR-IN-CHIEF

Greg Wiegand

ACQUISITIONS EDITOR

Michelle Newcomb

DEVELOPMENT EDITOR

Bill Abner

MANAGING EDITOR

Sandra Schroeder

PROJECT EDITORS

Seth Kerney

Tonya Simpson

COPY EDITOR

Karen Davis

INDEXER

Lisa Stumpf

PROOFREADER

Leslie Joseph

TECHNICAL EDITORS

Vince Averello

Christian Kenyeres

EDITORIAL ASSISTANT

Cindy Teeters

COVER DESIGNER

Mark Shirar

COMPOSITOR

Bumpy Design

# CONTENTS AT A GLANCE

	Introduction .....	1
<b>1</b>	Getting Up to Speed with Android .....	13
<b>2</b>	Loading and Syncing Your Device .....	73
<b>3</b>	Customizing Your Device .....	107
<b>4</b>	Connecting to Networks and Devices .....	139
<b>5</b>	Installing, Running, and Managing Apps .....	175
<b>6</b>	Taking Gmail to the Pro Level .....	195
<b>7</b>	Using Google Now and Maps .....	243
<b>8</b>	Browsing with Chrome .....	269
<b>9</b>	Maximizing Your Productivity .....	297
<b>10</b>	Making the Most of Phone and Hangouts .....	329
<b>11</b>	Exploiting Camera, Photos, and Videos .....	365
<b>12</b>	Enjoying Your Music Everywhere .....	385
<b>13</b>	Staying in Touch via Social Networking .....	411
<b>14</b>	Using Samsung TouchWiz .....	449
	Index .....	481

# TABLE OF CONTENTS

Introduction.....	1
Grasping the Essentials of Android Navigation.....	1
Navigating the Lock, Home, and Apps Screens.....	2
Opening the Notifications Panel.....	6
Opening the Quick Settings Panel.....	6
Opening the Settings App.....	7
Using the Navigation Panel, Menus, Controls, and Dialog Boxes.....	8
Using the Touchscreen.....	12
<b>1</b> Getting Up to Speed with Android.....	13
Identifying Your Device's Android Version and Its Skin.....	14
Understanding Android Version Numbers and Names.....	14
Finding Out Which Android Version Your Device Is Running.....	15
Establishing Whether Your Device Is Using a Skin.....	15
Setting Different Volume Levels for Different Audio Sources.....	17
Using Manual Brightness and Adaptive Brightness.....	18
Managing Your Notifications.....	18
Responding to a Notification.....	19
Turning the Notification Light On or Off.....	21
Configuring Notifications for an App.....	21
Clearing Repeat Notifications.....	23
Configuring and Using Do Not Disturb and Interruptions.....	24
Configuring and Using Do Not Disturb in Marshmallow.....	25
Configuring and Using Interruptions in Lollipop.....	30
Entering Text.....	32
Using the Keyboard and Spelling Correction.....	32
Entering Text Using a Hardware Keyboard.....	38
Entering Text Using Dictation.....	40
Entering Emoji.....	42
Using Alternative Keyboards.....	43
Setting Up a Phone or Tablet for Multiple Users.....	44
Creating a User Account.....	44
Creating a Restricted Profile.....	46
Switching User Accounts and Profiles.....	47

	Deleting a User Account or Restricted Profile .....	48
	Understanding and Avoiding Problems When Sharing Your Device .....	48
	Getting the Best Battery Performance .....	49
	Identifying Power Hogs .....	49
	Eking Out Battery Life .....	50
	Recharging Secrets .....	52
	Managing Files and Storage .....	55
	Adding a Micro SD Card .....	55
	Connecting USB OTG Storage .....	62
	Choosing and Using a File Explorer .....	65
	Checking Space Usage and Reclaiming Space .....	68
<b>2</b>	Loading and Syncing Your Device .....	73
	Understanding Your Options for Loading and Syncing Your Device .....	74
	Choosing the Right Management or Sync App .....	75
	Getting and Installing Your Management or Sync App .....	76
	Installing a Management or Sync App in Windows .....	76
	Choosing What Happens When You Connect Your Device to Windows .....	78
	Installing Android File Transfer on OS X .....	79
	Using Your Management or Sync App .....	81
	Using Phone Companion in Windows 10 .....	81
	Using Other Management or Sync Apps in Windows .....	89
	Using Android File Transfer on OS X .....	91
	Loading Files on Your Device .....	92
	Updating, Backing Up, and Restoring Your Device .....	94
	Keeping Your Device Updated .....	94
	Backing Up Your Device .....	97
	Restoring Your Device .....	101
	Using Remote Lock and Wiping .....	104
<b>3</b>	Customizing Your Device .....	107
	Setting Up Your Home Screens .....	107
	Adding and Removing Home Screens .....	108
	Adding Apps to Your Home Screens .....	109
	Adding Widgets to Your Home Screens .....	109
	Adding Web Addresses to Your Home Screens .....	111
	Organizing Home Screen Items into Folders .....	112

Adding Dropbox Folders to Your Home Screens .....	112
Repositioning Items on Your Home Screens .....	113
Removing Items from Your Home Screens .....	113
Rearranging Your Home Screens .....	113
Setting the Wallpaper .....	113
Using a Different Launcher .....	114
Choosing a Launcher .....	115
Installing a Launcher .....	116
Switching Among Launchers .....	117
Making No Launcher the Default .....	118
Configuring Input Options .....	119
Configuring the Lock Screen .....	122
Choosing the Best Locking Method .....	123
Setting Up Locking on Your Device .....	124
Setting Up Smart Lock .....	125
Putting a Message or Owner Information on the Lock Screen .....	128
Unlocking Your Device with Your Fingerprint .....	128
Configuring Lock-Screen Notifications .....	129
Choosing Location Settings to Protect Your Privacy .....	130
Encrypting Your Device .....	132
Encrypting the Data on Your Device .....	133
Decrypting the Data on Your Device .....	135
Performing a Hard Reset .....	136
<b>4</b> Connecting to Networks and Devices .....	139
Using Airplane Mode .....	139
Taking Control of Cellular Connections .....	140
Displaying the Cellular Network Settings Screen .....	140
Enabling and Disabling Data Roaming .....	141
Choosing Among Cellular Network Types .....	143
Configuring a New Access Point .....	143
Connecting to a Different Carrier .....	144
Keeping Within Your Data Plan .....	144
Managing Your Wi-Fi Connections .....	147
Turning Wi-Fi On and Off .....	147
Connecting to Wi-Fi Networks .....	149
Connecting to a Closed Network .....	150
Working on the Advanced Wi-Fi Screen .....	151

Whitelisting Your Device on a Wi-Fi Network .....	157
Configuring IP Settings Manually .....	158
Connecting Through a Proxy Server .....	160
Improving Your Wi-Fi Connections .....	161
Forgetting a Network .....	163
Sharing Your Device's Internet Connection .....	163
Sharing the Internet Connection via USB Tethering .....	164
Sharing the Internet Connection via Portable Wi-Fi Hotspot .....	165
Connecting Bluetooth Devices .....	166
Pairing a Bluetooth Device with Your Android Device .....	166
Transferring Files to Another Device via Bluetooth .....	168
Sharing an Internet Connection via Bluetooth Tethering .....	169
Using VPNs .....	171
Setting Up a VPN Connection .....	172
Connecting via the VPN .....	173
<b>5</b> Installing, Running, and Managing Apps .....	175
Getting App Installation Right .....	175
Evaluating Permissions When Installing Apps .....	176
Getting a Refund on an App .....	177
Configuring Your Play Store Account .....	177
Sideloaded Apps .....	180
Installing a File Manager .....	181
Getting the Package File for the App .....	181
Setting Android to Allow Apps from Unknown Sources .....	183
Sideloaded the App .....	184
Running Apps .....	185
Working with the Overview Screen .....	185
Switching Apps with the Overview Screen .....	186
Closing an App from the Overview Screen .....	187
Pinning an App to the Screen .....	187
Opening the App Info Screen for an App .....	188
Forcing an App to Stop .....	190
Clearing an App's Cache, Data, or Defaults .....	190
Uninstalling Apps .....	191
Rebooting into Safe Mode .....	191
Resetting App Preferences .....	192

<b>6</b>	Taking Gmail to the Pro Level .....	195
	Setting Up Your Email Accounts .....	196
	Gathering the Information Needed to Set Up an Email Account .....	196
	Displaying the Set Up Email Screen .....	200
	Adding a Google Account .....	201
	Adding a Personal Account .....	203
	Adding an Exchange Server Account .....	208
	Configuring Gmail and Your Accounts to Work Your Way .....	213
	Choosing General Settings .....	214
	Configuring Settings for a Google Account .....	216
	Configuring a Personal Account .....	222
	Configuring an Exchange Account .....	224
	Triaging and Reading Your Messages .....	226
	Navigating Among Your Accounts, Labels, and Folders .....	227
	Working in the Conversation List .....	228
	Reading Your Messages .....	230
	Writing and Sending Messages .....	231
	Labeling, Archiving, and Moving Your Messages .....	232
	Labeling and Archiving Messages in a Google Account .....	233
	Moving Messages in Personal and Exchange Accounts .....	234
	Dealing with Spam and Problem Senders .....	234
	Searching for Messages .....	235
	Searching with Keywords in Any Type of Account .....	235
	Searching with Advanced Search Operators in Google Accounts .....	236
	Searching with Boolean Operators and Grouping .....	238
	Setting Up 2-Step Verification for Your Google Account .....	238
	Setting Up 2-Step Verification Using a Computer .....	238
	Setting Up 2-Step Verification Using an Android Device .....	240
	Logging In to Your Account with 2-Step Verification Enabled .....	240
<b>7</b>	Using Google Now and Maps .....	243
	Streamlining Your Life with Google Now .....	243
	Navigating and Customizing Google Now .....	244
	Customizing Google Now to Suit Your Needs .....	247
	Choosing Settings for Google Now .....	249
	Managing Your Activity in Google Account History .....	257

	Accessing Google Now from the Lock Screen .....	260
	Working with Reminders in Google Now .....	260
	Navigating with Maps .....	261
	Making Sure You Know Essential Maps Moves .....	262
	Saving Maps for Offline Use .....	264
	Choosing Key Settings for Maps .....	266
<b>8</b>	<b>Browsing with Chrome .....</b>	<b>269</b>
	Choosing Essential Chrome Settings .....	270
	Configuring Your Google Account .....	271
	Choosing Your Search Engine .....	273
	Choosing Whether to Merge Tabs and Apps on a Phone .....	274
	Setting Up Autofill Forms .....	274
	Working with the Save Passwords Feature .....	276
	Choosing Privacy Settings and Clearing Browsing Data .....	276
	Choosing Accessibility Settings .....	280
	Choosing Site Settings .....	280
	Enabling the Data Saver Feature .....	284
	Browsing the Web with Chrome .....	286
	Navigating Among Web Pages .....	286
	Managing and Switching Tabs .....	289
	Making the Most of Bookmarks .....	291
	Returning to a Recent Tab or a Tab Open on Another Device .....	293
	Returning to a Page You Visited Earlier .....	293
	Searching for Information .....	294
	Browsing Incognito .....	294
	Requesting a Desktop Site .....	296
<b>9</b>	<b>Maximizing Your Productivity .....</b>	<b>297</b>
	Managing Your Contacts .....	297
	Adding a New Contact .....	299
	Organizing Your Contacts into Groups .....	299
	Displaying Only the Contacts You Want to See .....	301
	Merging and Separating Contacts .....	302
	Importing and Exporting Contacts .....	303
	Mastering Your Schedule with Calendar .....	304
	Configuring the Calendar App .....	304
	Choosing Which Calendars to Display .....	307

Controlling How the Calendar Appears .....	308
Creating Events .....	308
Inviting Others to an Event .....	309
Dealing with Invitations .....	309
Sharing Your Google Calendars .....	309
Transferring and Syncing Files with Google Drive .....	311
Setting Up Google Drive .....	311
Navigating Google Drive .....	311
Configuring Backups, Cache, Encryption, and Data Usage .....	314
Creating a Folder .....	317
Adding Files to Google Drive .....	317
Keeping Files on Your Device .....	318
Printing Documents .....	318
Printing to Local Printers .....	318
Print to an HP Printer Using the HP Print Service Plugin .....	319
Printing to Cloud Printers .....	320
Printing on Your Existing Printer .....	321
Using a Chromecast Device .....	323
Setting Up a Chromecast with Your Android Device .....	324
Casting Your Screen or Audio to the Chromecast Device .....	327
<b>10</b> Making the Most of Phone and Hangouts .....	329
Becoming an Expert with the Phone App .....	329
Making Calls the Easy Way .....	330
Saving Time with Your Call History .....	333
Taking Calls—or Avoiding Them .....	337
Configuring the Phone App to Work Your Way .....	339
Setting Custom Ringtones for Important Callers .....	348
Blocking and Screening Calls .....	348
Setting a SIM Card Lock .....	350
Chatting, Talking, and Conferencing via Hangouts .....	351
Getting an Account .....	352
Getting Started with Hangouts .....	352
Making Hangouts Comfortable for You .....	353
Communicating via Hangouts .....	360

<b>11</b>	Exploiting Camera, Photos, and Videos .....	365
	Getting Great Photos with the Camera App .....	366
	Opening the Camera App and Navigating Its Interface .....	366
	Accessing the Camera from the Lock Screen .....	369
	Configuring the Camera App to Suit Your Needs .....	369
	Taking Regular Photos .....	372
	Taking Photo Sphere Photos .....	377
	Taking Panorama Photos .....	378
	Taking Photos with the Lens Blur Feature .....	378
	Editing Your Photos .....	380
	Shooting Videos .....	382
	Capturing Screenshots .....	383
<b>12</b>	Enjoying Your Music Everywhere .....	385
	Understanding Your Options for Listening to Music on Your Device .....	386
	Getting Your Music onto Your Device .....	386
	Understanding Which Music Formats Your Device Can Play .....	387
	Getting Your CDs onto Your Android Device .....	389
	Transcoding Existing Files .....	392
	Getting the Most Out of the Play Music App .....	393
	Getting Started with Play Music .....	393
	Setting Up an Account .....	394
	Syncing Your 50,000 Songs to Play Music .....	394
	Buying Songs from the Play Store .....	396
	Navigating the Play Music App .....	397
	Playing Songs .....	398
	Downloading Songs .....	401
	Deleting Songs from Your Device and Your Library .....	401
	Configuring the Play Music App .....	402
	Creating Playlists .....	405
	Improving Your Music with the Equalizer .....	406
	Turning On the Equalizer .....	407
	Creating a Custom Equalization .....	408
	Using Other Music Apps .....	408
	Three Apps for Identifying Music .....	408
	Three Streaming Services .....	409

<b>13</b>	Staying in Touch via Social Networking .....	411
	Getting Serious with Facebook .....	412
	Logging In to Facebook .....	412
	Adding Friends and Managing Invites and Imported Contacts .....	413
	Getting and Configuring Facebook Messenger .....	417
	Making Facebook Work Your Way .....	423
	Choosing Essential Privacy Settings .....	427
	Securing Your Facebook Account with Two-Factor Authentication .....	431
	Using Multiple Facebook Accounts on the Same Device .....	434
	Removing Your Facebook Account from Your Device .....	436
	Making the Most of Twitter .....	436
	Signing In to Twitter .....	436
	Navigating the Twitter App .....	437
	Configuring the Twitter App .....	439
	Securing Your Twitter Account with Login Verification .....	446
	Using Multiple Twitter Accounts .....	447
<b>14</b>	Using Samsung TouchWiz .....	449
	Getting Up to Speed with TouchWiz Essentials .....	450
	Using the Buttons in TouchWiz .....	450
	Navigating the Home Screen .....	451
	Customizing Your Home Screen .....	452
	Using Gestures to Control Your Samsung Device .....	454
	Customizing the Apps Screen .....	456
	Create a Folder .....	456
	Delete a Folder .....	457
	Uninstall or Disable Apps .....	458
	Working with the Notifications Panel, Quick Settings, and Settings .....	458
	Using the Notifications Panel and the Quick Settings Bar .....	459
	Using the Quick Settings Panel and the Settings App .....	461
	Using Multi Window .....	462
	Understanding the Galaxy Apps and S Apps .....	465
	Using the Camera App's Extra Features .....	466
	Mastering the Essentials of the Camera App .....	466
	Making the Most of the Camera Modes .....	468
	Setting the Camera to Take the Photos and Videos You Want .....	470

Browsing with Samsung's Internet Browser .....	472
Grasping the Essentials of the Internet App .....	473
Saving Web Pages and Reading Them Later .....	474
Returning to Web Pages with Bookmarks .....	475
Opening Multiple Tabs and Navigating Among Them .....	475
Loading Your Favorite Pages onto the Quick Access Screen .....	476
Adding a Web Page Shortcut to Your Home Screen .....	477
Browsing Secretly .....	477
Syncing Open Pages Through a Samsung Account .....	477
Improving Performance by Turning Off TouchWiz Features .....	477
Index .....	481

## ABOUT THE AUTHOR

**Guy Hart-Davis** is the author of *Windows 10 Tips and Tricks* and the coauthor of *My Samsung Galaxy Note 5*, both from Que.

## DEDICATION

*I dedicate this book to my son, Edward, who doggedly tests Android<sup>†</sup> hardware and software to destruction so that I don't have to.*

<sup>†</sup> and other!

## ACKNOWLEDGMENTS

My thanks go to the people whose hard work helped create this book you're reading. In particular, I'd like to thank the following people:

- Michelle Newcomb, for asking me to write the book.
- William Abner, for developing the outline and content.
- Vince Averello and Christian Kenyeres, for reviewing the manuscript for technical accuracy and contributing suggestions for improving the book.
- Seth Kerney and Tonya Simpson, for coordinating the book project.
- Karen Davis, for editing the manuscript with a light touch.
- Leslie Joseph, for proofreading the book.
- Lisa Stumpf, for creating the index.

## WE WANT TO HEAR FROM YOU!

As the reader of this book, *you* are our most important critic and commentator. We value your opinion and want to know what we're doing right, what we could do better, what areas you'd like to see us publish in, and any other words of wisdom you're willing to pass our way.

We welcome your comments. You can email or write to let us know what you did or didn't like about this book—as well as what we can do to make our books better.

*Please note that we cannot help you with technical problems related to the topic of this book.*

When you write, please be sure to include this book's title and author as well as your name and email address. We will carefully review your comments and share them with the author and editors who worked on the book.

**Email:** [feedback@quepublishing.com](mailto:feedback@quepublishing.com)

**Mail:** Que Publishing  
ATTN: Reader Feedback  
800 East 96th Street  
Indianapolis, IN 46240 USA

## READER SERVICES

Register your copy of *Android Tips and Tricks* at [quepublishing.com](http://quepublishing.com) for convenient access to downloads, updates, and corrections as they become available. To start the registration process, go to [quepublishing.com/register](http://quepublishing.com/register) and log in or create an account.\* Enter the product ISBN, 9780789755834, and click Submit. When the process is complete, you will find any available bonus content under Registered Products.

\*Be sure to check the box that you would like to hear from us to receive exclusive discounts on future editions of this product.

# Introduction



This short introduction is intended to make sure you know the essentials for navigating your Android device.

If you're already familiar with Android, feel free to skip the Introduction and dive straight into Chapter 1, "Getting Up to Speed with Android"—or into whichever chapter will be most helpful to you.

## **GRASPING THE ESSENTIALS OF ANDROID NAVIGATION**

Google has made Android as easy to navigate as possible using straightforward taps and gestures on the touch screen.

This section covers navigating the lock screen, the Home screen, and the Apps screen; opening the Notifications panel and the Quick Settings panel; and opening the Settings app.



**NOTE**

This book focuses on Android version 5, which is known as Lollipop, and Android version 6, which is known as Marshmallow. Earlier versions of Android, such as KitKat (version 4.4) and Jelly Bean (versions 4.1–4.3), have different features and respond in different ways.

## NAVIGATING THE LOCK, HOME, AND APPS SCREENS

As you work with your device, you will likely use three screens the most. These are the lock screen, which protects your security; the Home screen, which is your home base in Android; and the Apps screen, from which you launch the apps you want to use.

### UNLOCKING THE LOCK SCREEN

When you start your Android device, it normally displays the lock screen. This security screen has two purposes: to prevent Android from responding to accidental touches on the screen and (optionally) to make the user authenticate himself by using the unlock method that the owner has set.

You can apply different unlock methods to the lock screen. The default unlock move is a simple swipe that provides no security at all, but you can apply strong security by requiring a PIN or passcode. The left screen in Figure I.1 shows the lock screen with security in place. The right screen in Figure I.1 shows the screen for entering a password to unlock the device.

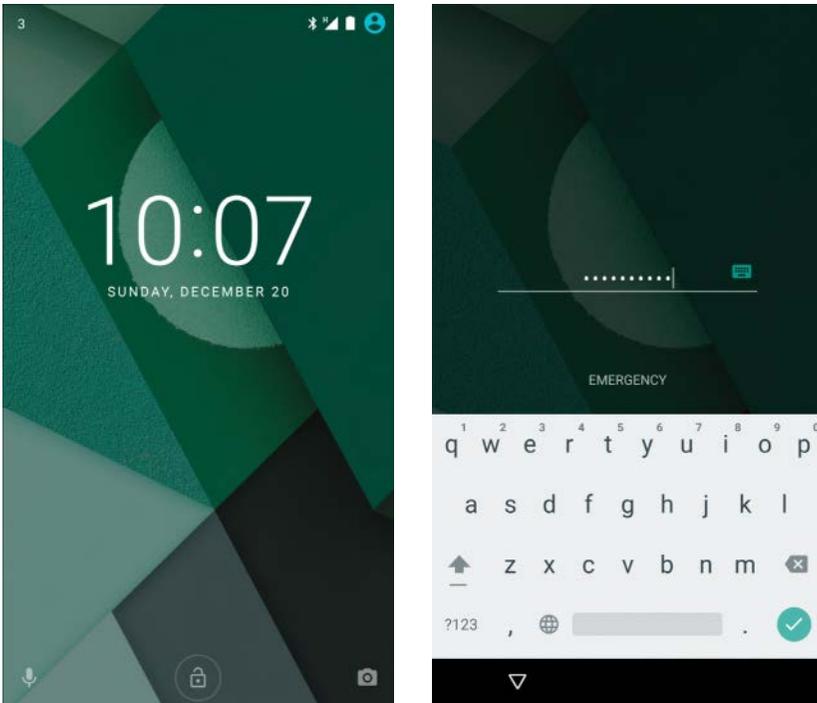
**CAUTION**

You can turn off the lock screen by tapping the None button on the Choose Screen Lock screen in the Settings app. This move is seldom wise except for devices you are using for demonstration purposes.

### GETTING AROUND THE HOME SCREEN AND USING THE BUTTONS

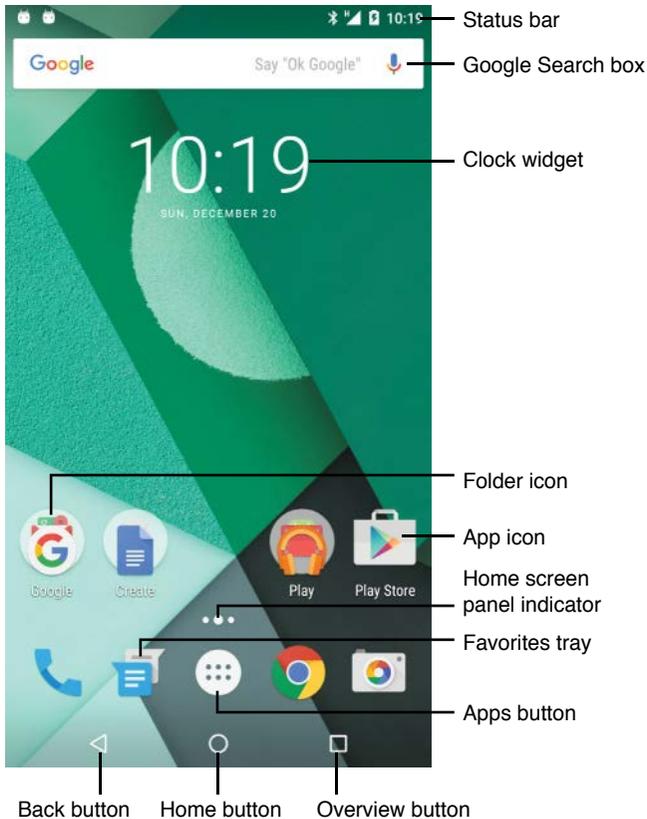
After you've unlocked your device, the Home screen appears. The Home screen is your base for taking actions in Android and typically contains several types of items. Figure I.2 shows a Home screen with its essential parts labeled:

- **Status bar.** The status bar appears at the top of the Home screen and most other screens.
- **Google Search box.** This box enables you to search quickly straight from the Home screen. You can tap the microphone icon and speak your search terms.

**FIGURE I.1**

*Swipe the lock icon at the bottom of the lock screen (left) to start unlocking your device. On the screen that appears, perform your unlocking move, such as entering your password on the password screen (right).*

- **Clock widget.** A *widget* is a small, single-purpose app, such as the Clock widget shown here. You can put any of various widgets on the Home screen to display the information you find useful or entertaining.
- **App icon.** You can place icons for apps on the Home screen so that you can access them quickly.
- **Folder icon.** You can put your Home screen icons into folders to keep them organized.
- **Home screen panel indicator.** The Home screen consists of a series of panels that you can scroll among by swiping or dragging left or right. The larger dot shows the current panel in the series of panels.
- **Apps button.** Tap this button to display the Apps screen (discussed in the next section).
- **Favorites tray.** This tray contains a handful of icons for apps that you want to have available on every Home screen panel.

**FIGURE I.2**

*The Home screen consists of a series of horizontal panels that give you access to many different Android features.*

- **Back button.** Tap this button to return to the previous screen or to cancel out of a dialog box.
- **Home button.** Tap this button to display the Home screen. Android displays whichever Home screen panel you used last. Tap the Home button again to display your main Home screen panel.

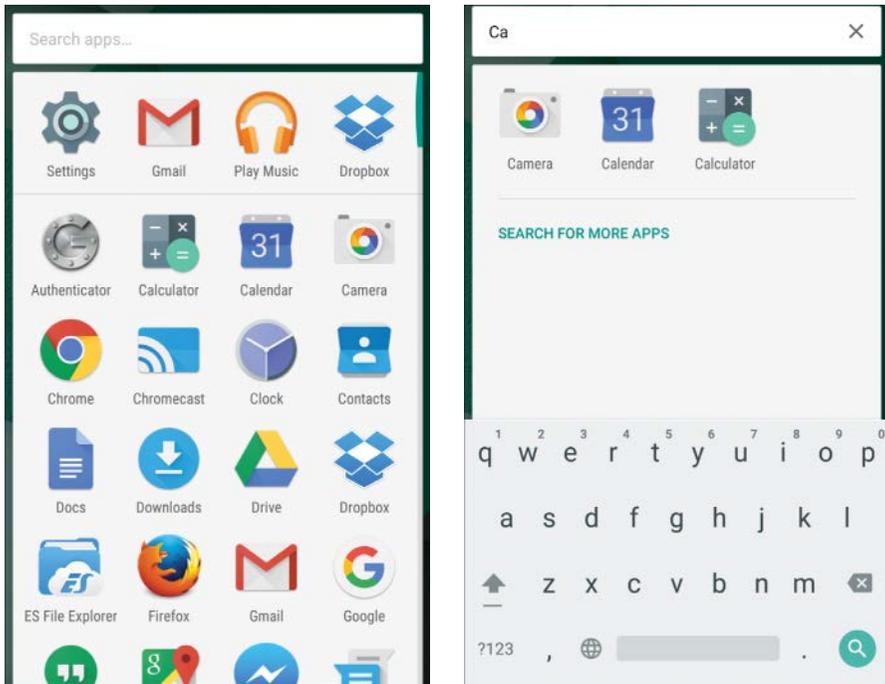
**TIP**

Swipe up across the Home button to access the Google Now information feature. In Marshmallow, you can tap and hold the Home button to bring up the Now on Tap feature.

- **Overview button.** Tap this button to display the Overview screen. You can then tap the app or window you want to display.

## USING THE APPS SCREEN

From the Home screen, tap the Apps button to display the Apps screen. This screen contains a list of apps. (See the left screen in Figure I.3.) If all the apps don't fit on the screen at once, swipe up to display further apps.



**FIGURE I.3**

*On the Apps screen (left), drag or swipe up to find the app you want, and then tap its icon. You can locate an app by tapping the Search Apps box and typing the beginning of the app's name (right).*

The Apps screen is easy to use:

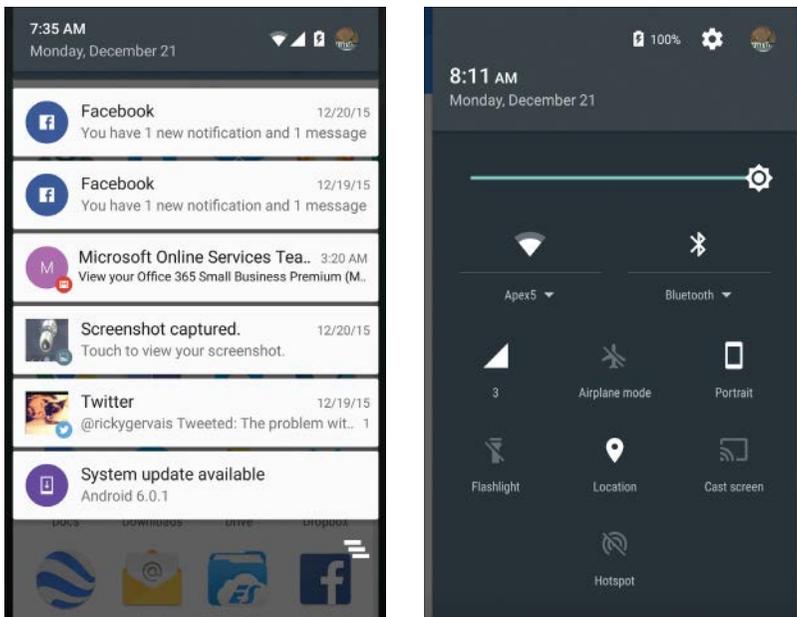
- The top row shows apps you have recently used.
- The following rows show the full list of apps in alphabetical order.
- You can tap the Search Apps box at the top and start typing the name of the app you want. (See the right screen in Figure I.3.)

When you find the app you want to use, tap its icon. That app's screen then appears.

## OPENING THE NOTIFICATIONS PANEL

The Notifications panel contains notifications raised by apps to alert you to events. For example, when you receive a message in Gmail, the Gmail app raises a notification in the Notifications panel. Similarly, when Android detects that a software update has become available, it displays a notification to let you know about the update.

To open the Notifications panel (shown in Figure I.4), drag or swipe down from the top of the screen with one finger. You can then view your notifications, deal with any that need your attention, and close the Notifications panel again by dragging or swiping upward.



**FIGURE I.4**

*Drag or swipe down from the top of the screen to open the Notifications panel (left). The Quick Settings panel (right) gives you instant access to essential settings.*

## OPENING THE QUICK SETTINGS PANEL

The Quick Settings panel is a screen that gives you swift access to frequently used settings. You can open the Quick Settings panel in one of two ways:

- Pull down from the top of the screen with two fingers.
- Open the Notifications panel and then tap the bar at the top.

The right screen in Figure I.4 shows the Quick Settings panel on a phone. To close the Quick Settings panel, drag or swipe up.

**TIP**

Tap at the top of the Quick Settings panel to switch to the Notifications panel.

## OPENING THE SETTINGS APP

Android has a vast number of settings that you can customize to configure your device the way you want it. You configure most of the settings through the Settings app. You can open the Settings app in three easy ways, as explained next. From here on, this book tells you to “Open the Settings app” rather than telling you which way to open it.

The quickest way to open the Settings app is to use the Quick Settings panel:

1. Open the Quick Settings panel by pulling down from the top of the screen with two fingers.
2. Tap the Settings icon (the gear icon) to open the Settings app.

Alternatively, you can open the Settings app from the Notifications panel:

1. Pull down from the top of the screen with one finger to open the Notifications panel.
2. Tap the bar at the top to display the Quick Settings panel.
3. Tap the Settings icon (the gear icon) to open the Settings app.

Or you can simply open the Settings app from the Apps screen like any other app:

1. Tap the Home button to display the Home screen.
2. Tap the Apps icon to display the Apps screen.
3. Tap the Settings icon to open the Settings app.

**NOTE**

Some Android skins make major changes to the Settings app, so if your device uses a skin, you may need to find your own way to the settings. See Chapter 14, “Using Samsung TouchWiz,” for coverage of the changes in the Samsung TouchWiz skin.

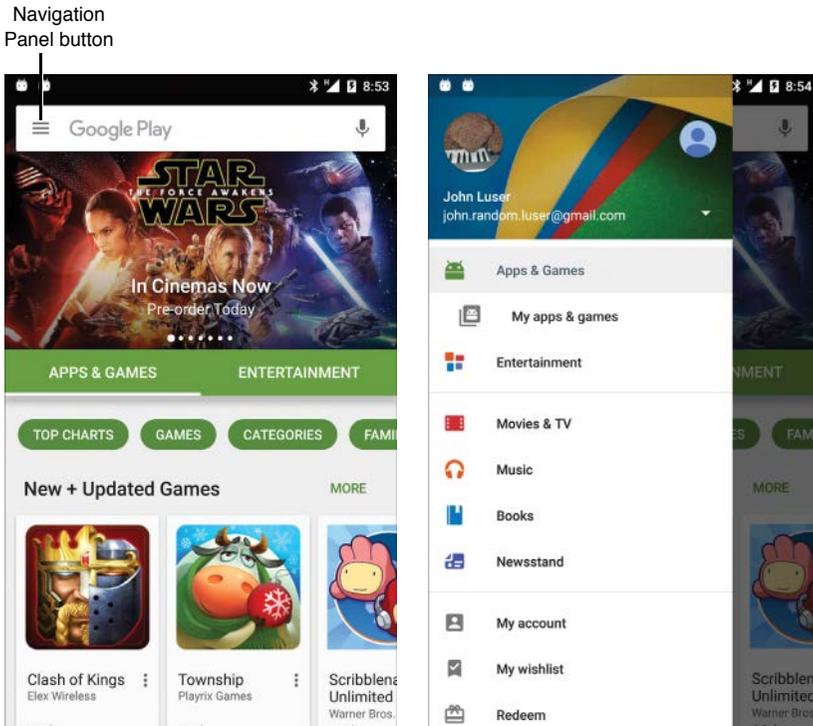
## USING THE NAVIGATION PANEL, MENUS, CONTROLS, AND DIALOG BOXES

To enable you to give commands easily and clearly, Android uses a large menu called the navigation panel; smaller menus; controls such as switches, check boxes, and radio buttons; and dialog boxes.

### USING THE NAVIGATION PANEL

In Lollipop and Marshmallow, many apps use the navigation panel, a wide menu-like panel on the left side of the screen, to enable you to navigate the app and give commands.

To display the navigation panel, you either tap the Navigation Panel button (see the left screen in Figure 1.5, which shows the Play Store app) or swipe right from the left edge of the screen. Tapping the Navigation Panel button is usually easier because some apps have laterally scrolling sections that accept the swipe gesture, which means you need to avoid such sections when you're swiping to open the navigation panel.



**FIGURE 1.5**

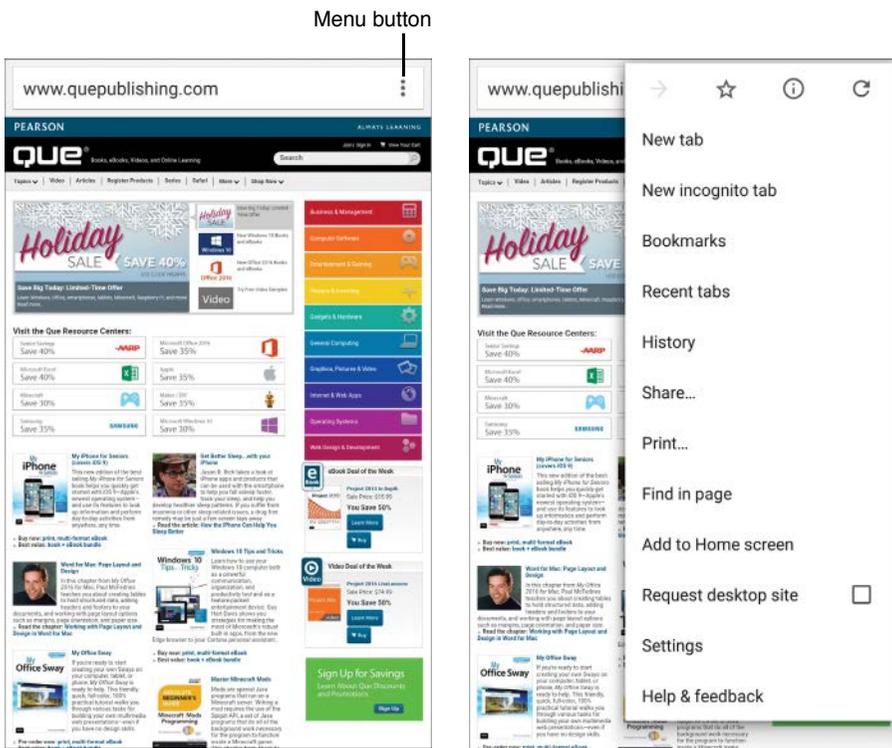
*Tap the Navigation Panel button (left) to display the navigation panel (right).*

After the navigation panel is open, you can tap one of the buttons or other controls on it to take an action. (See the right screen in Figure I.5.) For example, you can tap the My Account button on the navigation panel in the Play Store app to display the My Account screen, on which you can configure settings.

If you decide not to take an action on the navigation panel, you can close it either by swiping the navigation panel to the left or by tapping in the app to the right of the navigation panel.

## USING THE MENUS

Many apps include a Menu button that you can tap to display a menu of commands. For example, in Google's browser app, Chrome, you tap the Menu button (an icon with a vertical line of three dots) to display the menu (see Figure I.6), and then tap the command you want to use.



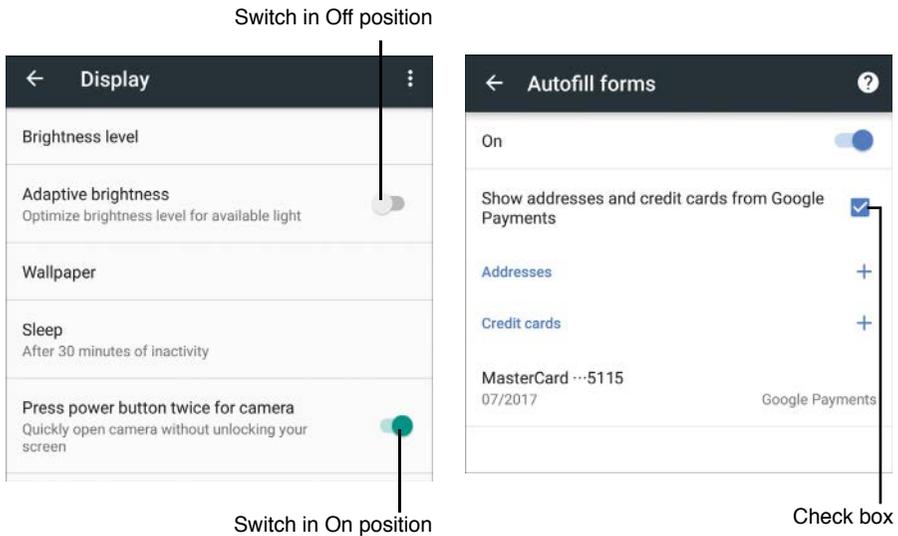
**FIGURE I.6**

Tap the Menu button (the three-dot icon, left) to open the menu (right), and then tap the command you need.

## WORKING WITH SWITCHES, CHECK BOXES, AND RADIO BUTTONS

Android uses switches and check boxes to enable you to turn individual options on and off.

For example, in the left screen in Figure I.7, the Adaptive Brightness switch is set to Off and the Press Power Button Twice for Camera switch is set to On. In the right screen in Figure I.7, the Show Addresses and Credit Cards from Google Payments box is checked, indicating that this feature is enabled.



**FIGURE I.7**

Set a switch to On to enable a feature or to Off to disable it (left). Check a check box (right) to enable a feature.

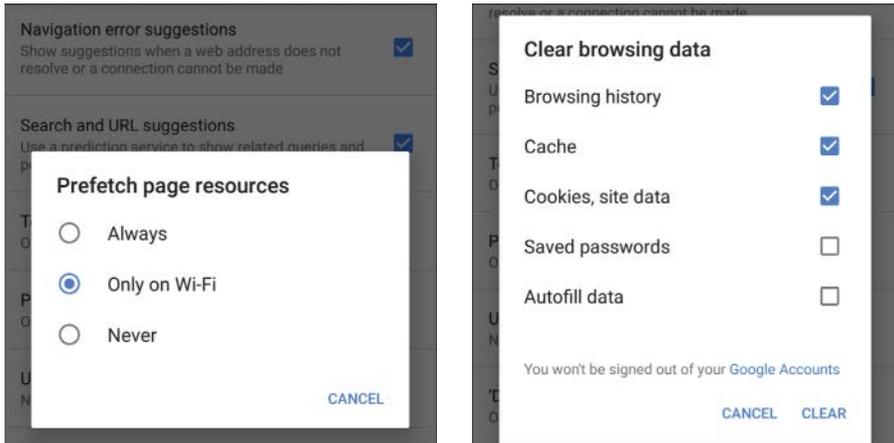


### NOTE

This book uses the term *check* to mean tapping a box to put a check mark in it and the term *uncheck* to mean tapping a box to remove the check mark from it. If the box is already checked or unchecked (as appropriate), you don't need to change the setting.

Android uses groups of radio buttons, also called *option buttons*, to enable you to make a choice among two or more mutually exclusive options. For example, in the Prefetch Page Resources dialog box shown on the left in Figure I.8, the Only on Wi-Fi radio button is selected, showing the blue circle. Tapping the Always radio

button or the Never radio button selects the radio button you tap and deselects the Only on Wi-Fi radio button; only one radio button in the group can be selected at any time.



**FIGURE I.8**

*Tap a radio button to select that option, deselecting whichever other option in the group is currently selected (left). Many dialog boxes contain command buttons, such as the Clear button and Cancel button shown in the Clear Browsing Data dialog box (right).*

## MAKING CHOICES IN DIALOG BOXES

When you need to make a decision, Android displays a dialog box to present the choices clearly. You can't take other actions until you have dismissed the dialog box.

If a dialog box contains only radio buttons, tapping a radio button closes the dialog box.

Otherwise, you normally tap a command button, such as the OK button or the Cancel button, to dismiss the dialog box. For example, in the Clear Browsing Data dialog box (see the right screen in Figure I.8), you tap the five check boxes to specify which of your browsing data you want to clear. The dialog box remains open until you tap the Clear button (to clear the selected items) or tap the Cancel button to close the dialog box without taking action.

Some dialog boxes appear only to confirm an action you have taken and so contain only an OK button.

## USING THE TOUCHSCREEN

Android uses seven main gestures on the touchscreen:

- **Tap.** Tap the screen and then lift your finger.
- **Tap and hold.** Tap the screen and keep your finger on it, usually until a menu appears or another change occurs. This action is also called *long-press*.
- **Double-tap.** Tap the screen twice in rapid succession.
- **Drag.** Tap an item on the screen, keep your finger on the screen, and then drag the item to its destination. In many cases, you need to tap and hold for a moment before the item becomes free for dragging.
- **Swipe.** Move your finger left, right, up, or down across the screen.
- **Pinch in.** Place your finger and thumb (or two fingers, if you prefer) apart on the screen and then pinch them together. This action is often used for zooming out (for example, on a map or a photo).
- **Pinch out.** Place your finger and thumb (or two fingers) together on the screen and then spread them apart. This action is often used for zooming in.

### PREVENTING THE SCREEN FROM ROTATING

Most Android devices include sensors (such as accelerometers) that detect the device's orientation. Android can automatically rotate the display to match the way the screen is pointing.

This automatic rotation is often handy, but you may want to turn it off at times, such as when you are holding your device nearly flat rather than upright. To turn off automatic rotation, open the Quick Settings panel by pulling down with two fingers from the top of the screen, and then tap the Auto-Rotate icon. When you tap it, the Auto-Rotate icon changes to the Portrait icon or the Landscape icon, depending on the device and its current orientation.

## IN THIS CHAPTER

- Setting up your home screens
- Using a different launcher
- Securing your device with locking, location settings, and encryption

# 3

## CUSTOMIZING YOUR DEVICE

In this chapter, you'll learn to customize your Android device. You'll start with the Home screens because setting these up the way you prefer can make a huge difference in how you use your phone or tablet.

Android gives you access to a wide range of settings, enabling you to configure your device to work the way you prefer. You can access most of these settings through the Settings app.

### SETTING UP YOUR HOME SCREENS

Your Home screens are your base camp for getting things done in Android, so you will want to make them as useful as possible. This means adding the icons and widgets you use the most and arranging them into your preferred order. You may also want to add Home screens (or remove existing ones) and change the wallpaper.



**TIP**

This section explains how to customize the Home screens using stock Android. If your device has a skin, you may need to use different techniques. If you have a Samsung device, see Chapter 14, “Using Samsung TouchWiz,” for instructions on customizing the Home screens on the Samsung TouchWiz skin.

The way you customize Home screens depends on the version of Android and the launcher it is running.

**NOTE**

This chapter focuses on Marshmallow (Android 6) and Lollipop (Android 5) with Google Now Launcher. This is the default launcher for these versions of Android. However, if you have an older device that you have upgraded to Lollipop, you may need to install the Google Now Launcher and set it to be the default launcher. See the section “Using a Different Launcher,” later in this chapter, for instructions on changing launchers.

## ADDING AND REMOVING HOME SCREENS

To give yourself space for your icons and widgets, you can create extra Home screens. If you no longer need a Home screen, you can remove it.

**NOTE**

Some versions of Android with certain launchers provide a set number of Home screens and don't let you add or delete Home screens. If your version of Android restricts you in this way, consider installing a third-party launcher to enable yourself to add and delete Home screens.

Google Now Launcher makes it easy to add Home screens. Follow these steps:

1. Swipe left one or more times to display the last Home screen (the one on the right).
2. Tap and hold an icon to make it mobile, and then drag it to the right edge of the screen. Android automatically creates another Home screen.
3. Release the icon.

**TIP**

You can create further Home screens in the same way. Before you do, you must put at least one more icon on the new Home screen you've just created so that there will be at least one icon left on that Home screen when you drag an icon to create another Home screen.

To remove a Home screen with Google Now Launcher, you remove all the icons from it. Android then gets rid of the surplus Home screen automatically.

## ADDING APPS TO YOUR HOME SCREENS

You can run any app from the Apps screen, but you'll probably want to put the apps you use most on your first Home screen for quick access.

Here's how to add an app's icon to a Home screen:

1. On the Home screen, tap the Apps icon to display the Apps screen.
2. Tap and hold the icon for the app you want to add to the Home screen. Thumbnails of the Home screens appear.
3. Drag the icon to the destination Home screen, position it where you want it, and then drop it.



### NOTE

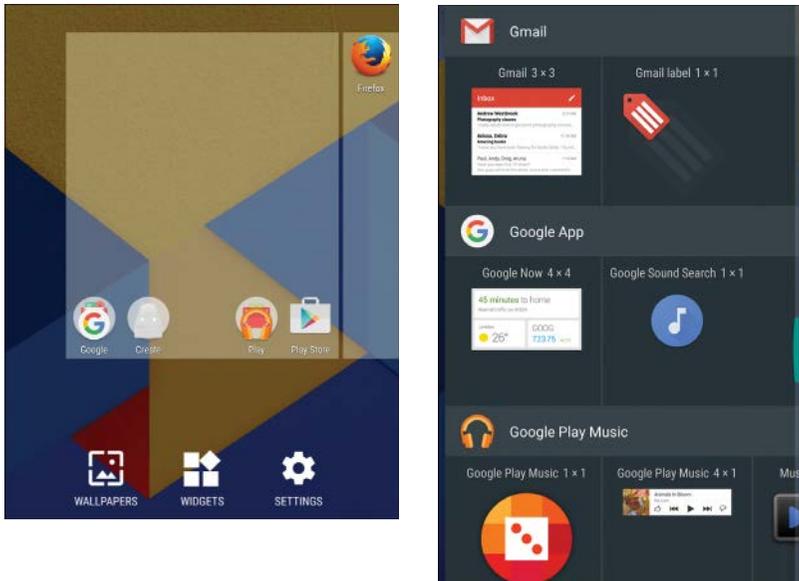
If you need to move the app's icon again on the Home screen, tap the icon and hold down until it becomes mobile, drag it to the new location, and then drop it.

## ADDING WIDGETS TO YOUR HOME SCREENS

You can also add widgets, tiny apps that display specific information, to your Home screens. Android comes with an extensive selection of widgets built in. If you need widgets beyond these, you can find many more on the Play Store and other online sites.

Here's how to add a widget to a Home screen with Google Now Launcher:

1. Tap and hold open space on the Home screen to display the customization controls. (See the left screen in Figure 3.1.)
2. Tap the Widgets button to display the Widgets screen. (See the right screen in Figure 3.1.)
3. Swipe up until you find the widget you want to add. You may also need to swipe left to see all the widgets available for a particular app.



**FIGURE 3.1**

*Tap and hold open space on the Home screen to display the customization controls (left), and then tap the Widgets button to display the Widgets screen (right).*

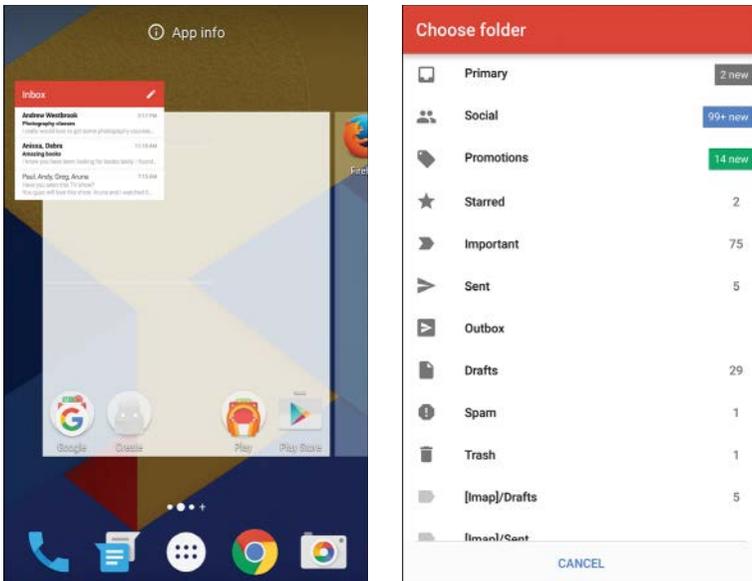
4. Tap and hold the widget to pick it up. The Home screens then appear as thumbnails. (See the left screen in Figure 3.2.)



## NOTE

Each widget has its size to the right of its name, such as 1×1 for the Contacts widget for Google Contacts, 3×3 for the Gmail widget, and 4×1 for the Drive widget. You can use these sizes to judge where the widgets will fit on your Home screens.

5. Drag the widget to where you want it to appear, and then drop it.
6. If the widget displays any configuration options, choose suitable settings. For example, when you add the Gmail widget to a Home screen, you get to choose which folder to display in the widget. (See the right screen in Figure 3.2.)

**FIGURE 3.2**

*When the Home screen thumbnails appear (left), drag the widget to the appropriate Home screen. For some widgets, you then must choose the content to display, such as choosing the folder for the Gmail widget (right).*

## ADDING WEB ADDRESSES TO YOUR HOME SCREENS

If you need to be able to quickly access particular websites, you can add their addresses to your Home screens. Follow these steps:

1. Open the Chrome browser and go to the web page or website.
2. Tap the Menu button to open the menu.
3. Tap the Add to Home Screen button to display the Add to Home Screen dialog box.
4. Either accept the default name for the icon or type a descriptive name that will enable you to identify it. Often, you'll need to shorten the name to make it useful.
5. Tap the Add button. Android adds the icon to your Home screen. You can then tap and hold it and move it to another location if you want.

## ORGANIZING HOME SCREEN ITEMS INTO FOLDERS

Your device's Home screens provide enough space for an almost infinite number of icons, but you'll probably need to keep them organized in a human-friendly way. To organize your icons, you can create folders either on the Home screens themselves or in the Favorites tray.

Here's how to create a folder:

1. Navigate to the Home screen that contains the icons. You can drag icons from one screen to another, but it's easier to start with them on the same screen.
2. Tap and hold an icon until it becomes mobile.
3. Drag the icon on top of another icon you want to put in the same folder. Android puts the two icons in a folder and assigns it the default name *Unnamed Folder*.



### NOTE

When you drag one icon on top of another icon, a highlighted circle appears behind the second icon to show that the icon is in the right place. If you miss the target icon, it moves out of the way on the assumption that you are rearranging the icons rather than creating a folder.

4. Tap the folder to open it.
5. Tap the folder's default name (*Unnamed Folder*) and then type the name you want to give it.
6. Tap the check-mark button on the keyboard or tap outside the folder's name to apply the name.



### TIP

To take an icon out of a folder, tap the folder to open it. Tap and hold the icon until it becomes mobile, and then drag it out of the folder to where you want it on the Home screen. To delete a folder, remove all its icons; when only one icon is left, the folder disappears, and that icon moves to the Home screen.

## ADDING DROPBOX FOLDERS TO YOUR HOME SCREENS

If you've installed the Dropbox app on your device, you may want to give yourself an easy way to access key folders. To do so, add one or more instances of the Dropbox widget to your Home screen using the technique explained earlier in this

chapter. When you add the widget, Android prompts you to choose the folder that the widget will open. Tap the appropriate folder, and then tap the Create Shortcut button. Android gives the widget the name of the folder.

## REPOSITIONING ITEMS ON YOUR HOME SCREENS

To reposition an item on a Home screen, tap and hold it until it becomes mobile, and then drag it to where you want to place it.

## REMOVING ITEMS FROM YOUR HOME SCREENS

To remove an item from a Home screen, tap and hold the item's icon until the Remove button appears at the top of the screen. Drag the icon to the Remove button and drop it there.



### NOTE

If the app you tap, hold, and drag on the Home screen is an app you've installed, the Uninstall button appears to the right of the Remove button. You can uninstall the app by dragging it to the Uninstall button and then tapping the OK button in the confirmation dialog box that opens.

## REARRANGING YOUR HOME SCREENS

To rearrange your Home screens with Google Now Launcher, open the Home screens for customization, and then tap and hold the thumbnail for the Home screen you want to move. When it becomes mobile, drag it to its destination and drop it there.

## SETTING THE WALLPAPER

To change the overall look of your Home screens, you can change the wallpaper. Android comes with a set of colorful wallpapers, and you can download other wallpapers to add variety. You can also use a photo of your own.



### NOTE

Each Home screen uses the same wallpaper on stock Android. Some skins enable you to use different wallpapers on different Home screens.

**TIP**

The live wallpapers include motion, which can make the Home screens look more entertaining when you're not working in an app. However, because they take up more processing power, you should avoid them if you want maximum performance or maximum runtime on the battery.

Follow these steps to set the wallpaper with Google Now Launcher:

1. Tap and hold open space to open the Home screen for customization.
2. Tap the Wallpapers button to display the Wallpapers screen.
3. Tap the My Photos button if you want to use one of your own images for the wallpaper; when you find the image, tap it to preview it. Otherwise, scroll the list of wallpapers and tap the one you want to preview.
4. When you've selected the wallpaper you want, tap the Set Wallpaper button to apply it.

**TIP**

You can find vast numbers of wallpapers on both the Play Store and on the Web. For best results, make sure you get wallpapers of the right resolution for your device—for example, 1080×1920 for a device such as the Nexus 5X. If you're not sure of your device's resolution, look it up online.

**CAUTION**

Before downloading a wallpapers app from the Play Store, read user reviews to determine its quality. If you decide to install it, carefully review the permissions it requires. If it requires permissions it shouldn't need, such as accessing your contacts, cancel the installation.

## USING A DIFFERENT LAUNCHER

A *launcher* is an app that enables you to launch other apps. The launcher controls the way your device's Home screen and other main screens appear, including any live widgets you place on them.

Android includes a default launcher that runs by default and which you summon each time you press the Home button. But you can install different launchers to change the way Android looks and acts on your device.

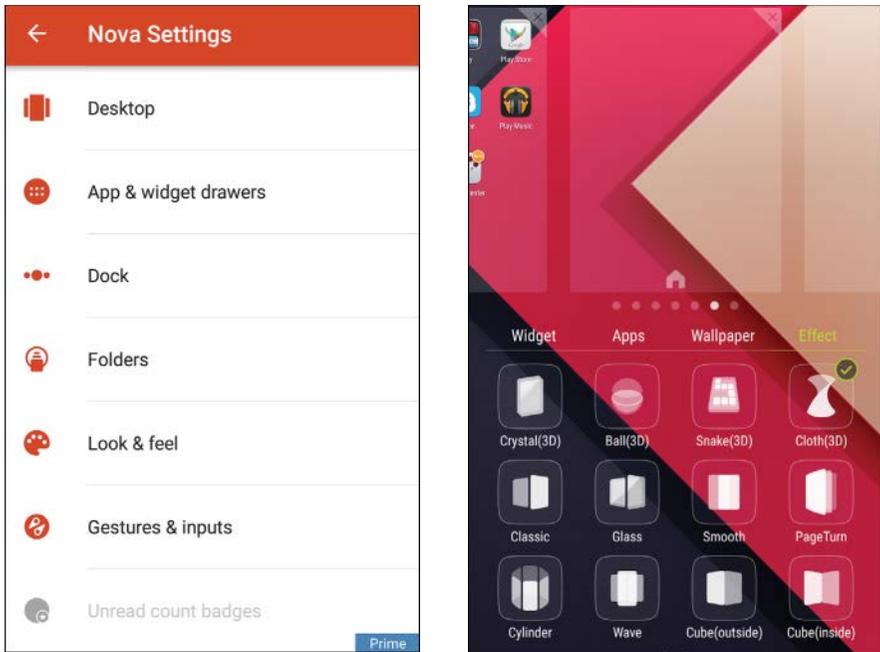
## CHOOSING A LAUNCHER

If you want to change your launcher, you have plenty of choices because developers have built many different launchers. You can find various launchers by opening the Play Store app, tapping the Apps button, and then searching for *launcher*.

Here are three of the top launchers at this writing:

- **Google Now Launcher.** Google Now Launcher is a launcher developed by Google that enables you to upgrade the launcher functionality on devices running new versions of Android. Stock versions of both Marshmallow and Lollipop come with Google Now Launcher as the standard launcher, but you also can try running it on skinned versions of Android. Google Now Launcher is free.
- **Nova Launcher.** Nova Launcher is a slick launcher that makes substantial changes to the Android user interface. The basic version of Nova Launcher is free and provides a slew of customization features, but the Prime version (which costs \$4.99) has even more, including the use of gestures on the Home screens. With Nova Launcher, you can even put small horizontal widgets in the app drawer if you find that helpful. The left screen in Figure 3.3 shows the main Nova Settings screen for Nova Launcher, which gives you an idea of what you can customize: the desktop, the app and widget drawers, the dock, the folders, the look and feel of the launcher, the gestures and inputs, and the unread count badges (a Prime feature).
- **Go Launcher.** Go Launcher offers a range of customizations, including themes that dramatically change the look of Android. Some themes are free; others you must pay for. Go Launcher includes shortcuts to many recommended apps, some of which are free. The right screen in Figure 3.3 shows the Effect panel for customizing Go Launcher. You'll probably want to start with the free version of Go Launcher; if you like it, consider upgrading to Go Launcher Prime, which costs \$5.99 and offers features such as removing ads, using a side dock to switch among running tasks, and a security lock that enables you to lock specific apps and settings.

**! CAUTION** A launcher typically needs many permissions to run successfully. For safety, it is best to avoid launchers from sources other than the Play Store unless you are certain of their provenance, integrity, and coding.

**FIGURE 3.3**

*From the Nova Settings screen (left), you can configure many areas of Nova Launcher. Go Launcher (right) also offers many settings, but its interface is completely different.*

## INSTALLING A LAUNCHER

To install a launcher, you download it from the Play Store like any other app. When the download completes, open the launcher by tapping the Open button on the app's screen in the Play Store app or by tapping the launcher's icon on the Apps screen.

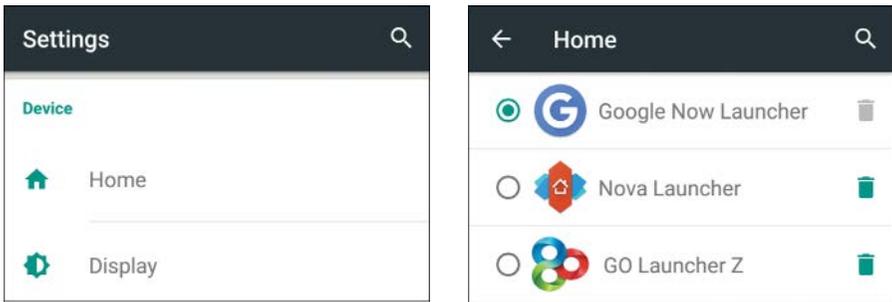
Some launchers walk you through a setup routine on first run. For example, Nova Launcher prompts you to import items from your existing launcher, saving you the trouble of rebuilding your existing Home screens for the new launcher. If the launcher cannot import widgets, you will need to add them manually.

After you finish any setup routine, the launcher displays your Home screen in all its transformed glory (or otherwise), and you can start exploring the launcher.

## SWITCHING AMONG LAUNCHERS

After installing multiple launchers, you can switch among them as needed by following these steps:

1. Open the Settings app and navigate to the Device section (shown on the left in Figure 3.4).
2. Tap the Home button in the Device section to display the Home screen. (See the right screen in Figure 3.4.)



**FIGURE 3.4**

*Use the Home screen in the Settings app to choose your default launcher. You can also delete any launcher you no longer want.*



### NOTE

The Home button appears in the Device section of the Settings screen only when multiple launchers are installed on your device. If your device has only Google Now Launcher, the Home button doesn't appear because you don't need it.

3. Tap the launcher you want to make the new default, selecting its radio button.
4. Tap the Home button. The Home screen appears, showing any customizations that the launcher makes automatically.

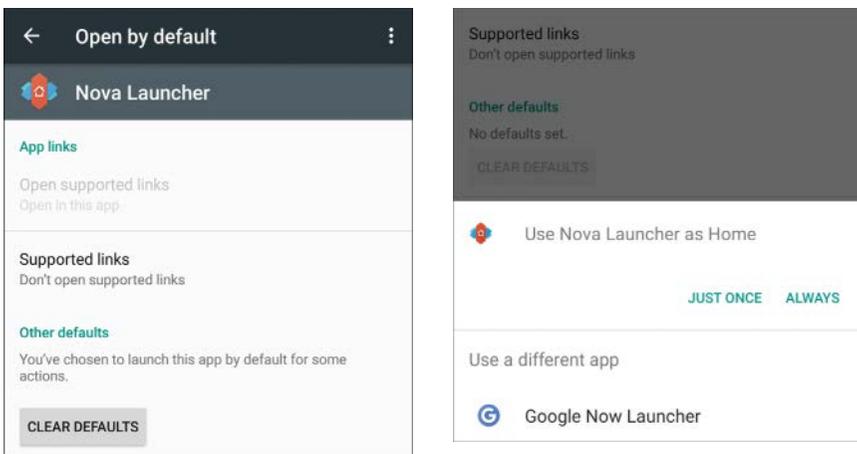
You can then use the launcher's controls to make further customizations. For example, to delete a launcher on Nova Launcher, tap the Delete button (the trash can) on the right of its button on the Home screen in the Settings app.

## MAKING NO LAUNCHER THE DEFAULT

When you're experimenting with launchers, you may want to try making no launcher the default so that you can easily switch among the launchers. By removing your default launcher, you can make Android display the Select a Home App dialog box each time you tap the Home button, allowing you to choose the launcher you want to use next.

Here's how to remove your default launcher:

1. Open the Settings app.
2. Tap the Apps button in the Device section to display the Apps screen.
3. On Lollipop, swipe left twice to display the All screen. (If the launcher is one you've downloaded, you can use the Downloaded screen instead.)
4. Scroll down and find the launcher that's currently running. This example uses Nova Launcher.
5. Tap the launcher to display its App Info screen.
6. On Marshmallow, tap the Open by Default button to display the Open by Default screen (shown on the left in Figure 3.5).



**FIGURE 3.5**

*Tap the Clear Defaults button on the Open by Default screen in Marshmallow (left) or the App Info screen in Lollipop to clear your default launcher. When you tap the Home button, you can then choose which launcher to use (right).*

7. Tap the Clear Defaults button. There's normally no response to this move except for a quick blink of the button, but if you see a confirmation dialog box, tap the OK button or its functional equivalent to confirm you want to clear the default launcher.

8. Tap the Home button. Because you've cleared the defaults, an untitled dialog box opens prompting you to choose a launcher. The right screen in Figure 3.5 is an example of this dialog box. The launcher you've just cleared—in this case, Nova Launcher—appears at the top, with a Just Once button and an Always button below it. The lower section of the dialog box shows the Use a Different App list, which contains your other launchers.
9. Tap the button for the launcher you want to use. In this example, you'd tap Google Now Launcher to switch to the Google Now Launcher. Because you're not tapping an Always button, this is only a temporary switch, so each time you tap the Home button, the dialog box appears again.

When you decide which launcher you want to use, tap the Home button to display the dialog box for choosing the launcher. If the launcher you want appears at the top of the dialog box, tap the Always button to make the launcher the default option. If not, tap the launcher in the Use a Different App list; then tap the Home button again to display the dialog box again, this time with the launcher you just tapped at the top. Now tap the Always button to set the default.

**NOTE**

The rest of this book assumes that you are using Google Now Launcher because this is the default launcher for stock Marshmallow and Lollipop.

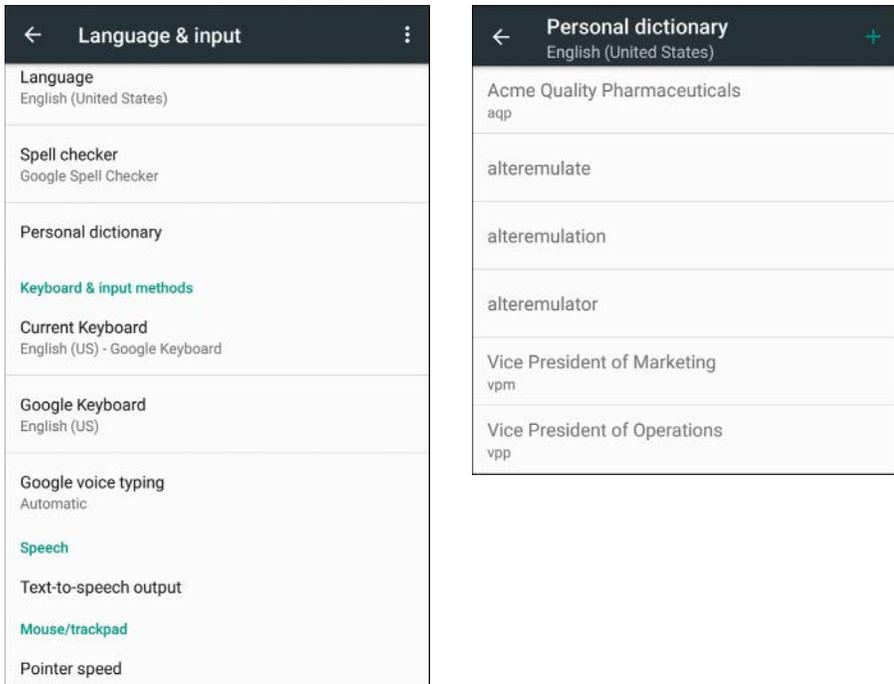
To set your default launcher on Samsung TouchWiz, open the Settings app, tap Applications to display the Applications screen, and then tap Default Applications to display the Default Applications screen. In the Set Defaults section, tap the Home button to display the settings screen called Home, tap the radio button for the launcher you want to use, and then press the Home button.

## CONFIGURING INPUT OPTIONS

Android supports different input options to enable you to get text into your device using your preferred language and a keyboard that suits your needs. You can also input text using your voice with the Google Voice Typing feature.

To set up your input options, you work on the Language & Input screen in the Settings app. (See the left screen in Figure 3.6.) To display this screen, open the Settings app and tap the Language & Input button in the Personal section.

First, make sure the Language button at the top shows the language you want to use, such as English (United States). If not, tap this button to display the Language screen and then tap the correct language. You can tap the Search icon and search for the language if necessary.

**FIGURE 3.6**

*Use the Language & Input screen (left) to set your input language and configure input options. On the Personal Dictionary screen, you can set up text shortcuts or add words you don't want the spell checker to query.*

Next, tap the Spell Checker button to display the Spell Checker screen. Here, you can set the switch at the top to On or Off to enable or disable spell checking. If you set the switch to On, you can also take three other actions:

- **Change the language.** Tap the Language button to set the language for spell checking. The default setting, Use System Language, works well in many cases.
- **Choose which spell checker to use.** If multiple radio buttons appear, tap the spell checker you want to use. If the only radio button is Google Spell Checker, the choice is made for you.
- **Configure the spell checker.** If the spell checker you use has a Settings button (the gear icon), tap this icon to display the Settings screen for the spell checker. You can then enable or disable any options as needed. For example, on the Google Spell Checker Settings screen, you can set the Look Up Contact Names switch to On if you want the spell checker to be able to look up names in your contact list to get them right.

Also at the top of the Language & Input screen, you can tap the Personal Dictionary button to display the Personal Dictionary screen. (See the right screen in Figure 3.6.) Here, you can tap the Add (+) button in the upper-right corner to add a text shortcut or a custom spelling to your personal dictionary. Alternatively, tap an existing entry to edit its contents or to delete it.

**TIP**

The Personal Dictionary has two features. First, you can create shortcuts to enable you to enter text quickly and accurately; for example, you might create a shortcut of **vpm** to enter **Vice President of Marketing** quickly. Second, you can add a word to stop the spell checker from querying it.

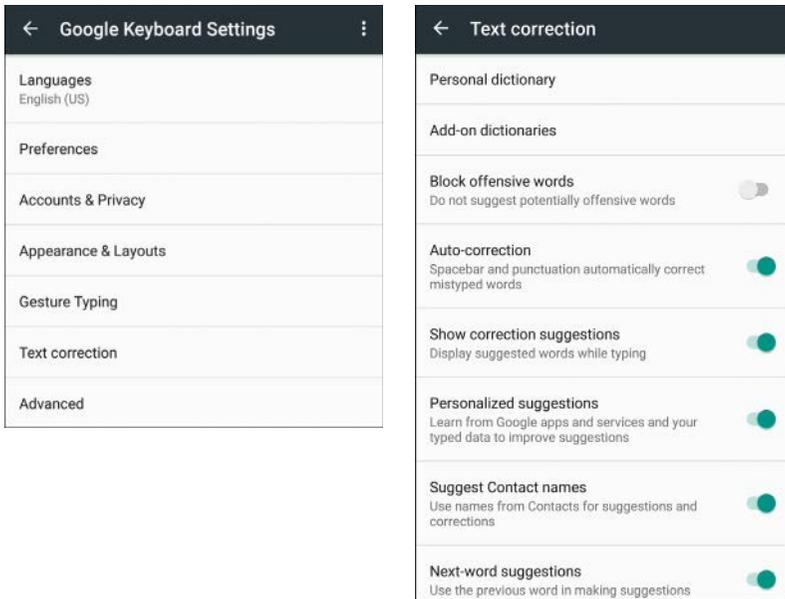
Next, in the Keyboard & Input Methods section, set up the keyboards and other input methods you want to use on your device. Here's what you can do:

- **Change the current keyboard.** Tap the Current Keyboard button to display the Change Keyboard dialog box, and then tap the radio button for the keyboard you want to use. If the keyboard you want doesn't appear, tap the Choose Keyboards button to display the Language & Input screen, and then set the switch to On for each keyboard you want to have available. Chapter 1, "Getting Up to Speed with Android," discusses some alternative keyboards you may want to try on your device.

**NOTE**

The Google Keyboard is normally the default keyboard, so its switch will be set to On unless you select a different keyboard. Google Voice Typing enables you to enter text by tapping the microphone button on the right side of the suggestion strip above the keyboard and then speaking into your device's microphone (or an attached microphone). Make sure the Google Voice Typing switch is set to On if you want to be able to use this feature.

- **Configure a keyboard.** Tap the keyboard's button to display its Settings screen, and then choose the settings you want. For example, the left screen in Figure 3.7 shows the Google Keyboard Settings screen, where you can set your input language (such as U.S. English), set preferences (such as auto-capitalization and vibration), configure text correction (see the right screen in Figure 3.7), and choose other options. Chapter 1 explains your choices on the Google Keyboard Settings screen.

**FIGURE 3.7**

*Choose options for a keyboard on its Settings screen, such as the Google Keyboard Settings screen (left), and the screens to which it gives access, such as the Text Correction screen (right).*

## CHANGING KEYBOARDS QUICKLY

You can change keyboards quickly from within an app that accepts text input. With the keyboard displayed, tap and hold the key to the left of the spacebar to display the Change Keyboard dialog box, and then tap the radio button for the keyboard you want. If the keyboard doesn't appear in the Change Keyboard dialog box, tap the Choose Keyboards button to go to the Language & Input screen, where you can add it.

## CONFIGURING THE LOCK SCREEN

The lock screen is the screen that appears when you start your device or when you wake your device after sleep. You can choose different lock strengths or even turn off locking altogether; you can also configure the Smart Lock feature to allow you to easily unlock your device. You can display your owner information (or other information) on the lock screen to help someone who finds your device return it to you.

## TAKING ACTIONS FROM THE LOCK SCREEN

By default, the lock screen in stock Android allows you to unlock your device, make an emergency call (swipe up and then tap the Emergency button), or open the Camera app (swipe the Camera icon up or to the left). However, because many manufacturers customize the lock screen, you may find that your device's lock screen offers more functionality, such as widgets for keeping on top of your communications.

On stock Marshmallow with some Nexus models, you can also press the Power button twice to open the Camera app quickly without unlocking your device. If this setting doesn't work, choose Settings, Display and then set the Press Power Button Twice for Camera switch to On. If this setting doesn't appear, your device doesn't support it.

## CHOOSING THE BEST LOCKING METHOD

To keep your data safe, lock your device. Android offers four ways to unlock the screen, but only two are worth using if your device contains any personal or sensitive information, as almost all devices do. These are the four unlock methods:

- **Swipe.** You tap the lock icon on the lock screen and swipe your finger across the screen to unlock your device. Swipe provides no security at all, but it does prevent your device from becoming unlocked by accident in your pocket or bag.
- **Pattern.** You draw a pattern on a nine-dot grid on the screen to unlock your device. A pattern is useful only for light security. You can draw a complex pattern to make this harder for a determined attacker to break, but the result may be more difficult for you to use than a PIN or password.
- **PIN.** You type in a numeric personal identification number (PIN) and tap the Enter button to unlock your device. PIN is a good choice for medium security. The PIN must be at least four digits long (giving 10,000 possible combinations), but it is sensible to use eight digits (10,000,000 combinations) or more.



### NOTE

If you enter the wrong PIN or password five times in succession, Android makes you wait 30 seconds before trying again. This delay is to make it awkward for someone to guess your PIN or password—for example, by entering the names of your family, friends, or pets. It also helps delay an attacker breaking your PIN by “brute force,” simply entering every possible PIN value in turn until stumbling on the correct one.

- **Password.** You type in a password using any characters—letters, numbers, or symbols—but containing at least one letter. Password is the only choice for serious security on your device. Android requires the password to be at least four characters long, but you should consider eight characters a minimum to secure your device effectively. The longer the password, the harder it is for an attacker to break by brute force.

**! CAUTION** Even a strong password may not protect your device against professional intrusion. Some law-enforcement agencies have automated tools for brute-force attacks on iOS devices (the iPhone, iPad, and iPod touch). These tools cut the device's power after a failed PIN attempt to avoid triggering the delay mechanism. It is likely that agencies have similar tools for cracking Android devices.

## SETTING UP LOCKING ON YOUR DEVICE

Here's how to set up locking on your device:

1. Open the Settings app.
2. Tap the Security button in the Personal section to display the Security screen.



**NOTE** The screen locking settings may be in a different location on your device, such as a screen called Lock Screen or Security & Screen Lock.

3. Tap the Screen Lock button in the Screen Security section to display the Choose Screen Lock screen. If you have already applied a lock, you will need to use the unlocking method to proceed. For example, type your PIN and tap the Next button or the right-arrow button.
4. Tap the unlock method you want to use, and then follow through any screens that appear. For example, if you tap the Password button, you must type a password and then confirm it.



**NOTE** On Marshmallow, when you tap the Pattern button, the PIN button, or the Password button on the Choose Screen Lock screen, the Secure Start-Up screen appears, offering to apply further protection by requiring your

password before the device starts. Tap the Require Password to Start Device radio button if you want to implement this security mechanism, which is a good idea. Otherwise, tap the No Thanks radio button. Either way, tap the Continue button to proceed.

5. Back on the Security screen, tap the Automatically Lock button to display the Automatically Lock dialog box, and then tap the button for the delay between the device going to sleep and the screen locking. The best choice is Immediately, but you may want to have a short delay, such as 5 Seconds or 15 Seconds, if you find yourself needing to wake your device soon after you put it to sleep.
6. Also on the Security screen, set the Power Button Instantly Locks switch to On so that you can lock your device quickly by pressing the Power button.

Locking is now set up. To try it, press the Power button once to lock your device, press the Power button again to wake it, and then use the unlock method to unlock the device.

## SETTING UP SMART LOCK

Android's Smart Lock feature allows you to set up other ways of unlocking your device than your pattern, PIN, password, or fingerprint. As of this writing, Smart Lock offers five smart ways to keep your device unlocked or unlock it automatically:

- **Trusted Devices.** You can specify one or more trusted devices whose presence allows your device to remain unlocked. Trusted devices use either NFC or Bluetooth. For example, if you wear a Bluetooth-capable watch, you can use that as a trusted device.
- **Trusted Places.** You can specify one or more trusted places—map locations—in which your device remains unlocked. For example, you can set up your home as a trusted place.
- **Trusted Face.** You can set up your device to unlock when its screenside camera detects you gazing lovingly at it.
- **Trusted Voice.** You can set up your device to unlock when it hears a voice that matches the voice model you set up.
- **On-Body Detection.** You can set up your device to remain unlocked while it detects you are holding it or carrying it.

## UNDERSTANDING THE PITFALLS OF SMART LOCK

If you use your Android device extensively but want to keep your data safe, you'll need to unlock your device many times per day. Unlocking is vital for security, but it reduces your productivity by increasing the time it takes to start interacting with your phone or tablet.

Smart Lock is a great idea for helping overcome users' understandable reluctance to keep typing in a PIN or a complex passcode each time their device has locked. As explained in the main text, Smart Lock offers three smart tests for keeping your device unlocked (Trusted Devices, Trusted Places, and On-Body Detection) and two smart means of unlocking your device quickly and almost effortlessly (Trusted Face and Trusted Voice).

Unfortunately, all these five Smart Lock approaches have security problems—especially the three stay-unlocked methods.

A malefactor can defeat the Trusted Devices feature by removing a trusted device along with your Android device. To defeat the On-Body Detection feature, an attacker need only remove your Android device from your hand or take your purse (with your phone in it) from your shoulder.

Trusted Places is even worse. If you make home a trusted place, any of your family can use your Android device the moment you turn your back. If you make work a trusted place, any colleague can filch your device and start using it.

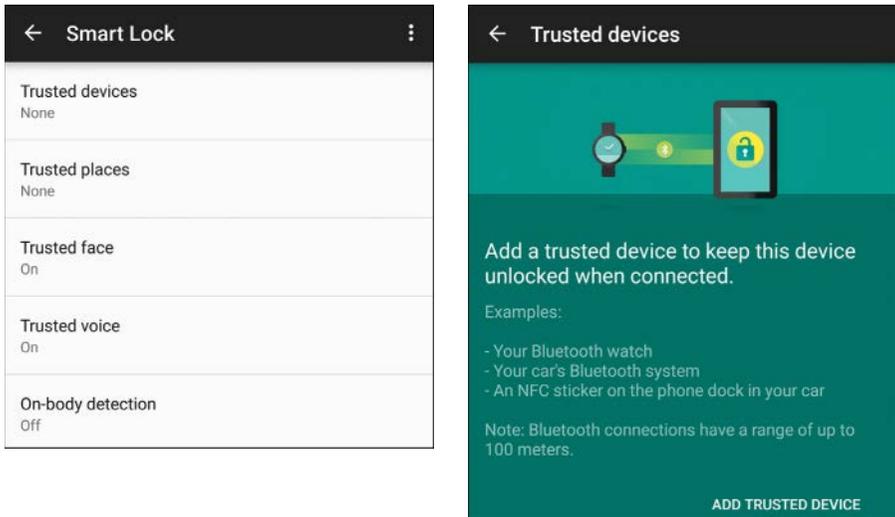
The two smart-unlock methods, Trusted Face and Trusted Voice, are better—but even so, you may not want to use them. With Trusted Face, someone who looks like you to the camera and its algorithms may be able to unlock your device. (A picture of you shouldn't work because Trusted Face includes a "liveness check" that makes sure the face's eyes blink.) Similarly, Trusted Voice is open to attacks using either similar voices or recordings of your voice.

Setting up Smart Lock is straightforward. Choose Settings, Security, Smart Lock to display the Smart Lock screen. (See the left screen in Figure 3.8.) You'll need to enter your password, PIN, or pattern to prove you're you.

Next, tap the button for the Smart Lock method you want to set up, and follow the prompts on the screens that appear. Here are brief notes on the Smart Lock methods:

- **Trusted Devices.** On the Trusted Devices screen (see the right screen in Figure 3.8), tap the Add Trusted Device button. On the Choose Device Type screen, tap the Bluetooth button or the NFC button, as appropriate.

For Bluetooth, you then select the device on the Choose Device screen. For NFC, you bring the NFC tag or device to within striking distance of the NFC chip in your Android device. Usually, you'll hear a bleep when the NFC chips connect.



**FIGURE 3.8**

*On the Smart Lock screen (left), tap the Smart Lock method you want to set up. Then use the screen that appears, such as the Trusted Devices screen (right), to configure the Smart Lock method.*

- **Trusted Places.** On the Trusted Places screen, tap the place if it already appears. Otherwise, tap the Add Trusted Place button and then use the Pick a Place screen to select the place; Android suggests your current location, but you can move the location as needed.
- **Trusted Face.** On the Add a Trusted Face screen (in Marshmallow) or the About Trusted Face screen (in Lollipop), read the warnings and then tap the Set Up button. On the next screen, which is called Add a Trusted Face in both Marshmallow and Lollipop, tap the Next button, and then position your face in the dotted frame onscreen and wait while Android recognizes it.



### TIP

After setting up Trusted Face, tap the Improve Face Matching button on the Trusted Face screen and go through the procedure a few more times to teach Android how your face looks from different angles, with or without glasses or makeup, or shaven and unshaven.

- **Trusted Voice.** On the Settings screen that appears, set the Always On switch (on Marshmallow) or the From Any Screen switch (on Lollipop) to On if it is set to Off. You can then set the Trusted Voice switch to On; you'll need to enter your pattern, password, or PIN, too.
- **On-Body Detection.** On the On-Body Detection screen, set the switch to On, and then tap the Continue button in the Keep in Mind dialog box that opens and warns you that someone else might be able to grab your device from you without causing automatic locking to take place.

**TIP**

After setting up your Smart Lock method or methods, test them to make sure they work as you expect them to.

## PUTTING A MESSAGE OR OWNER INFORMATION ON THE LOCK SCREEN

You can display a message or your owner information on the lock screen. This works a little differently in Marshmallow than in Lollipop:

- **Marshmallow.** Choose Settings, Security, Lock Screen Message to open the Lock Screen Message dialog box. Type the message you want to display, tapping the Enter key as needed to create new lines, and then tap the Save button.
- **Lollipop.** Choose Settings, Security, Owner Info to display the Owner Info screen. Check the Show Owner Info on Lock Screen box, and then type the text you want to display.

**CAUTION**

Any information you display on the lock screen is accessible to anybody who can pick up your device and press the Power button. So you'll need to balance your desire for instant access to information against your need to keep that information private.

## UNLOCKING YOUR DEVICE WITH YOUR FINGERPRINT

If your device has a fingerprint scanner, you can set up one or more of your fingertips as an easy way of unlocking your device.

On those Google Nexus models that have fingerprint scanners, such as the Nexus 6P and the Nexus 5X, the fingerprint-unlock feature is called Nexus Imprint. To set it up, choose Settings, Security, Nexus Imprint; enter your PIN, pattern, or password to authenticate yourself; and then tap the Add Fingerprint button on the Nexus Imprint screen to start the process of adding a fingerprint. When you reach the Fingerprint Added screen, you can tap the Add Another button to add another finger.

The Nexus Imprint assigns the first fingerprint the default name Finger 1. When you finish adding fingerprints and return to the Nexus Imprint screen, you can tap a Finger button to open a dialog box that enables you to either add a more useful name (such as Right Index Finger) or delete the fingerprint.

**TIP**

Normally, it's a good idea to add multiple fingerprints so that you can unlock your device using either hand. If the fingerprint scanner is on the front of the device, you may want to add your thumbs as well.

Other manufacturers give different names to the fingerprint-unlocking feature on their devices and put them in different areas of the Settings app, so you may need to search for them. For example, on Samsung devices that have fingerprint readers, such as the Galaxy Note 5, choose Settings, Lock Screen and Security, Fingerprints to display the Fingerprints screen, and then tap the Add Fingerprint button.

## CONFIGURING LOCK-SCREEN NOTIFICATIONS

Android enables you to choose whether to display notifications on the lock screen. Displaying notifications on the lock screen can be a time-saver, but it also risks exposing notifications to people you'd rather didn't see them. So Android gives you another choice: You can display notifications but hide any content that might be sensitive.

To configure lock-screen notifications, choose Settings, Sound & Notification. On the Sound & Notification screen, tap the When Device Is Locked button, and then tap the appropriate option in the pop-up menu: Show All Notification Content, Hide Sensitive Notification Content, or Don't Show Notifications at All.

**NOTE**

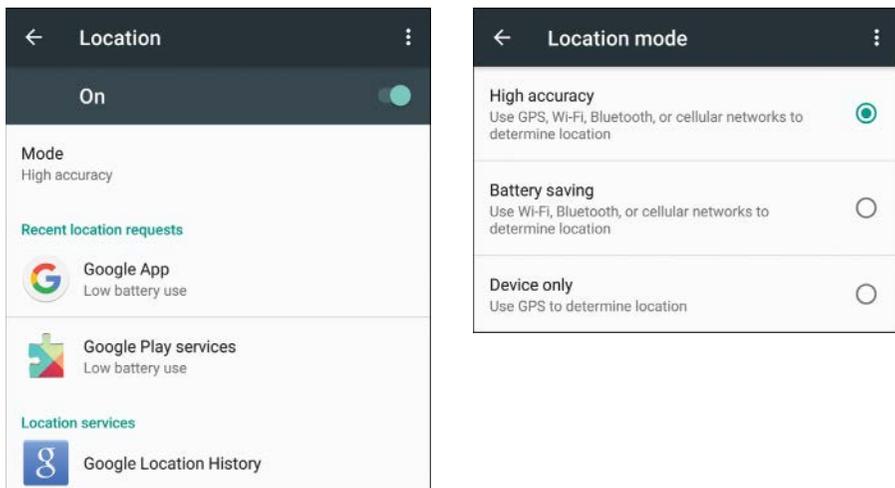
On a tablet running Marshmallow, the Hide Sensitive Notification Content option might not be available.

## CHOOSING LOCATION SETTINGS TO PROTECT YOUR PRIVACY

Carrying a cell phone is like carrying a beacon that constantly tracks your location, and even a Wi-Fi-only tablet keeps track of your whereabouts so that it can provide map information and other location-dependent data. Besides, electronics devices are exposed to snooping, so it's essential to choose privacy settings that suit your needs.

Here's how to choose location settings:

1. Open the Settings app.
2. In the Personal section, tap the Location button to display the Location screen. (See the left screen in Figure 3.9.)
3. Set the Location switch to the On position to use location tracking.
4. Tap the Mode button to display the Location Mode screen. (See the right screen in Figure 3.9.)

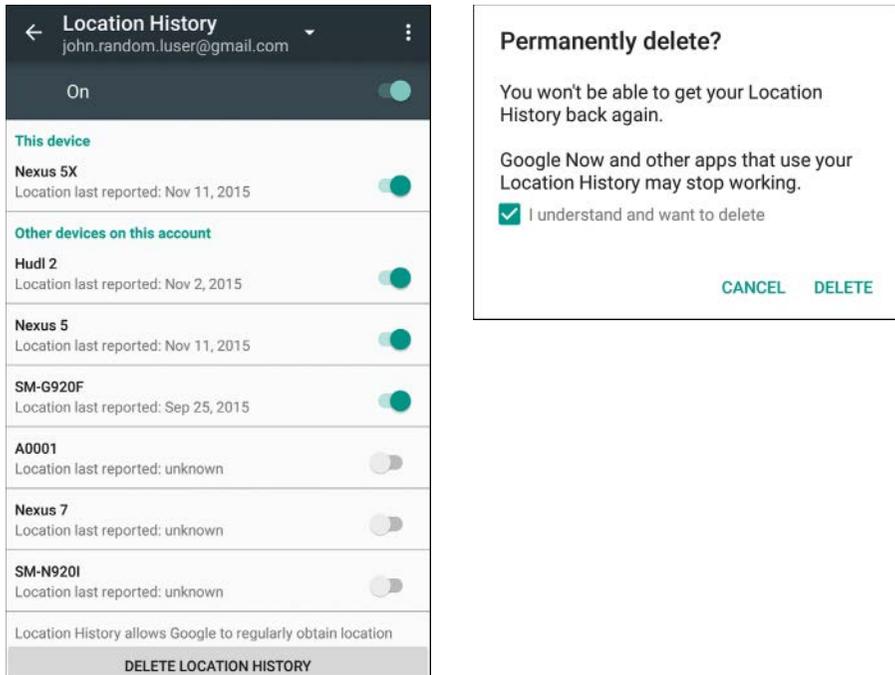


**FIGURE 3.9**

*On the Location screen (left), you can turn location tracking On or Off, choose which mode to use, and configure Location Services. On the Location Mode screen, choose how you want Android to track your device's location.*

5. Tap the button for the location mode you want to use: High Accuracy, Battery Saving, or Device Only.
6. Tap the arrow button or the Back button below the screen to return to the Location screen.

7. Review the apps and services in the Recent Location Requests list to make sure that all are apps you want to use location services.
8. In the Location Services list, tap Google Location History to display the Location History screen. (See the left screen in Figure 3.10.)

**FIGURE 3.10**

*From the Location History screen (left), you can pause location history tracking or turn it off for a device. To delete your location history, tap the Delete Location History button and then tap the Delete button in the Permanently Delete dialog box (right).*

**TIP**

If you have set up multiple Google accounts on your device, make sure the Location History screen is showing the account you want to configure. You can switch accounts by using the pop-up menu at the top of the screen.

9. If you want to pause location history, set the switch at the top of the Location History screen to Off, and then tap the OK button in the Pause Location History dialog box that opens.
10. Look at the devices shown on the Location History screen. You can set the switch for a device to Off to turn off location history for that device.

11. If you want to delete all the location history entries for this Google account, tap the Delete Location History button at the bottom of the Location History screen. In the Permanently Delete? dialog box that appears (see the right screen in Figure 3.10), check the I Understand and Want to Delete box, and then tap the Delete button.

**! CAUTION** Deleting your location history entries may stop apps that use your location history from working. Google Now is the app most likely to be affected, but other apps also can be affected.

## ENCRYPTING YOUR DEVICE

To protect your device against unauthorized access if you lose it, you can encrypt its contents. Encryption deliberately scrambles the content using an encryption key, leaving the content unreadable without the key to decrypt it.

### MOST MARSHMALLOW DEVICES HAVE MANDATORY ENCRYPTION

If your device came with Marshmallow installed, chances are that it is already encrypted. In Marshmallow, Google made encryption mandatory for all new Android devices that meet certain technical and performance criteria, so unless your device doesn't meet them, it should be encrypted. But if you have upgraded your device from Lollipop to Marshmallow, you should check that encryption has been applied. And if your device is still running Lollipop, you should apply encryption if you haven't already done so.

To check whether your device is encrypted, choose Settings, Security and then look at the Encryption section of the Security screen. If the Encrypt Phone button or Encrypt Tablet button has an Encrypted readout, you're all set. If not, you can encrypt your device as explained in this section.



**NOTE** Encryption can take an hour or more, depending on the amount of data your device contains and its processor speed; and if encryption fails to complete, your data may get corrupted. So Android ensures enough power is available by making the encryption controls unavailable unless the device's battery is fully charged *and* the device is connected to a power supply.

For the encryption to work, you must set a lock screen PIN or password to prevent others from unlocking your device. If you've already set a PIN or password, you're good to go; if not, go back to the section "Setting Up Locking on Your Device," earlier in this chapter, and set one or the other.

## UNDERSTANDING THE DISADVANTAGES OF ENCRYPTION

Encryption has three disadvantages you should understand before you encrypt your device.

First, your device must decrypt data to present it to you, so it may run more slowly. Depending on the device's hardware, the difference may not be noticeable, but it may be enough to be annoying. This is why Google included performance criteria rather than making encryption mandatory for *all* Marshmallow devices.

Second, on Lollipop, you must enter your PIN or password to decrypt the storage each time you restart the device. On Marshmallow, you can choose whether to require the PIN or password at startup. (This feature is called Secure Start-Up.) This is easy enough, but it makes an extra step between booting your device and getting to use it.

Third, the only way to remove encryption is by restoring your device to factory settings. Doing this removes all your data and apps from the device, so you have to set it up again from scratch.

For a device that has multiple user accounts set up, there's a fourth disadvantage: Even if you encrypt the device from your owner account, the other accounts remain unencrypted and aren't required to set a PIN or passcode. This raises the possibility that an attacker can use the other accounts to attack your data.

**! CAUTION** Android's encryption is strong enough to prevent civilian attackers from unencrypting it. However, you should assume that law-enforcement agencies and government security agencies have tools powerful enough to crack the encryption without breaking a serious sweat.

## ENCRYPTING THE DATA ON YOUR DEVICE

Here's how to encrypt your device:

1. Fully charge the battery, and leave the device connected to power.
2. Open the Settings app.

3. Tap the Security button in the Personal section to display the Security screen.

**NOTE**

Depending on your device, the encryption settings may be in a different location. If you can't find them, search for "encrypt."

4. Tap the Encrypt Phone button or the Encrypt Tablet button (whichever one appears). The Encrypt Phone screen or the Encrypt Tablet screen appears. (Some devices have the Encrypt Device button and Encrypt Device screen instead.)
5. Read the information and then tap the Encrypt Phone button or the Encrypt Tablet button. The Confirm Your PIN screen or Confirm Your Password screen appears.

**NOTE**

If your device doesn't have a PIN or password set, the No Lock Screen PIN or Password dialog box opens, telling you that you need to set a PIN or password. Turn back to the section "Setting Up Locking on Your Device," earlier in this chapter, and return when you have set a PIN or password.

6. Type your PIN or password.
7. Tap the Continue button. The Encrypt screen appears, warning you that encryption is irreversible and that your device will restart several times during the encryption process.
8. Tap the Encrypt Phone button or the Encrypt Tablet button. Android starts the encryption process. You'll see the Encrypting screen with a progress readout as it works.
9. When the Type Password to Decrypt Storage prompt appears, type your PIN or password and tap the Done button on the keyboard. Android then decrypts your data, the lock screen appears, and you can type your PIN or password (again) to unlock the device as usual.

**NOTE**

If you have a PIN rather than a password, don't worry that the Type Password to Decrypt Storage prompt asks for a password. Type in your PIN, and all will be well.

**TIP**

If encryption fails on a tablet that has multiple user accounts set up, try updating to the latest version of Android before encrypting the tablet.

## DECRYPTING THE DATA ON YOUR DEVICE

The only way to decrypt the data on your device is to perform a factory data reset. This move wipes all your apps and data off your device and restores it to its original settings.

**CAUTION**

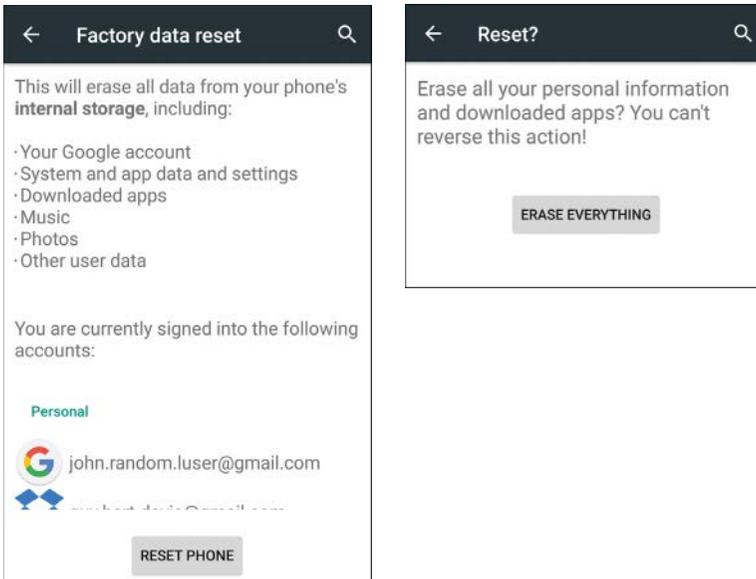
Back up your device's data to your computer or to an online account—or, better, to both—before performing a factory data reset.

**TIP**

You may want to perform a factory data reset before selling your phone or tablet or giving it to someone else.

Here's how to perform a factory data reset:

1. Open the Settings app.
2. Tap the Backup & Reset button in the Personal section to display the Backup & Reset screen.
3. Tap the Factory Data Reset button. The Factory Data Reset screen appears. (See the left screen in Figure 3.11.)
4. The Confirm Your PIN screen or Confirm Your Password screen appears.
5. Type your PIN or password.
6. Tap the Continue button. The Reset screen appears, displaying a final, excited warning. (See the right screen in Figure 3.11.)
7. Tap the Erase Everything button. The Power Off dialog box opens for a few seconds. The device then shuts down and restarts. The Erasing screen appears while Android erases the data.

**FIGURE 3.11**

*On the Factory Data Reset screen (left), tap the Reset Phone button or Reset Tablet button. On the Reset screen (right), tap the Erase Everything button.*

Android then resets the operating system to factory defaults and displays the Welcome screen. You can then set up your device again as you did when you first got it.

**TIP**

The quickest and easiest way to get your device up and running again is to restore data from your Google account to it. Tap the Yes button on the Got Google screen, and then type your email address and password on the Sign In screen. When the Google Services screen appears, check the box called "Back Up Your Data to a Google Account. Restore Previous Backups to This Device."

## PERFORMING A HARD RESET

In addition to the factory data reset explained in the previous section, there's another type of reset called a *hard reset*. A hard reset is a move you typically perform when your device won't start correctly; for example, it crashes while loading Android.

## FIND SPECIFIC INSTRUCTIONS FOR YOUR DEVICE BEFORE PERFORMING A HARD RESET

Exactly how you perform a hard reset depends on the device you're using and the version of Android it's running. This section gives you the general steps needed, but before performing them, you should search online to find the different key presses or commands your device and version of Android need. Search for the device's name and *hard reset*.

Here's an example of how to perform a hard reset. These instructions are specifically for the Nexus 5X running stock Marshmallow.

1. Power down your phone or tablet. Press and hold the Power button until the Power dialog box opens, and then tap the Power Off button in the dialog box that opens.



### NOTE

If the Power dialog box doesn't appear because your device is frozen, keep holding down the Power button until the device turns off.

2. Hold down the Volume Up button, the Volume Down button, and the Power button for several seconds. Your device turns on and displays a picture of an Android lying on its back with its cover open for maintenance. Release the buttons.



### TIP

Different devices use different combinations of hardware buttons to perform a hard reset. If the combination given here doesn't work for your device, search online for the device's name and *recovery buttons*.

3. Press the Volume Up button or the Volume Down button one or more times until the Recovery Mode button appears at the top of the screen.
4. Press the Power button to give the Recovery Mode command. Your device restarts and displays another screen showing an Android lying on its back, cover open for maintenance, a red triangle with an exclamation point, and the message "No Command."
5. Press and hold the Power button and then press the Volume Up button. The Android Recovery screen appears.

6. Press the Volume Up button or the Volume Down button to select the Wipe Data/Factory Reset command on the menu.
7. Press the Power button to give the command. A confirmation screen appears because this is a drastic move.
8. Press the Volume Up button or the Volume Down button to select the Yes – Erase All User Data command.
9. Press the Power button to give the command. Android erases the data, restarts, and displays the Welcome screen. You can then set up the device from scratch.

# Index



## Symbols

- 2-step verification (Google accounts), 238
  - Android devices, 240
  - computers, 238-239
  - logging in, 240
  - reinforcing, 239-240
- + search operator, 237

## A

- AAC (Advanced Audio Coding), 388-389
- About Phone button, 15
- About Tablet button, 15
- accelerometers, 12
- Access Point Name (APN) setting, 143
- Access Point Names button, 143
- access points, configuring, 143
- Access Your Contacts dialog box, 352
- accessibility
  - Chrome, 270, 280
  - Google Now, 252
  - TTY Mode, 344
- accessing
  - Camera app from lock screen, 369
  - devices, 75-77
- accounts
  - email
    - adding to Gmail app, 200, 203-208*
    - moving messages, 234*
    - personal accounts, 197*
    - security, 199-200*
    - settings, configuring, 222-224*
  - Exchange
    - adding to Gmail app, 208-212*
    - mail server technology, 198*



- moving messages, 234*
  - settings, configuring, 224-226*
  - setup information, 198-199*
- Facebook
  - deleting, 436*
  - multiple, 434-435*
  - phone numbers, adding, 412-413*
- Gmail
  - adding to Gmail app, 201-202*
  - settings, 196*
- Google. *See* Google accounts
- Hangouts, 357-359
- Play Store account, 177-179
- Samsung, 450, 477
- Twitter
  - multiple, 446-447*
  - settings, 439*
- user
  - creating, 44-45*
  - deleting, 48*
  - nonowner, 45*
  - owner, 45*
  - switching, 47*
- Accounts & Privacy screen, 250-252
- Activate Device Administrator screen, 212
- Activate Facebook Texts dialog box, 413
- Activity Controls screen, 251
- activity log (Facebook), 428
- Adaptive Brightness switch, 18
- Add Call button, 335
- Add to Homescreen dialog box, 111
- Add Network dialog box, 150
- Add New Contact screen, 299
- Add New User dialog box, 44
- Add-On Dictionaries button/screen, 35
- Add to Playlist dialog box, 405
- Add Rule button/dialog box, 28
- Add User button, 44
- Add Your Account screen, 201
- Add Your Email Address screen, 203
- adding
  - apps to Home screen, 109
  - Home screens, 107-108
  - web addresses to Home screen, 111
  - widgets to Home screen, 109-110
- adjusting. *See also* customizing
  - brightness, 18
  - volume levels, 17
- adopting SD cards, 59
- Advance To dialog box, 215
- Advanced Audio Coding (AAC), 388-389
- Advanced Wi-Fi screen, 151-152
- after: search operator, 236
- Airplane mode, 50, 139-140
- Alarm Volume slider, 17
- Alarms Only button, 28
- alerts (Facebook), 425
- All Inboxes button, 227
- All Sites screen (Chrome), 281
- Allow Data Roaming dialog box, 142
- Allow Facebook to Access Your Contacts dialog box, 414
- Allow Only Priority Interruptions button/dialog box, 30
- Allow Peeking switch, 22
- allowing apps from unknown sources, 183
- alternate characters, typing, 33
- alternative keyboards, 43
- Always Forward dialog box, 344
- Ambient Display switch, 18
- Android
  - Developer website, 383
  - Device Manager website, 104
  - File Transfer app, 74-75
    - disk image, ejecting, 80*
    - downloading, 79*
    - file management, 91*
    - file size limitations, 92*
    - installing, 79-80*
    - running, 80-81, 91*
  - operating system (OS)
    - devices, 14*
    - updates, 15*
    - versions, 14-15*
  - SDK, 383
  - skins
    - defined, 14*
    - functionality, 15*
    - Home screens, 108*

- OS updates, 15*
  - Samsung's TouchWiz skin, 16*
  - Settings app, 7*
  - slow devices, 15*
  - wallpapers, 113*
- versions, 2
- animations, turning off, 478
- Any Calendar button, 27
- APNs screen, 143
- App & Content Access screen, 46
- App Data Usage screen, 145
- App icon (Home screen), 3
- App Info screen, 21, 188-189
- App Notifications screen, 21
- Apple
  - iCloud service, 74
  - iTunes, 74
  - iTunes Match, 386
  - OS X
    - Android File Transfer app. See Android, File Transfer app*
    - devices, accessing, 75*
    - SD cards, formatting, 61-62*
    - USB tethering, 164*
- AppLock app, 188
- apps
  - adding to Home screen, 109
  - allowing apps from unknown sources, 183
  - Android File Transfer, 74-75
    - disk image, ejecting, 80*
    - downloading, 79*
    - file management, 91*
    - file size limitations, 92*
    - installing, 79-80*
    - running, 80-81, 91*
  - App Info screen, 188-189
  - auto backup, configuring, 315-316
  - background data, restricting, 146
  - backing up, 99
  - Calendar. *See* Calendar app
  - Call Control, 349
  - Camera. *See* Camera app
  - Chromecast, installing, 324
  - clearing an app's cache, data, or defaults, 190-191
  - closing, 187
  - Cloud Print, 320
  - Contacts
    - adding contacts, 299*
    - calls, making, 332*
    - displaying contacts, 301-302*
    - grouping contacts, 299-300*
    - importing/exporting contacts, 303-304*
    - merging contacts, 302*
    - ringtones contacts, 298*
    - separating contacts, 302*
  - data usage, displaying, 145
  - defaults, 190
  - doubleTwist, 76
  - Download Manager, 23-24
  - Drive
    - apps auto backup, configuring, 315-316*
    - data usage, 316*
    - Documents Cache, 316*
    - encryption, 316*
    - files, 317-318*
    - folders, 313, 317*
    - My Drive screen, 311*
    - navigating, 311-313*
    - photos, 315*
    - searching, 313*
    - settings, 311*
    - views, toggling, 311*
  - Email, 196
  - Extreme Call Blocker, 349
  - Facebook. *See* Facebook
  - Facebook Messenger. *See* Facebook, Messenger
  - forcing an app to stop, 190
  - GALAXY, 465
  - Gmail. *See* Gmail app
  - Google
    - Authenticator, 240*
    - hangouts. See hangouts*
    - Now. See Google Now*
    - Sky Map, 268*
    - Play Store, 175-179*
    - Voice, 351*
  - HTC Manager, 75
  - installing, 176-177
  - Internet, 472
    - bookmarks, 475*
    - browsing secretly, 477*
    - desktop versus mobile version of pages, 474*
    - interface, 473*
    - multiple web pages, opening, 475*
    - page navigation, 473*

- Quick Access screen*, 476
- saving web pages*, 474-475
- shortcuts*, 477
- syncing open web pages*, 477
- keyboard shortcuts, 185
- killing, 193
- launching, 2
- locking, 188
- LogMeIn, 323
- Maps
  - capabilities*, 261
  - directions*, 263
  - distance, measuring*, 264
  - Google Earth shortcut*, 262
  - History screen*, 267
  - home addresses*, 266
  - layers*, 262
  - location settings*, 266
  - navigating*, 262-264
  - north orientation*, 263
  - notifications*, 267
  - pins, dropping*, 263
  - saving maps for offline use*, 264-265
  - searching places*, 263
  - settings*, 266-267
  - Street View*, 264
  - timeline*, 262
  - work addresses*, 266
  - zooming*, 262
- Memo, 465
- Menu button, 9
- Motorola Device Manager app, 75
- moving on Home screen, 109
- notifications
  - configuring in Lollipop*, 23
  - configuring in Marshmallow*, 21-22
  - management*, 24
- open-source licenses, 405
- package files, 181-183
- performance killers, 189-190
- permissions, 176-177
- Phone. *See* Phone app
- Phone Companion, 75, 81
  - configuring items for syncing*, 84-87
  - importing photos/videos*, 88
  - launching*, 82-83
  - transferring files*, 88
- PhotoInfo Eraser, 371
- Photos. *See* Photos app
- pinning to screens, 187-188
- Pixelgarde Free, 371
- Play Music, 327
- preferences, 192
- PrinterShare, 319-321
- refunds, 177
- Ringtone maker, 348
- running, 185
- S Health, 466
- S Note, 465
- S Planner, 466
- S Voice, 465
- Samsung. *See* Samsung
- screen locks, 46
- SD card compatibility, 58-59
- searching on devices, 417
- Settings. *See* Settings app
- sideloading, 180-185
- Splashtop, 323
- storage space consumption, 69-71
- switching, 186
- sync. *See* sync apps
- TouchWiz. *See* TouchWiz skin
- Twitter, 436
  - configuring*, 439
  - content settings*, 443
  - data settings*, 444-445
  - display*, 444
  - Home screen*, 437
  - locations*, 437, 445
  - logging in*, 436-437
  - login verification*, 446-447
  - messages*, 438
  - moments*, 438
  - multiple accounts*, 446-447
  - navigating*, 437-438
  - notifications*, 438-442
  - orders/payments*, 443
  - privacy*, 442-443
  - proxy settings*, 445
  - searching*, 438
  - signing out*, 443
  - sounds*, 444
- uninstalling, 191
- updating, 96-97
- Wi-Fi analyzer, 162
- Wi-Fi stumbler, 162
- Apps button (Home screen), 3
- Apps screen
  - launching apps, 2
  - Marshmallow, 188

navigating, 5  
Settings app, opening, 7

### Apps screen (TouchWiz)

apps  
  *opening, 456*  
  *rearranging, 458*  
  *recovering disabled, 458*  
  *uninstalling, 458*

folders  
  *creating, 456*  
  *deleting, 457*

Apps & Websites screen, 248

archiving  
  email messages, 214, 231, 234  
  hangouts, 364

arranging  
  apps (TouchWiz skin), 458  
  Home screens, 113

ASTRO File Manager, 67, 181

ASTRO File Manager Pro, 67

attachments (email), downloading  
  Exchange, 226  
  Google, 222  
  personal accounts, 223

Audacity audio editor app, 391

audio. *See* sounds

authentication  
  Facebook, 431  
    *login approval codes, 433-434*  
    *setting up, 432-433*  
  purchases, 179

Auto-Correction switch, 35

Auto mode (Samsung Camera app), 468

Auto-Update Apps dialog box, 178

Autofill forms, 272-275, 279

automatic  
  advancing email messages, 215  
  backup (apps), 315-316  
  Do Not Disturb rules, 26-28  
  fitting email messages, 215  
  screen rotation, 12  
  software updates, checking, 95-96

Automatic Rules button/screen, 26

Autoplay (Facebook), 425

## B

Back button (Home screen), 4

Back Camera Photo dialog box, 369

Back Camera Video dialog box, 370

Back Up My Data button/screen, 99

background data, restricting, 146

backing up  
  apps, 99, 315-316  
  devices  
    *Google accounts, 98-99*  
    *methods, choosing, 97-98*  
    *sync and management apps, 100*

Backup Account button, 99

Backup & Reset button/screen, 98

bandwidth management (Chrome), 284

batteries, 17  
  Bluetooth consumption, 168  
  charge cycles, 54  
  higher-capacity, 52  
  lithium-ion, 53  
  power consumption, reducing, 50-51  
  power hogs, identifying, 49-50  
  recharging devices, 52-53  
  swappable, 52  
  third-party, 53  
  upgrading, 53

Battery screen, 49

bcc: search operator, 236

before: search operator, 236

Big Bang Ringtone Maker app, 348

Bing search engine, 273

bit rate, 388

Block All switch, 22

Block dialog box, 362

Block Offensive Words switch, 35

blocking  
  Caller ID, 346  
  hangout participants, 362  
  offensive words, 35  
  people  
    *Facebook, 430-431*  
    *Hangouts, 356*  
  phone calls, 348-349  
  senders (email), 235

## Bluetooth

- battery consumption, 168
- devices, 166
  - pairing*, 166-168
  - transferring files*, 168-169
- Google Now settings, 254
- tethering, 163, 169-171

Bluetooth Pairing Request dialog box, 167

Bluetooth screen, 166

bookmarks, 272

- Chrome, 291-293
- Internet app, 475

Boolean operators (email searches), 238

booting into Safe mode, 191-192

brightness

- adjusting, 18
- battery consumption, 50

Brightness Level button, 18

Brightness slider, 18

browsers

- Chrome, 474
  - // flags*, 279
  - accessibility*, 280
  - All Sites screen*, 281
  - Autofill*, 272-275, 279
  - bookmarks*, 272, 291-293
  - browsing history*, 278
  - cache*, 278
  - Camera screen*, 282
  - configuring Google account*, 271-272
  - cookies*, 279, 282
  - Data Saver feature*, 284
  - 'Do Not Track' screen*, 278
  - encryption*, 272-273
  - Fullscreen screen*, 284
  - Google Translate*, 284
  - history*, 272, 293
  - incognito web browsing*, 294-295
  - installing*, 270
  - JavaScript screen*, 283
  - Location screen*, 282
  - Merge Tabs and Apps*, 274
  - Microphone screen*, 283
  - Notifications screen*, 283
  - offline messages*, 296
  - passwords*, 272-273
  - Pop-Ups screen*, 284
  - privacy*, 276-279

*Protected Content screen*, 284

*RAM*, 285

*Reduce Data Usage feature*, 284-285

*Safe Browsing*, 284

*Save Passwords feature*, 276, 279

*search engines*, 273

*settings*, 270, 276-280

*Site Settings*, 280-284

*Storage screen*, 284

*tabs*, 272, 289-291

*Touch to Search*, 278

*Usage and Crash reports*, 278

*web browsing*, 286-293

default, changing, 288

Samsung Internet, 472

*bookmarks*, 475

*desktop versus mobile version of pages*, 474

*interface*, 473

*multiple tabs*, 475

*page navigation*, 473

*Quick Access screen*, 476

*saving web pages*, 474-475

*secret browsing*, 477

*syncing open pages*, 477

*web page shortcuts*, 477

browsing (web), 291

history, 278

secretly, 477

budget devices, 17

buying music, 396-397

## C

CAs (certificate authorities), 199

Cache Size dialog box, 316

caches

Chrome, 278

clearing, 190

defined, 70

Documents, configuring, 316

Download Manager, clearing, 23-24

storage space consumption, 70-72

Calendar app

calendars

*settings*, 307

*sharing*, 309-310

*syncing*, 84

- updating*, 308
    - views*, 308
  - capabilities, 304
  - configuring, 304-306
  - display options, 307
  - events
    - choosing from Gmail*, 306
    - creating*, 308-309
    - declined*, 305
    - duration*, 305
    - invitations*, 309
  - notifications, 305
  - Quick Responses, 306
  - start of the week, 304
  - time zones, 304
  - view options, 308
  - week numbers, 304
- Call Control app, 349
- Call Details screen, 335
- Call Forwarding Settings screen, 344
- Call History screen, 333
- Call Settings screen, 341-342
- Call Waiting, 346
- Caller ID
  - blocking, 346
  - Caller ID by Google feature, 346-347
  - configuring, 345-346
- Caller ID by Google screen, 347
- Caller ID dialog box, 345
- Calling Accounts screen, 342
- calls
  - blocking, 348-349
  - Call Waiting, 346
  - Caller ID
    - blocking*, 346
    - Caller ID by Google feature*, 346-347
    - configuring*, 345-346
  - conference, 336
  - declining, 337-338
  - details, displaying, 335
  - forwarding, 344-345
  - history, 333-335
  - Internet calling, configuring, 342
  - interruptions, 30
  - making, 331
    - contacts*, 331-332
    - Contacts app*, 332
    - Contacts tab*, 333
    - Frequently Contacted list*, 333
    - Recents tab*, 332
    - Speed Dial tab*, 330-331
  - merging, 336
  - multiperson, 335-337
  - nearby places, 347-348
  - notifications, 26
  - outgoing, limiting, 343-344
  - receiving, 337-338
  - ringtones, 340, 348
  - screening, 348
  - sending directly to voicemail, 349
  - Smart Dialer, 335
  - tablets, enabling, 351
  - taking, 337-338
  - text responses, sending, 338
  - TTY Mode, 344
  - voicemail, configuring, 342-343
- Calls button, 26
- Calls switch, 30
- Camera app
  - accessing from lock screen, 369
  - camera shake, 373-374
  - CIF format, 371
  - configuring, 369
  - flash, 375
  - focusing, 372
  - grid, 374
  - HDR, 375
  - installing, 366
  - Lens Blur feature, 378-379
  - locations, 371
  - manual exposure, 372-374
  - navigating, 366-368
  - opening, 366-368
  - Panorama feature, 378
  - Photo Sphere feature, 377-378
  - photos
    - editing*, 380-381
    - reviewing*, 376-377
    - taking with volume buttons*, 372
  - regular camera, switching, 372
  - resolution/quality, 369-371
  - Samsung, 466
    - effects*, 468
    - flash*, 467
    - focus*, 467
    - front/rear camera*, 468

- grid lines*, 472
- HDR*, 468
- locations*, 472
- modes*, 468-470
- opening*, 466
- photos*, 468
- RAW files*, 472
- resolution*, 467
- reviewing photos*, 472
- settings*, 467, 470-472
- timer*, 468
- Tracking Auto-Focus*, 471
- videos*, 468-471
- voice control*, 472
- volume keys functions*, 472
- zooming*, 466
- switching cameras, 376
- timer, 374
- updating, 366
- videos, shooting, 382-383
- zooming, 372
- Camera screen (Chrome), 282
- camera shake, 373-374
- car chargers, 53
- cards (Google Now), 245, 256, 259
- carriers (different), connecting, 144
- Cast To dialog box, 327
- casting screens to Chromecast, 327
- categories (inboxes), 217
- category: search operator, 237
- CBR (constant bit rate), 388
- cc: search operator, 236
- CDs, ripping, 389-392
- cellular connections, 140
  - access points, 143
  - cellular data versus roaming data, 141
  - Cellular Network Settings screen, 140
  - choosing, 143
  - data plans
    - data hogs, identifying*, 145-146
    - data usage limits, setting*, 144
    - Data Usage screen menu*, 146-147
    - Data Usage tool*, 144
  - data roaming, 141-142
  - different carriers, connecting, 144
  - Internet connections, sharing, 163-164
    - Bluetooth tethering*, 169-171
    - portable Wi-Fi hotspots*, 165-166
    - USB tethering*, 164
  - network types, choosing, 143
  - VPNs, 171
    - configuring*, 172-173
    - connecting*, 173-174
    - services*, 171
- Cellular Network Settings screen
  - access points, 143
  - data roaming, 141-142
  - different carriers, connecting, 144
  - displaying, 140
  - network types, choosing, 143
- certificate authorities (CAs), 199
- changing. *See* switching
- charge cycles, 54
- chargers, 53
- chatting
  - Facebook Messenger, 417-419
    - contacts*, 420
    - groups*, 420
    - installing*, 418
    - logging in*, 418
    - navigating*, 420
    - notifications*, 422
    - opening*, 418
    - permissions*, 418
    - phone number, adding*, 419
    - ringtones*, 422
    - settings*, 421-422
    - sounds*, 422
    - Text Anyone in Your Phone screen*, 418
  - Google Hangouts, 351-352
    - accounts*, 352, 357-359
    - archiving hangouts*, 364
    - configuring hangouts*, 362-363
    - contacts, accessing*, 352
    - deleting hangouts*, 364
    - merging hangouts*, 363-364
    - navigating*, 352
    - opening*, 352
    - opening hangouts*, 360-361
    - sending messages*, 362
    - settings*, 354
    - SMS, configuring*, 355-357
    - status, setting*, 353-354

- check boxes, 10
- Choose Keyboard Layout dialog box, 39
- Choose Number dialog box, 331
- Choose Screen Lock screen (Settings app), 2
- Choose Wallpaper From screen, 51
- choosing
  - backup methods, 97-98
  - cellular networks, 143
  - devices, 16-17
  - files, 66
  - keyboards, 121
  - launchers, 115
  - search engine, 273
  - sync and management apps
    - manufacturers*, 75
    - third-party*, 76
- Chrome, 474
  - // flags, 279
  - accessibility, 280
  - All Sites screen, 281
  - Autofill, 272-275, 279
  - bookmarks, 272, 291-293
  - browsing history, 278
  - cache, 278
  - Camera screen, 282
  - configuring Google account, 271-272
  - cookies, 279, 282
  - Data Saver feature, 284
  - 'Do Not Track' screen, 278
  - encryption, 272-273
  - Fullscreen screen, 284
  - Google Translate, 284
  - history, 272, 293
  - incognito web browsing, 294-295
  - installing, 270
  - JavaScript screen, 283
  - Location screen, 282
  - Merge Tabs and Apps, 274
  - Microphone screen, 283
  - Notifications screen, 283
  - offline messages, 296
  - passwords, 272-273
  - Pop-Ups screen, 284
  - privacy, 276-279
  - Protected Content screen, 284
  - RAM, 285
  - Reduce Data Usage feature, 284-285
  - Safe Browsing, 284
  - Save Passwords feature, 276, 279
  - search engines, 273
  - settings, 270, 276-280
  - Site Settings, 280-284
  - Storage screen, 284
  - tabs, 272, 289-291
  - Touch to Search, 278
  - Usage and Crash reports, 278
  - web browsing, 286-293
    - browsing incognito*, 294-295
    - managing tabs*, 289-291
    - requesting desktop sites*, 296
    - returning to pages visited earlier*, 293
    - returning to recent tabs*, 293
    - searching for info*, 294
- Chromecast app, installing, 324
- Chromecast devices, 323-324
  - casting screens, 327
  - names, 325
  - networks, 326
  - remote controls, 324
  - setting up, 324-326
  - streaming, 324
  - updating, 326
- CIF (Common Intermediate Format), 371
- circle: search operator, 237
- Clear Cache button, 24
- Clear Data button, 24
- Clear Your Phone's Browsing Data dialog box, 426
- clearing
  - apps cache, data, or defaults, 190
  - Download Manager cache/data
    - Lollipop*, 24
    - Marshmallow*, 23
  - notifications, 19-20
    - Lollipop*, 24
    - Marshmallow*, 23
  - notification-management apps*, 24
  - repeat*, 23
- Clock widget, 3
- closed networks, 150
- closing
  - apps, 187
  - navigation panel, 9
  - Quick Settings panel, 7

- Cloud Print app, 320
- cloud printers, 318-321
- Common Intermediate Format (CIF), 371
- communications services, 51
- computers
  - 2-step Google account verification, 238-240
  - controlling from devices, 322-323
  - syncing devices with, 74
    - Android File Transfer*. See *Android, File Transfer app*
    - manufacturer apps*, 75
    - OS X*, 75
    - Phone Companion app*, 75
    - third-party apps*, 76
    - Windows*, 75
- conference calls, 336
- configuring
  - access points, 143
  - app notifications
    - Lollipop*, 23
    - Marshmallow*, 21-22
  - apps auto backup, 315-316
  - Calendar app, 304
    - choosing events from Gmail*, 306
    - general settings*, 304-306
    - individual calendars*, 307
  - Camera app, 369
    - locations*, 371
    - manual exposure*, 372
    - resolution/quality*, 369-371
  - Chromecast devices, 324-326
  - data usage, 316
  - Do Not Disturb, 25
    - custom automatic rules*, 28
    - default automatic rules*, 26-28
    - Priority Only Allows notifications*, 25-26
    - turning on/off*, 29-30
  - Documents Cache, 316
  - email accounts
    - Exchange*, 198-199
    - Gmail app, adding*, 200
    - Google accounts*, 197
    - personal accounts*, 197
  - email accounts for Gmail app
    - Exchange accounts*, 208-212
    - Google/Gmail accounts*, 201-202
    - personal accounts*, 203-208
  - encryption, 316
- Exchange accounts, 224-226
- Facebook, 423
  - alerts*, 425
  - Autoplay*, 425
  - browsing data, clearing*, 426
  - chat*, 426
  - Continuous Contacts Upload*, 425
  - language*, 426
  - links, opening*, 425
  - news feed*, 426-427
  - notifications*, 424-425
  - photos*, 426
  - privacy*, 427-431
  - sounds*, 425
  - two-factor authentication*, 432-433
- Gmail app, 214
  - action confirmations*, 216
  - archiving messages*, 214
  - Auto-Advance*, 215
  - auto-fitting messages*, 215
  - conversation view*, 215
  - deleting messages*, 214
  - replying to message with multiple recipients*, 215
  - sender images*, 215
  - swipe actions*, 215
- Google accounts, 216, 271-272
  - attachment downloads*, 222
  - images*, 222
  - Inbox*, 216-217
  - labels*, 221
  - notifications*, 218
  - signatures*, 219
  - syncing messages*, 220
  - vacation responders*, 219-220
- Google Drive, 311
- Google Now, 245
  - accounts & privacy*, 250-252
  - app suggestions*, 257
  - cards*, 245
  - languages*, 252
  - Now Cards*, 256, 259
  - Now on Tap*, 246
  - phone/tablet searches*, 254-255
  - voice settings*, 254
- Google Photos, 315
- Hangouts, 362-363
  - account settings*, 357-359
  - SMS*, 355-357
  - status*, 353-354

- input options, 119-121
- Interruptions, 30-31
- IP settings, 158-159
- lock screen, 122-123, 129
- personal email accounts, 222-224
- Phone app, 339
  - call forwarding*, 344-345
  - Call Settings screen*, 341-342
  - Caller ID*, 345-346
  - Caller ID by Google*, 346-347
  - Caller Waiting*, 346
  - display options*, 340
  - Internet calling*, 342
  - nearby places*, 347-348
  - outgoing calls, limiting*, 343-344
  - Quick Responses*, 340-341
  - sounds/vibration*, 340
  - voicemail*, 342-343
- Phone Companion app, 84-87
- Play Music app, 402-405
- Play Store account, 177-179
- SD cards, 57-58
- Text Correction, 35-36
- Twitter, 439
  - accounts*, 439
  - content*, 443
  - data settings*, 444-445
  - display*, 444
  - locations*, 445
  - login verification*, 446-447
  - multiple accounts*, 446-447
  - notifications*, 440-442
  - orders/payments*, 443
  - privacy*, 442-443
  - proxy settings*, 445
  - signing out*, 443
  - sounds*, 444
- Voice Typing, 40-42
- VPNs, 172-173
- Confirming Your Phone Number screen, 419
- Connect To dialog box, 173
- connections
  - Bluetooth devices, 166
    - Internet connections, sharing*, 169-171
    - pairing with Android devices*, 166-168
    - transferring files*, 168-169
  - cellular, 140
    - access points*, 143
    - cellular data versus roaming data*, 141
    - Cellular Network Settings screen*, 140
    - data roaming*, 141-142
    - Data Usage tool*, 144-147
    - different carriers, connecting*, 144
    - Internet connections, sharing*, 163-171
    - network types, choosing*, 143
  - devices to Windows, 78-79
  - different carriers, 144
  - hardware keyboards, 38
  - Internet, sharing, 163-164
    - Bluetooth tethering*, 169-171
    - portable Wi-Fi hotspots*, 165-166
    - USB tethering*, 164
  - USB OTG storage, 62
  - VPNs, 171
    - configuring*, 172-173
    - connecting*, 173-174
    - services*, 171
  - Wi-Fi
    - closed networks*, 150
    - connecting networks*, 149-150
    - digital certificates*, 152-154
    - forgetting networks*, 163
    - improving*, 161-162
    - IP settings, configuring*, 158-159
    - MAC addresses*, 157
    - Protected Setup (WPS)*, 156-157
    - proxy servers*, 160-161
    - settings*, 151-152
    - turning on/off*, 147-148
    - whitelists*, 157
  - Wi-Fi Direct
    - creating*, 154-155
    - troubleshooting*, 156
- constant bit rate (CBR), 388
- Contact Options dialog box, 363
- contacts
  - adding, 299
  - calling, 332-333
  - Continuous Contacts Upload feature
    - defined*, 414
    - Facebook*, 425
    - turning on/off*, 416-417
  - displaying, 301-302
  - Facebook imported
    - deleting*, 415
    - uploading*, 416-417
  - Facebook Messenger, 420
  - Google Now, 252

- grouping, 299-300
- Hangouts access, 352
- importing/exporting, 303-304
- managing, 297
- merging, 302
- ringtones, 298, 348
- separating, 302
- sharing, 304
- SIM Cards, 303
- Speed Dial list, 331-332
- Contacts app, 297
  - calls, making, 332
  - contacts
    - adding, 299*
    - displaying, 301-302*
    - grouping, 299-300*
    - importing/exporting, 303-304*
    - merging, 302*
    - ringtones, 298*
    - separating, 302*
- Contacts tab (Phone app), 333
- Contacts to Display screen, 301
- Continuous Contacts Upload feature
  - defined, 414
  - Facebook, 425
  - turning on/off, 416-417
- controlling computers from devices, 322-323
- conversation list (Gmail app), 228-230
- conversation view (Gmail app), 215
- cookies, 279, 282
- Copy Accounts and Data from This Device dialog box, 75
- copying files, 66
- Cortana, 84
- Couldn't Finish dialog box, 206
- Create Contact Under Account dialog box, 303
- Create New Group dialog box, 300
- creating
  - closed networks, 150
  - documents, 317
  - events, 308-309
  - folders
    - Google Drive, 317*
    - TouchWiz, 456*

- playlists, 405-406
- restricted profiles, 46-47
- ringtones, 348
- user accounts, 44-45
- Cupcake, 14
- Customize Google Now screen, 247
- customizing
  - Do Not Disturb rules, 28
  - Google Now, 246-249
  - Home screens, 108
  - personal dictionaries, 37
  - ringtones, 348
  - TouchWiz Home screen, 452-454
- CyberGhost VPN, 171

---

## D

- data
  - background, restricting, 146
  - browsing, clearing, 426
  - caches
    - Chrome, 278*
    - clearing, 190*
    - defined, 70*
    - Documents, configuring, 316*
    - Download Manager, clearing, 23-24*
    - storage space consumption, 70-72*
  - clearing, 190
  - decrypting, 135-136
  - Download Manager, clearing, 23-24
  - encryption, 133-135, 272-273
  - factory data reset, 135-136
  - Google Drive usage, 316
  - Google Now gathering, 244
  - hogs, identifying, 145-146
  - limits, setting, 144
  - plans
    - data hogs, identifying, 145-146*
    - data usage limits, setting, 144*
    - Data Usage tool, 144*
  - roaming, enabling/disabling, 141-142
  - screen lock, 46
  - Twitter settings, 444-445
- Data Saver feature (Chrome), 284
- Data Usage tool, 144-147
  - data hogs, identifying, 145-146
  - data limits, setting, 144
  - Data Usage screen, 144-147

- Days button/dialog box
  - Do Not Disturb, 26
  - Interruptions, 30
- declining calls, 337-338
- decryption, 135-136
- Default Event Duration dialog box, 305
- defaults
  - apps, 190
  - browsers, 288
  - clearing, 190
  - inboxes, 216
  - launcher, 114, 118-119
- Define Custom View screen, 301
- Delete App Data dialog box, 24
- Delete Hangout dialog box, 364
- deleting
  - email messages, 214, 231
  - Facebook
    - accounts*, 436
    - contacts*, 415
  - files, 66
  - folders, 112
  - hangouts, 364
  - Home screens, 108-109
  - items from Home screen, 113
  - launchers, 117
  - location history, 132
  - maps, 265
  - photo locations, 371
  - reminders, 261
  - restricted profiles, 48
  - saved web pages, 475
  - songs, 401-402
  - TouchWiz folders, 457
  - user accounts, 48
  - words from personal dictionaries, 37
- deliveredto: search operator, 237
- desktop versions of web pages,
  - requesting, 296
- devices
  - 2-step Google account verification, 240
  - accessing
    - HTC Manager app*, 75-77
    - Motorola Device Manager app*, 75
    - OS X*, 75
    - Samsung Kies app*, 75
    - Windows*, 75
  - apps, searching, 417
  - backing up
    - Google accounts*, 98-99
    - methods, choosing*, 97-98
    - sync and management apps*, 100
  - batteries, 17
    - Bluetooth consumption*, 168
    - charge cycles*, 54
    - higher-capacity*, 52
    - lithium-ion*, 53
    - power consumption, reducing*, 50-51
    - power hogs, identifying*, 49-50
    - recharging devices*, 52-53
    - swappable*, 52
    - third-party*, 53
    - upgrading*, 53
  - Bluetooth, 166
    - pairing with Android devices*, 166-168
    - transferring files*, 168-169
  - browsing data, clearing, 426
  - budget devices, 17
  - choosing, 16-17
  - connecting to Windows, 78-79
  - controlling computers, 322-323
  - decrypting, 135-136
  - drivers, 78-79
  - encryption, 132-135
  - files, transferring, 93
  - hard resets, 97, 136-138
  - internal storage space, 55
  - Internet connections, sharing, 163-164
    - Bluetooth tethering*, 169-171
    - portable Wi-Fi hotspots*, 165-166
    - USB tethering*, 164
  - multiple users. *See* multiusers
  - operating systems (OSs), 14-15
  - power consumption, reducing, 50-51
  - rebooting into Safe mode, 191-192
  - recharging, 52-53, 140
  - remote locking and wiping, 104-106
    - ringing devices*, 105
    - SD cards*, 104
  - restoring
    - Google backups*, 101-102
    - sync and management apps*, 102-103
  - ringing, 105
  - Samsung. *See* Samsung
  - SD cards, 17
  - shared security, 48
  - SIM cards, locking, 350

- skins
    - defined*, 14
    - functionality*, 15
    - Pulse Notification Light setting*, 21
    - Samsung's TouchWiz*. See *Samsung, TouchWiz*
    - slow devices*, 15
    - updates*, 15
  - software updates, 94-96
  - storage space available, checking
    - Lollipop*, 70-72
    - Marshmallow*, 68-70
  - syncing new devices from old devices, 74
  - syncing with computers, 74
    - Android File Transfer for Mac app*, 74-75
    - manufacturer apps*, 75
    - OS X*, 75
    - Phone Companion app*, 75
    - third-party apps*, 76
    - Windows*, 75
  - waking, 18
  - whitelisting, 157
- DHCP (Dynamic Host Configuration Protocol), 158
- dialog boxes
- Access Your Contacts, 352
  - Activate Facebook Texts, 413
  - Add Network, 150
  - Add New User, 44
  - Add Rule, 28
  - Advance To, 215
  - Allow Data Roaming, 142
  - Allow Facebook to Access Your Contacts, 414
  - Allow Only Priority Interruptions, 30
  - Always Forward, 344
  - Back Camera Photo, 369
  - Back Camera Video, 370
  - Block, 362
  - Bluetooth Pairing Request, 167
  - Cache Size, 316
  - Caller ID, 345
  - Cast To, 327
  - Choose Keyboard Layout, 39
  - Choose Number, 331
  - Clear Your Phone's Browsing Data, 426
  - Connect To, 173
  - Contact Options, 363
  - Copy Accounts and Data from This Device, 75
  - Couldn't Finish, 206
  - Create Contact Under Account, 303
  - Create New Group, 300
  - Days
    - Do Not Disturb*, 26
    - Interruptions*, 30
  - Default Event Duration, 305
  - Delete App Data, 24
  - Delete Hangout, 364
  - Distance Units, 267
  - Don't Interrupt, 30
  - Edit VPN Profile, 172
  - Enable FDN, 344
  - Erase All Data, 105
  - Extract Certificate, 153-154
  - Filter By, 312
  - Force Stop, 24
  - Forward When Busy, 345
  - Forward When Unanswered, 345
  - Forward When Unreachable, 345
  - Front Camera Photo, 370
  - Front Camera Video, 371
  - Google Account, 250
  - images, 222
  - Import/Export Contacts, 303
  - Keep Wi-Fi On During Sleep, 152
  - Label As, 233
  - Languages, 41, 253
  - Likes, 441
  - Limiting Data Usage, 144
  - Location Accuracy Tips, 267
  - Lock SIM Card, 350
  - Log Out, 435
  - Login Approval, 433
  - Login Verification, 446
  - Mentions and Photo Tags, 441
  - Name the Certificate, 154
  - navigating, 11
  - New Folder, 317
  - New Label, 221
  - New Lock Screen, 105
  - Number Confirmed, 413
  - Paired Devices, 167
  - Panorama Resolution, 371
  - Polls, 441
  - Potential Threat Alerts, 418
  - Preferred Network Type, 143
  - Primary, 218
  - Print Options, 322
  - Priority Inbox, 218

- Profile Info, 47
- Proxy Port, 445
- Quick Response, 341
- Remote Security Administration, 210
- Remove Account, 436
- Remove This Profile, 48
- Remove This User, 48
- Retweets, 441
- Ring Device, 104
- Ringtones, 348
- Rule Name, 26
- Send Feedback, 267
- Separate Contact, 302
- Service, 342
- Set Backup Account, 99
- Set Up User Now, 44
- Set Up Wi-Fi Hotspot, 165
- Share Via, 169
- Show Scale on Map, 267
- Signature, 219
- SIP Calling, 342
- Sleep, 50
- Sound, 343
- Speech Output, 41, 254
- Start of the Week, 304
- Stop Continuously Uploading Your Contacts, 417
- Sync Frequency, 223-224
- Sync Interval, 442
- TTY Mode, 344
- Usage Cycle Reset Date, 144
- User Account Control, 77
- Voicemail Number, 343
- Want Help with Any Screen? Turn on Now on Tap, 246
- Wi-Fi Frequency Band, 152
- Window Animation Scale, 479
- WPS Push Button Setup, 156
- dialpad touch tones (Phone app), 340
- dictation, 40-42
- dictionaries
  - add-on, 35
  - personal, 37
- digital certificates
  - Exchange Server accounts, 209
  - installing, 152-154
  - SSL and TLS, 199
- dinosaur-versus-cactus game, 296
- direct call gesture, 455
- directions (Maps), 263
- disabling
  - apps, 458
  - call forwarding, 345
  - data roaming, 141-142
  - Google Now app suggestions, 257
  - Hangouts
    - notifications, 362
    - SMS, 355
- Display and Sound screen, 444
- Display screen, 18
- displaying
  - App Notifications screen, 21
  - calendars, 307-308
  - contacts, 301-302
  - Do Not Disturb screen, 25
  - file explorers, 66
  - notifications, 21
  - Phone app options, 340
  - storage space availability
    - Lollipop, 70-72
    - Marshmallow, 68-70
  - Twitter, 444
  - Wi-Fi data usage, 146
- Distance Units dialog box, 267
- DMTF (Dual Tone Multi Frequency), 342
- Do Not Disturb feature
  - configuring, 25
  - custom automatic rules, 28
  - default automatic rules, 26-28
  - Priority Only Allows notifications, 25-26
  - turning on/off, 29-30
- Do Not Disturb button/screen, 25
- 'Do Not Track' screen, 278
- documents. *See also* files
  - Google Drive
    - adding, 317
    - keeping on devices, 318
  - printing
    - cloud printers, 320-321
    - existing printers, 321-322
    - HP printers, 319-320
    - local printers, 318-319
    - options, 318
  - scanning, 317
- Documents Cache, configuring, 316
- Don't Interrupt button/dialog box, 30

- Donut, 14
- double-tap gesture, 12
- doubleTwist app, 76
- Download Languages screen, 41
- Download Manager cache/data, clearing
  - Lollipop, 24
  - Marshmallow, 23
- downloading
  - Android File Transfer, 79
  - email attachments
    - Exchange accounts*, 226
    - Google accounts*, 222
    - personal accounts*, 223
  - Facebook, 412
  - files, 313
  - ringtones, 348
  - songs, 401
  - wallpapers, 114
- downloads
  - notifications, 23
    - Lollipop*, 24
    - Marshmallow*, 23
  - storage space consumption, 72
- drag gesture, 12
- Drive (Google)
  - apps auto backup, configuring, 315-316
  - data usage, 316
  - Documents Cache, 316
  - encryption, 316
  - files
    - adding*, 317
    - downloading*, 313
    - filtering*, 312
    - keeping on devices*, 318
    - opening*, 313
    - sorting*, 312
    - transferring*, 93
  - folders
    - creating*, 317
    - information, viewing*, 313
    - opening*, 313
  - My Drive screen, 311
  - navigating, 311-313
  - photos, 315
  - searching, 313
  - setting up, 311
  - views, toggling, 311

- drivers, 78-79
- Dropbox, 51
  - files, transferring, 93
  - Home screen, 112-113
- Dual Tone Multi Frequency (DMTF), 342
- During Events For button, 27
- Dvorak keyboard layout, 39
- Dynamic Floating Preview switch, 34
- Dynamic Host Configuration Protocol (DHCP), 158

## E

---

- Éclair, 14
- Edit VPN Profile dialog box, 172
- editing photos, 380-381
- effects (Samsung Camera app), 468
- email
  - 2-step account verification, 238
    - Android devices*, 240
    - computers*, 238-239
    - logging in*, 240
    - reinforcing*, 239-240
  - accounts
    - Exchange*, 198-199
    - Google*, 197
    - personal*, 197
  - adding accounts to Gmail app, 200
    - Exchange accounts*, 208-212
    - Google/Gmail accounts*, 201-202
    - personal accounts*, 203-208
  - attachment downloads
    - Exchange*, 226
    - Google*, 222
    - personal accounts*, 223
  - blocking senders, 235
  - conversation list, 228-229
  - digital certificates, installing, 153
  - Email app, 196
  - files, transferring, 94
  - Gmail app. *See* Gmail app
  - images
    - display options*, 222
    - Exchange accounts*, 224
    - personal accounts*, 223
  - incoming mail servers, 197
  - mail servers, 198

## messages

- action confirmations*, 216
- archiving*, 214, 231-234
- auto-advancing*, 215
- auto-fitting to screen*, 215
- deleting*, 214, 231
- forwarding*, 230
- grouping by conversation*, 215
- labeling*, 232-233
- marking as unread*, 231
- moving*, 232-234
- printing*, 231
- reading*, 230-231
- replying*, 230
- replying all*, 215
- sender information, displaying*, 231
- spam*, 234
- starring*, 231
- syncing*, 220
- writing/sending*, 231-232

## notifications

- Exchange*, 212, 226
- Google accounts*, 218
- personal accounts*, 223

## outgoing mail servers, 197

## ports, 205

## searching

- Boolean operators*, 238
- keywords*, 235-237

## security, 197-200

## sender images, 215

## signatures

- Exchange*, 224
- Google*, 219
- personal accounts*, 222

## syncing

- Exchange accounts*, 224-225
- personal accounts*, 223
- Phone Companion app*, 84

## vacation responders

- Exchange accounts*, 224
- Google accounts*, 219-220

## Email app, 196

## emojis, 42

## emoticons, 42

## Enable FDN dialog box, 344

## Enable Gesture Typing switch, 34

enabling. *See also* turning on/off

- call forwarding, 345
- data roaming, 141-142
- FDN, 344
- Google Now app suggestions, 257
- Hangouts
  - notifications*, 362
  - SMS*, 355
- phone calling on tablets, 351

## encryption, 132-135, 272-273

- disadvantages of, 133
- Google Drive, 316
- Marshmallow devices, 132

## End Time button

- Do Not Disturb, 27
- interruptions, 31

## entering text

- dictation, 40
  - configuring*, 40-42
  - microphones*, 42
- emojis, 42
- keyboards
  - alternative*, 43
  - gestures*, 34
  - hardware*, 38-39
  - onscreen*, 32-34
  - Text Correction*, 35-36
- personal dictionaries, 37

## Equalizer, 406-408

## Erase All Data dialog box, 105

## Erase button, 105

## Erase Everything button, 61

## Erase &amp; Format button, 57

## Erase SD Card button/screen, 60

## erasing SD cards, 60-61

## ES File Explorer, 67, 181

## Event button, 27

## Event screen, 27

## events

- calendars
  - creating*, 308-309
  - declined*, 305
  - duration*, 305
  - invitations*, 309
- interruptions, 30
- notifications, 26

Events switch, 26, 30  
 Everything Else screen, 249  
 Excel, syncing, 84  
 Exchange accounts  
   adding to Gmail app, 208-212  
   *attachments*, 212  
   *device administrator, activating*, 212  
   *digital certificates*, 209  
   *notifications*, 212  
   *ports*, 210  
   *remote administration*, 210  
   *syncing options*, 211-212  
 mail server technology, 198  
 moving messages, 234  
 settings, configuring, 224-226  
 setup information, 198-199  
 exporting contacts, 303-304  
 Extract Certificate dialog box, 153-154  
 Extreme Call Blocker app, 349

## F

Facebook  
 accounts  
   *deleting*, 436  
   *phone numbers, adding*, 412-413  
 alerts, 425  
 browsing data, clearing, 426  
 chatting, 426  
 contacts  
   *deleting*, 415  
   *uploading*, 416-417  
 downloading, 412  
 Find Friends feature, 413-414  
 friend invitations, managing, 415  
 language, 426  
 links, opening, 425  
 logging in, 412  
 Messenger, 417-419  
   *contacts*, 420  
   *groups*, 420  
   *installing*, 418  
   *logging in*, 418  
   *navigating*, 420  
   *notifications*, 422  
   *opening*, 418  
   *permissions*, 418

*phone number, adding*, 419  
   *ringtones*, 422  
   *settings*, 421-422  
   *sounds*, 422  
   *Text Anyone in Your Phone screen*, 418  
 multiple accounts, 434  
   *browsers*, 435  
   *deleting*, 436  
   *logging in/out*, 434-435  
 news feed, managing, 426-427  
 notifications, 424-425  
 photos, 426  
 privacy, 427  
   *activity log*, 428  
   *audience, choosing*, 427  
   *blocking people*, 430-431  
   *Privacy Shortcuts screen*, 427  
   *who can contact*, 429  
 settings  
   *accessing*, 423  
   *alerts*, 425  
   *Autoplay*, 425  
   *browsing data, clearing*, 426  
   *chat*, 426  
   *Continuous Contacts Upload*, 425  
   *language*, 426  
   *links, opening*, 425  
   *notifications*, 424-425  
   *photos*, 426  
   *sounds*, 425  
 sounds, 425  
 two-factor authentication, 431  
   *login approval codes*, 433-434  
   *setting up*, 432-433  
 videos, watching, 425-426  
 factory data reset, 135-136  
 Fast Motion mode (Samsung Camera app), 470  
 favorite web pages  
   *bookmarking*, 475  
   *Quick Access page, adding*, 476  
 Favorites tray, 3  
 FDN (Fixed Dialing Numbers), 343-344  
 File Beam (Touch to Send) app, 183  
 file systems, 56  
 filename: search operator, 236

## files

- copying, 66
- deleting, 66
- downloading, 313
- explorers
  - built-in*, 66
  - HTC File Manager*, 67
  - Marshmallow*, 65-66
  - Samsung My Files*, 66
  - third-party*, 67
- filtering, 312
- Google Drive
  - adding*, 317
  - keeping on devices*, 318
- managers, 181
- managing
  - Android File Transfer app*, 91-92
  - File Explorer*, 88
  - Phone Companion app*, 84-87
- opening, 313
- printing
  - cloud printers*, 320-321
  - existing printers*, 321-322
  - HP printers*, 319-320
  - local printers*, 318-319
  - options*, 318
- RAW, 472
- searching, 66
- selecting, 66
- sharing, 66
- sorting, 312
- storage space. *See* storage
- transferring
  - Bluetooth connections*, 168-169
  - Dropbox*, 93
  - email*, 94
  - Google Drive*, 93
  - OneDrive*, 93
  - SD cards*, 93
  - wireless connections*, 93

Filter By dialog box, 312

## filters

- files, 312
- SafeSearch, 252

Find Friends feature (Facebook), 413-414

finding. *See* searching

## fingerprints

- authentication, 179
- unlocking devices, 128-129

Fixed Dialing Numbers (FDN), 343-344

FLAC (Free Lossless Audio Codec), 388, 391

flash (Camera app), 375

focusing (Camera app), 372

Folder icon (Home screen), 3

## folders

- deleting, 112
- Google Drive
  - creating*, 317
  - navigating*, 311
- Home screens, 112
- information, viewing, 313
- naming, 112
- navigating, 65
- opening, 313
- searching, 66, 313
- TouchWiz
  - creating*, 456
  - deleting*, 457

Force Stop button/ dialog box, 24, 190

forcing an app to stop, 190

forgetting Wi-Fi networks, 163

Format as Internal Storage screen, 57

formatting SD cards, 56

- Lollipop, 60-61
- OS X, 61-62
- Windows, 61

forms (Autofill), 274-275

forums category (inboxes), 217

Forward When Busy dialog box, 345

Forward When Unanswered dialog box, 345

Forward When Unreachable dialog box, 345

## forwarding

- calls, 344-345
- email messages, 230

fractions, typing, 34

Free Lossless Audio Codec (FLAC), 388, 391

frequency bands (Wi-Fi), 152

Frequently Contacted list (Phone app), 333

from: search operator, 236

Front Camera Photo dialog box, 370

Front Camera Video dialog box, 371

Froyo, 14

Fullscreen screen (Chrome), 284

## G

- GALAXY Apps, 465
- General area (Settings screen), 178
- Gesture Typing button/screen, 34
- gestures
  - Gesture Typing, 34
  - listing of, 12
  - TouchWiz skin, 454-456
- Gingerbread, 14
- Gmail app, 196
  - 2-step account verification, 238
    - Android devices, 240
    - computers, 238-239
    - logging in, 240
    - reinforcing, 239-240
  - accounts
    - adding to Gmail app, 201-202
    - settings, 196
  - blocking senders, 235
  - calendar events, choosing, 306
  - configuring, 214
    - action confirmations, 216
    - archiving messages, 214
    - Auto-Advance, 215
    - auto-fitting messages, 215
    - conversation view, 215
    - deleting messages, 214
    - replying to messages with multiple recipients, 215
    - sender images, 215
    - swipe actions, 215
  - conversation list, 228-230
  - email accounts, adding
    - Exchange, 208-212
    - Google/Gmail, 201-202
    - personal, 203-208
  - Exchange accounts
    - configuring, 224-226
    - setup information, 198-199
  - Google accounts, 216
    - attachment downloads, 222
    - images, 222
    - Inbox, 216-217
    - labels, 221
    - notifications, 218
    - setup information, 197
    - signatures, 219
    - syncing messages, 220
    - vacation responders, 219-220
  - messages
    - archiving, 231-234
    - Boolean operators, 238
    - deleting, 231
    - forwarding, 230
    - labeling, 232-233
    - marking as unread, 231
    - moving, 232-234
    - printing, 231
    - reading, 230-231
    - replying, 230
    - search operators, 236-237
    - searching with keywords, 235
    - sender information, displaying, 231
    - spam, 234
    - starring, 231
    - writing/sending, 231-232
  - navigating, 227
  - personal accounts
    - configuring, 222-224
    - setup information, 197
  - Set Up Email screen, displaying, 200
- Go Launcher, 115
- Google, 273
  - Account dialog box, 250
  - accounts. *See* Google accounts
  - Authenticator app, 240
  - backups, 101-102
  - Caller ID by Google, 346-347
  - Camera app
    - accessing from lock screen, 369
    - camera shake, 373-374
    - CIF format, 371
    - configuring, 369
    - editing photos, 380-381
    - flash, 375
    - focusing, 372
    - grid, 374
    - HDR, 375
    - installing, 366
    - Lens Blur feature, 378-379
    - locations, 371
    - manual exposure, 372-374
    - navigating, 366-368
    - opening, 366-368
    - Panorama feature, 378
    - Photo Sphere feature, 377-378

- regular camera, switching, 372*
- resolution/quality, 369-371*
- reviewing photos, 376-377*
- shooting videos, 382-383*
- switching cameras, 376*
- taking photos with volume buttons, 372*
- timer, 374*
- updating, 366*
- zooming, 372*
- Chrome, 474
- Drive. *See* Google Drive
- Earth shortcut (Maps app), 262
- Hangouts app, 351-352
  - accounts, 352, 357-359*
  - archiving hangouts, 364*
  - configuring hangouts, 362-363*
  - contacts, accessing, 352*
  - deleting hangouts, 364*
  - merging hangouts, 363-364*
  - navigating, 352*
  - opening, 352*
  - opening hangouts, 360-361*
  - sending messages, 362*
  - settings, 354*
  - SMS, configuring, 355-357*
  - status, setting, 353-354*
- Keyboard, 34, 121
  - accessing in Lollipop, 34*
  - displaying, 34*
  - Gesture Typing, setting, 34*
  - Text Correction, 35*
- Photos, 315
- Play Music app, 385-386, 393-398, 402-405
- Play Store app, 175-179
- Search box (Home screen), 2
- Sky Map app, 268
- Translate, 284
- Voice Typing, 40, 121
  - configuring, 40-42*
  - microphones, 42*
  - tablet phone calling, enabling, 351*
  - settings, 40*
- Google accounts
  - 2-step verification, 238
    - Android devices, 240*
    - computers, 238-239*
    - logging in, 240*
    - reinforcing, 239-240*
  - adding to Gmail app, 201-202
  - calendars, sharing, 309-310
  - configuring, 271-272
  - device backups, 98-99
  - history, 257
  - messages
    - archiving, 234*
    - labeling, 233*
    - spam, 234*
  - search operators, 236-237
  - settings, configuring, 216
    - attachment downloads, 222*
    - images, 222*
    - Inbox, 216-217*
    - labels, 221*
    - notifications, 218*
    - signatures, 219*
    - syncing messages, 220*
    - vacation responders, 219-220*
  - setup information, 197
- Google Drive
  - apps auto backup, configuring, 315-316
  - data usage, 316
  - Documents Cache, 316
  - encryption, 316
  - files
    - adding, 317*
    - downloading, 313*
    - filtering, 312*
    - keeping on devices, 318*
    - opening, 313*
    - sorting, 312*
    - transferring, 93*
  - folders
    - creating, 317*
    - information, viewing, 313*
    - opening, 313*
  - My Drive screen, 311
  - navigating, 311-313
  - photos, 315
  - searching, 313
  - setting up, 311
  - views, toggling, 311
- Google Now
  - capabilities, 243-244
  - configuring, 245
    - cards, 245*
    - Now on Tap, 246*
  - contacts, 252
  - customizing, 246-249
  - data-gathering, 244

Google Account History, 257  
 information feature, 4  
 installing, 245  
 Launcher, 108  
   *defined, 115*  
   *wallpaper, 114*  
   *widgets, 109-110*  
 navigating, 246  
 opening, 244  
 reminders, 260-261  
 settings, 249  
   *accounts & privacy, 250-252*  
   *app suggestions, 257*  
   *languages, 252*  
   *Now Cards, 256-259*  
   *phone/tablet searches, 254-255*  
   *voice, 254*

Gracernote database, 391  
 grid (Camera app), 374  
 grid lines (Samsung Camera app), 472  
 groups  
   contacts, 299-300  
   Facebook Messenger, 420

## H

Hacker's Keyboard, 43  
 Hands-Free button/screen, 41  
 hangouts  
   archiving, 364  
   configuring, 362-363  
   deleting, 364  
   merging, 363-364  
   messages, sending, 362  
   opening, 360-361  
 Hangouts app, 351-352  
   accounts, 352, 357-359  
   contacts, accessing, 352  
   hangouts  
     *archiving, 364*  
     *configuring, 362-363*  
     *deleting, 364*  
     *merging, 363-364*  
     *opening, 360-361*  
     *sending messages, 362*  
   navigating, 352  
   opening, 352

  settings, 354  
   SMS, configuring, 355-357  
   status, setting, 353-354  
 hard resets, 97, 136-138  
 hardware keyboards, 38-39  
   connecting, 38  
   keyboard shortcuts, 38  
   layouts, 39  
   text, selecting, 39  
 has:attachment search operator, 236  
 has:blue-info search operator, 237  
 has:blue-star search operator, 237  
 has:circle search operator, 237  
 has:green-check search operator, 237  
 has:green-star search operator, 237  
 has:nouserlabels search operator, 237  
 has:orange-guillemet search operator, 237  
 has:orange-star search operator, 237  
 has:purple-question search operator, 237  
 has:purple-star search operator, 237  
 has:red-bang search operator, 237  
 has:red-star search operator, 237  
 has:userlabels search operator, 237  
 has:yellow-bang search operator, 237  
 has:yellow-star search operator, 237  
 HDR (High Dynamic Range) (Camera app),  
   375, 468  
 headset microphone, 42  
 hiding  
   onscreen keyboard, 33  
   Wi-Fi data usage, 146  
 higher-capacity batteries, 52  
 history  
   Chrome, 272, 293  
   phone calls, 333-335  
 History screen, 333  
 home addresses (Maps), 266  
 Home button, 4  
 Home screen, 2-4  
   adding, 107-108  
   adding apps, 109  
   customizing, 108

- deleting, 108-109
- Dropbox app, 112-113
- folders, 112
- moving apps, 109
- navigating, 2-4
- panel indicator, 3
- rearranging, 113
- removing items, 113
- repositioning items, 113
- skins, 108
- TouchWiz screen
  - customizing, 452-454*
  - navigating, 451-452*
- Twitter, 437
- wallpaper, 113-114
- web addresses, adding, 111
- widgets, adding, 109-110

Honeycomb, 14

hotspots (portable Wi-Fi), 165-166

HP Print Service Plugin, 319-320

HTC
 

- File Manager, 67
- Manager app, 75-77
- Sense, 95-96

---

I

---

Ice Cream Sandwich, 14

iCloud service, 74

images
 

- email
  - display options, 222*
  - Exchange accounts, 224*
  - personal accounts, 223*
  - sender, 215*
- storage space consumption, 70-71

Images dialog box, 222

IMAP (Internet Mail Access Protocol), 198

Import/Export Contacts dialog box, 303

importing
 

- contacts, 303-304
- photos/videos, 78, 88

improving Wi-Fi connections, 161-162

in:anywhere search operator, 236

in: search operator, 236

inboxes (Google accounts), 216-217

incognito web browsing, 294-295

incoming mail servers, 197, 204

Incoming Server Settings screen, 204

input options
 

- configuring, 119-121
- keyboards. *See* keyboards
- Language & Input screen, 119-120

Install from Storage button, 154

installing
 

- Android
  - File Transfer app, 79-80*
  - SDK, 383*
- apps, 176-177
- Camera app, 366
- Chrome, 270
- Chromecast app, 324
- digital certificates, 152-154
- Facebook Messenger, 418
- file managers, 181
- Google Now, 245
- launchers, 114-116
- sync apps
  - Android File Transfer on OS X, 79-81*
  - Windows, 76-78*
- third-party file explorers, 67

Internal Storage screen, 68

Internet app, 472
 

- desktop versus mobile version
  - of pages, 474
- interface, 473
- page navigation, 473
- Quick Access screen, 476
- web pages
  - bookmarking, 475*
  - browsing secretly, 477*
  - multiple, opening, 475*
  - saving, 474-475*
  - shortcuts, 477*
  - syncing open, 477*

Internet calling, configuring, 342

Internet connections, sharing, 163-164
 

- Bluetooth tethering, 169-171
- portable Wi-Fi hotspots, 165-166
- USB tethering, 164

Internet Mail Access Protocol (IMAP), 198

Interruptions  
 configuring, 30-31  
 turning on/off, 31-32

Interruptions Allowed button, 31

Interruptions button/screen, 30

invitations  
 events, 309  
 Facebook, managing, 415

IP settings, configuring, 158-159

IPVanish, 171

is:chat search operator, 237

is:important search operator, 236

is:read search operator, 237

is:starred search operator, 236

is:unread search operator, 236

iTunes, 74

iTunes Match, 386

---

## J

JavaScript screen, 283

Jelly Bean, 14

joining. *See* merging

---

## K

Keep Wi-Fi On During Sleep dialog box, 152

keyboards  
 alternative, 43  
 changing, 122  
 emojis, 42  
 gestures, 34  
 Google Keyboard, 121  
 Hacker's Keyboard, 43  
 hardware, 38-39  
   *connecting, 38*  
   *keyboard shortcuts, 38*  
   *layouts, 39*  
   *text, selecting, 39*  
 onscreen, 32  
   *alternate characters, 33*  
   *fractions, 34*  
   *gestures, 34*  
   *hiding, 33*  
   *layouts, switching, 32*

*numbers, 33*  
   *suggestions, 34*  
 personal dictionaries, 37  
 selecting, 121  
 shortcuts  
   *apps, 185*  
   *hardware keyboards, 38*  
 Smart Keyboard Pro, 43  
 SwiftKey keyboard, 43  
 Text Correction, 35-36

keyword searches (email), 235

Kies app, 75

killing apps, 193

KitKat, 14, 59

---

## L

Label As dialog box, 233

label:important search operator, 236

label: search operator, 236

labeling email messages, 221, 232-233

Language & Input button/screen, 34, 119-120

languages  
 Facebook, 426  
 Google Now settings, 252  
 updates, 41  
 Voice Typing, 41

Languages dialog box, 41, 253

larger: search operator, 237

launchers  
 apps, 2  
 choosing, 115  
 default launcher, 114, 118-119  
 defined, 114  
 deleting, 117  
 Go Launcher, 115  
 Google Now Launcher, 115  
 installing, 114-116  
 Nova Launcher, 115  
 permissions, 115  
 switching among, 117  
 sync apps, 89

layers (Maps), 262

layouts (keyboard)  
 hardware, 39  
 onscreen, 32

- Lens Blur feature (Camera app), 378-379
- lenses, 377
- lights (notifications), turning on/off, 21
- Likes dialog box, 441
- Limiting Data Usage dialog box, 144
- limiting outgoing calls, 343-344
- links (Facebook), 425
- list: search operator, 236
- Listen Now screen (Play Music app), 397
- listening to music, 386
- lithium-ion batteries, 53
- Live Broadcast mode (Samsung Camera app), 469
- live wallpapers, 51, 114
- local printers, 318-319
- Location Accuracy Tips dialog box, 267
- Location and Proxy screen, 445
- Location Mode screen, 51
- Location screen, 282
- locations
  - battery consumption, 51
  - Camera app, adding, 371
  - Google Now, 248
  - Maps, 266
  - phone calls nearby places, 347-348
  - Samsung Camera app, 472
  - settings, 130-132
  - Twitter, 437, 445
- lock screen, 2
  - Camera app, accessing, 369
  - configuring, 122-123
  - Lollipop, 128
  - Marshmallow, 128
  - navigating, 2
  - notifications, 129
  - Password Unlock method, 124
  - Pattern Unlock method, 123
  - PIN Unlock method, 123
  - Slide Unlock method, 123
  - turning on/off, 2
  - unlocking, 2, 128-129
- Lock SIM Card dialog box, 350

- locking
  - apps, 188
  - remote locking and wiping, 104-106
    - ringing devices*, 105
    - SD cards*, 104
  - screens, 46
  - settings, 124-126
  - SIM cards, 350
- Log Out dialog box, 435
- logging in/out
  - Facebook, 412
    - approval codes*, 433-434
    - Messenger*, 418
  - Google accounts, 240
  - Samsung accounts, 477
  - Twitter, 436-437, 443
  - verification, 446-447
- Login Approval Required dialog box, 433
- Login Approvals screen, 432
- Login Verification dialog box, 446
- LogMeIn app, 323
- Lollipop, 14
  - app notifications, configuring, 23
  - Camera app, 366
  - contacts, adding, 299
  - Gmail app, 196
  - Google Keyboard Settings screen,
    - accessing, 34
  - Google Now
    - opening*, 244
    - reminders*, 260
  - Interruptions feature
    - configuring*, 30-31
    - turning on/off*, 31-32
  - lock screens, 128
  - notifications, clearing, 24
  - Phone app, 332-333
    - Contacts tab*, 333
    - History screen*, 333
    - Recents tab*, 332
    - Speed Dial tab*, 330
  - SD cards, erasing, 60-61
  - storage space usage, checking, 70-72
  - USB OTG storage, 63-64
- long-press gesture, 12
- lossless compression, 388
- lossy compression, 388

## M

MAC addresses, 157

mail servers, 198

Manage Conference Call screen, 337

Manage Invites and Imported Contacts screen, 415

managing

battery life

*charge cycles, 54*

*recharging devices, 52-53*

*power consumption, reducing, 50-51*

*power hogs, identifying, 49-50*

cellular connections, 140

*access points, 143*

*Cellular Network Settings screen, 140*

*data roaming, 141-142*

*Data Usage tool, 144-147*

*different carriers, connecting, 144*

*network types, choosing, 143*

contacts, 297-298

Facebook imported contacts, 415

Facebook invitations, 415

files

*Android File Transfer app, 91-92*

*File Explorer, 88*

*Phone Companion app, 84-87*

Now Cards, 259

storage space, 55-56

manual exposure (Camera app), 374

Maps app

capabilities, 261

directions, 263

distance, measuring, 264

Google Earth shortcut, 262

History screen, 267

home addresses, 266

layers, 262

location settings, 266

navigating, 262-264

north orientation, 263

notifications, 267

pins, dropping, 263

saving maps for offline use, 264-265

searching places, 263

settings, 266-267

Street View, 264

timeline, 262

work addresses, 266

zooming, 262

Marshmallow, 14

app notifications, configuring, 21-22

Apps screen, 188

Camera app, 366

Camera screen, 283

contacts, adding, 299

default browsers, changing, 289

Do Not Disturb feature

*configuring, 25*

*custom automatic rules, 28*

*default automatic rules, 26-28*

*Priority Only Allows notifications, 25-26*

*turning on/off, 29-30*

encryption, 132

file explorer, 65-66

Gmail app, 196

Google Now

*Now on Tap, 246*

*opening, 244*

*reminders, 260*

lock screens, 128

Nexus model lock screen, 123

notifications, clearing, 23

Phone app

*Call History screen, 333*

*Contacts tab, 333*

*Recents tab, 332*

*Speed Dial tab, 330*

SD cards

*compatibility, 59*

*configuration, 57-58*

storage space usage, checking, 68-70

USB OTG storage, 62-63

media

battery consumption, 51

Facebook Messenger, 422

storage. *See storage*

syncing with devices, 78

volume levels, 17

Media Access Control, 157

Media Volume slider, 17

Memo, 465

Mentions and Photo Tags dialog box, 441

Menu button (apps), 9

Merge Tabs and Apps (Chrome), 274

## merging

- contacts, 302
- hangouts, 363-364
- phone calls, 336

## messages

## email

- action confirmations*, 216
- archiving*, 214, 231-234
- auto-advancing*, 215
- auto-fitting to screen*, 215
- blocking senders*, 235
- Boolean operators*, 238
- deleting*, 214, 231
- forwarding*, 230
- grouping by conversation*, 215
- images*, 224
- labeling*, 232-233
- marking as unread*, 231
- moving*, 232-234
- notifications*, 223, 226
- printing*, 231
- reading*, 230-231
- replying*, 230
- replying all*, 215
- search operators*, 236-237
- searching with keywords*, 235
- sender information, displaying*, 231
- spam*, 234
- starting*, 231
- syncing*, 223-225
- writing/sending*, 231-232

hangouts, sending, 362

interruptions, 30

notifications, 26

Twitter, 438

Messages button/screen, 26, 438

Messages switch, 30

## micro SD cards

- adding, 55-56
- adopting, 59
- app compatibility, 58-59
- converting adopted back to portable, 58
- erasing, 60-61
- formatting
  - OS X*, 61-62
  - Windows*, 61
- Marshmallow configuration, 57-58
- reformatting, 56
- SDHC, 56
- SDXC, 56

Microphone screen, 283

microphones, 42

Microsoft Cortana, 84

mobile hotspots, 163

Modify Network button, 160

moments (Twitter), 438

Moments screen, 438

Motion Control screen, 456

Motions and Gestures screen, 455

Motorola Device Manager app, 75

Mount USB On-The-Go Storage button, 64

Move Data to New Storage screen, 57

## moving

- apps on Home screen, 109
- email messages, 232-234

MP3 files, 387

Multi Window (TouchWiz), 462-465

multiperson calls, 335-337

## multiple accounts

- Facebook, 434
  - browsers*, 435
  - deleting*, 436
  - logging in/out*, 434-435
- Twitter, 446
  - configuring*, 446
  - switching between*, 447

## multiusers, 44

restricted profiles, 44

*creating*, 46-47

*deleting*, 48

*switching*, 47

shared devices, 48

## user accounts

*creating*, 44-45

*deleting*, 48

*nonowner*, 45

*owner*, 45

*switching*, 47

## music

battery consumption, 51

buying, 396-397

CDs, ripping, 389-392

deleting, 401-402

downloading, 401

Equalizer, 406-408

- formats supported, 387-389
- listening to, 386
- Play Music app, 385-386
- playing, 398-400
- playlists, creating, 405-406
- streaming, 386, 409
- syncing
  - Phone Companion app*, 84
  - songs*, 394-396
- transcoding files, 392-393
- transferring, 386-387

Music Settings screen, 402

mute gesture, 455

My Drive screen (Google Drive), 311

My Library screen (Play Music app), 397

## N

Name the Certificate dialog box, 154

Name Your Chromecast screen, 325

names

- Chromecast devices, 325
- digital certificates, 154
- folders, 112
- Google Now nicknames, 250-252
- labels, 221
- OS versions, 14
- personal email accounts, 208
- restricted profiles, 47

National Do Not Call Registry, 349

navigating

- Apps screen, 2-5
- bookmarks, 475
- Camera app, 366-368
- check boxes, 10
- dialog boxes, 11
- Facebook Messenger, 420
- folders, 65
- Gmail app, 227
- Google
  - Drive*, 311-313
  - Now*, 246
- Hangouts app, 352
- Home screen, 2-4
- Internet app, 475
- lock screen, 2
- Maps app, 262-264
- menus, 9

- navigation panel, 8-9
- radio buttons, 10
- switches, 10
- TouchWiz skin, 451-452
- Twitter, 437-438
- web pages, 286-289, 473

navigation panel, 8

- closing, 9
- opening, 8

Navigation Panel button/screen, 8, 267

nearby places (phone calls), 347-348

Network Operators button, 144

Network Restrictions screen, 146

networks

- cellular. *See* cellular connections
- Chromecast devices, 326
- closed, 150
- VPNs, 171

- configuring*, 172-173

- connecting*, 173-174

- services*, 171

Wi-Fi

- connecting*, 149-150

- forgetting*, 163

- notifications*, 151

Never radio button, 179

New Folder dialog box, 317

New Label dialog box, 221

New Lock Screen dialog box, 105

New Playlist dialog box, 406

New Profile button, 47

newer: search operator, 236

newer\_than: search operator, 236

news feed (Facebook), 426-427

Next-Word Suggestions switch, 36

nicknames (Google Now), 250-252

nonowner account, 45

NOT operator, 238

Notification Log widget, 21

notifications, 18

- apps, configuring with
  - Lollipop*, 23
  - Marshmallow*, 21-22
- calendar, 305

## calls

- Do Not Disturb mode*, 26
- interruptions*, 30
- repeat callers*, 26

## clearing

- Lollipop*, 24
- Marshmallow*, 23
- notification-management apps*, 24
- repeat*, 23

## displaying, 21

## Do Not Disturb feature

- configuring*, 25
- custom automatic rules*, 28
- default automatic rules*, 26-28
- Priority Only Allows notifications*, 25-26
- turning on/off*, 29-30

## download, 23

## email

- Exchange accounts*, 212, 226
- Google accounts*, 218
- personal accounts*, 208, 223

## events

- Do Not Disturb mode*, 26
- interruptions*, 30

## Facebook, 424-425

## Facebook Messenger, 421-422

## hangouts, 356, 362

## Interruptions feature

- configuring*, 30-31
- turning on/off*, 31-32

## light, 21

## lock-screen notifications, 129

## management apps, 24

## Maps, 267

## Messages

- Do Not Disturb mode*, 26
- interruptions*, 30

## Notifications panel, 19

## peeking, 22

## prioritizing, 22

## Priority Only Allows, 25-26

## recovering, 20-21

## reminders

- Do Not Disturb mode*, 26
- interruptions*, 30

## responding, 19-20

## TouchWiz skin, 459

## Twitter

- screen*, 438
- settings*, 440-442

## Wi-Fi networks, 151

## Notifications area (Settings screen), 179

## Notifications button/screen, 21

- Chrome, 283
- displaying, 20
- Twitter, 438

## Notifications panel, 19

- opening, 6
- Settings app, opening, 7

## Nova Launcher, 115

## Now Cards settings (Google Now), 256, 259

## Now on Tap (Google Now), 246

## Number Confirmed dialog box, 413

## numbers

- fractions, 34
- typing, 33



## offensive words, blocking, 35

## offline messages (Chrome), 296

## Offline Speech Recognition button, 41

## Ogg Vorbis, 388, 391

## "OK Google" Detection button/screen, 41, 253

## older: search operator, 236

## older\_than: search operator, 236

## On-Body Detection (Smart Lock), 125, 128

## OneDrive, 93

## OneNote, syncing, 84

## onscreen keyboard, 32

- alternate characters, 33
- fractions, 34
- Gesture Typing, 34
- hiding, 33
- layouts, 32
- numbers, 33
- suggestions, 34

## open-source licenses, 405

opening. *See also* launchers

- apps, 2, 456
- Camera app, 366-368
- Facebook Messenger, 418
- files, 313
- folders, 313
- Google Now, 244
- hangouts, 360-361

Hangouts app, 352  
 links in Facebook, 425  
 navigation panel, 8  
 Notifications panel, 6  
 Phone app, 329  
 Quick Settings panel, 6  
 Samsung Camera app, 466  
 Settings App, 7

operating systems. *See* OSs

operators

Boolean, 238  
 search, 236-237

option buttons, 10

options, turning on/off, 10

OR operator, 238

Order History screen, 443

orders (Twitter), 443

OSs (operating systems)

devices, 14

Lollipop, 14

*app notifications, configuring, 23*

*Camera app, 366*

*clearing notifications, 24*

*contacts, adding, 299*

*Gmail app, 196*

*Google Keyboard Settings screen,  
 accessing, 34*

*Google Now, 244, 260*

*History screen, 333*

*Interruptions feature, 30-32*

*Phone app, 330-333*

*SD cards, erasing, 60-61*

*storage space usage, checking, 70-72*

*USB OTG storage, 63-64*

Marshmallow

*app notifications, configuring, 21-22*

*Call History screen, 333*

*Camera app, 366*

*clearing notifications, 23*

*contacts, adding, 299*

*Do Not Disturb feature, 25-30*

*file explorer, 65-66*

*Gmail app, 196*

*Google Now, 244-246, 260*

*Phone app, 330-333*

*SD cards, 57-59*

*storage space usage, checking, 68-70*

*USB OTG storage, 62-63*

OS X. *See* OS X

SD card compatibility, 59

skins, 21

updating, 15

versions

*current device, determining, 15*

*names and numbers, 14*

Windows. *See* Windows

OS X

Android File Transfer app

*file management, 91*

*file size limitations, 92*

*installing, 79-80*

*running, 80-81, 91*

devices, accessing, 75

SD cards, formatting, 61-62

USB tethering, 164

outgoing calls, limiting, 343-344

outgoing mail servers, 197, 206

Outgoing Server Settings screen, 206

Overview button (Home screen), 4

Overview screen, 185

closing apps, 187

displaying, 4

opening App Info screen, 188-189

pinning apps, 187-188

switching apps, 186

owner account, 45

## P

package files for apps, 181-183

Paired Devices dialog box, 167

pairing Bluetooth devices, 166-168

palm swipe to capture gesture, 456

Pandora, 386, 409

panels

navigation, 8

*closing, 9*

*opening, 8*

Notifications, 19

*opening, 6*

*Settings app, opening, 7*

Quick Settings

*battery management, 49*

*Do Not Disturb, turning on/off, 29*

- opening/closing, 6*
- restricted profiles, switching, 47*
- screen brightness, 18*
- screen rotation, 12*
- Settings app, opening, 7*
- TouchWiz, 461*
- user accounts, switching, 47*
- Wi-Fi, turning on/off, 147*
- Volume, 31
- Panorama feature (Camera app), 378
- Panorama mode (Samsung Camera app), 469
- Panorama Resolution dialog box, 371
- parental controls, 179
- passcodes (lock screen), 2
- Password Unlock method, 124
- passwords (Chrome), 272-273, 276
- Pattern Unlock method, 123
- payments
  - Facebook Messenger, 422
  - Twitter, 443
- PCM (Pulse Code Modulation), 388
- peeking notifications, 22
- performance
  - batteries
    - power consumption, reducing, 50-51*
    - power hogs, identifying, 49-50*
  - killers (apps), 189-190
- permissions
  - apps, 176-177
  - launchers, 115
- personal dictionaries, 37
- personal email accounts
  - adding to Gmail app, 203-208
    - attachments, 208*
    - incoming server settings, 204*
    - names, 208*
    - notifications, 208*
    - outgoing server settings, 206*
    - ports, 205*
    - syncing frequency, 207*
  - moving messages, 234
  - settings, configuring, 222-224
  - setup information, 197
- Personalized Suggestions switch, 36

- Phone app
  - call history, 333-335
  - Call Waiting, 346
  - Caller ID
    - blocking, 346*
    - Caller ID by Google feature, 346-347*
    - configuring, 345-346*
  - calls
    - blocking, 348-349*
    - declining, 337-338*
    - forwarding, 344-345*
    - making, 330-331*
    - outgoing, limiting, 343-344*
    - screening, 348*
    - sending directly to voicemail, 349*
    - taking, 337-338*
    - text responses, sending, 338*
  - configuring, 339
    - Call Settings screen, 341-342*
    - display options, 340*
    - voicemail, 343*
  - Contacts tab, 333
  - dialpad touch tones, 340
  - Frequently Contacted list, 333
  - Internet calling, 342
  - layout, 330
  - look, 330
  - merging calls, 336
  - multiperson calls, 335-337
  - nearby places, 347-348
  - opening, 329
  - Quick Responses, 340-341
  - Recents tab, 332
  - ringtones, 340, 348
  - Smart Dialer, 335
  - sounds/vibration, 340
  - Speed Dial tab, 330
    - actions, 331*
    - contacts, 331-332*
  - TTY Mode, 344
  - voicemail, configuring, 342
- Phone Companion app, 75, 81
  - configuring items for syncing, 84-87
  - importing photos/videos, 88
  - launching, 82-83
  - transferring files, 88
- phone numbers (Facebook), 412-413
- Phone Search screen, 254-255

## phones

- browsing data, clearing, 426
- SIM cards, locking, 350
- tabs, managing, 290
- users, adding, 44

Photo Sphere feature (Camera app), 377-378

PhotoInfo Eraser app, 371

## photos

- editing, 380-381
- Facebook, 426
- Facebook Messenger, 422
- Google, 315
- importing, 78, 88
- locations, adding, 371
- RAW files, 472
- reviewing, 376-377, 472
- screenshots, 383
- syncing, 84
- taking
  - camera shake*, 373-374
  - flash*, 375
  - focusing*, 372
  - grid*, 374
  - HDR*, 375
  - lens blur*, 378-379
  - lenses, adding*, 377
  - manual exposure*, 374
  - panoramic*, 378
  - photo sphere*, 377-378
  - regular camera, switching*, 372
  - rule of thirds*, 374
  - Samsung Camera app*, 468
  - switching cameras*, 376
  - timer*, 374
  - tripods*, 377
  - volume buttons*, 372
  - zooming*, 372

Photos app, 380-381

PINs (lock screen), 2

PIN Unlock Key (PUK), 350

PIN Unlock method, 123

PIN2, 344

pinch in/out gesture, 12

pinning apps to screens, 187-188

Pixelgarde Free app, 371

Places screen, 248

Play Music app, 327, 385-386, 393-405

Play Store app, 175-179

playing songs, 398-400

playlists, creating, 405-406

Playlists screen (Play Music app), 398

Polls dialog box, 441

Pop-Ups screen, 284

POP3 (Post Office Protocol version 3)  
mail server, 198

portable chargers, 53

portable Wi-Fi hotspots, 163-166

## ports

- email servers, 205
- incoming mail, 197
- outgoing mail, 197

Potential Threat Alerts dialog box, 418

power consumption, reducing, 50-51

power hogs, identifying, 49-50

PowerPoint, syncing, 84

preferences (apps), 192

Preferred Network Type button, 143

Preferred Network Type dialog box, 143

Prefetch Page Resources, 277

preventing screen rotation, 12

primary category (inboxes), 217

Primary dialog box, 218

Print Options dialog box, 322

PrinterShare app, 319-321

## printing

- documents
  - cloud printers*, 320-321
  - existing printers*, 321-322
  - HP printers*, 319-320
  - local printers*, 318-319
  - options*, 318
- email messages, 231

prioritizing notifications, 22

Priority Inbox dialog box, 218

priority inboxes, 216

Priority Only Allows button, 25

Priority Only Allows notifications, 25-26

Priority Only button, 28, 31

## privacy

- Chrome settings, 270, 276-279
- decrypting, 135-136
- encryption, 132-135
- Facebook, 427
  - activity log*, 428
  - audience, choosing*, 427
  - blocking people*, 430-431
  - Privacy Shortcuts screen*, 427
  - who can contact*, 429
- Google Now settings, 250-252
- location settings, 130-132
- Twitter, 442-443

Privacy Shortcuts screen, 427

Pro mode (Samsung Camera app), 468

Profile Info dialog box, 47

promotions category (inboxes), 217

Protected Content screen, 284

## protocols

- DHCP, 158
- SSL, 199
- STARTTLS, 200
- TLS, 199

Proxy Port dialog box, 445

proxy servers, 160-161

proxy settings (Twitter), 445

PUK (PIN Unlock Key), 350

Pulse Code Modulation (PCM), 388

Pulse Notification Light switch, 21

---

## Q

quality (Camera app), 369-371

Quick Access screen (Internet app), 476

Quick Response dialog box, 341

## Quick Responses

- Calendar app, 306
- Phone app, 340-341

Quick Settings bar (TouchWiz), 460-461

## Quick Settings panel

- battery management, 49
- Do Not Disturb, turning on/off, 29
- opening/closing, 6
- restricted profiles, switching, 47

## screen

- brightness*, 18
- rotation*, 12

Settings app, opening, 7

TouchWiz, 461

user accounts, switching, 47

Wi-Fi, turning on/off, 147

QWERTY keyboard layout, 39

---

## R

radio buttons, 10

RAM (Chrome), 285

RAW files, 472

reading email messages, 230-231

rearranging Home screens, 113

rebooting into Safe mode, 191-192

receiving phone calls, 337-338

Recent Tabs screen, 293

Recents tab (Phone app), 332

recharging devices, 52-53, 140

## recovering

- disabled apps, 458
- notifications, 20-21
- update/restore problems, 97

Reduce Data Usage feature, 284-285

reducing power consumption, 50-51

reformatting SD cards, 56

- Lollipop, 60-61

- OS X, 61-62

- Windows, 61

refunds (apps), 177

Reminder Saved screen, 261

## reminders

- Google Now, 260-261
- interruptions, 30
- notifications, 26

Reminders switch, 26, 30

remote controlled Chromecast devices, 324

Remote Desktop feature, 323

remote locking and wiping, 104-106

- ringing devices, 105

- SD cards, 104

Remote Security Administration dialog box, 210

Remove Account dialog box, 436

Remove This Profile dialog box, 48

Remove This User dialog box, 48

Remove User button, 48

renaming maps, 265

Repeat Callers switch, 26

reply all (Gmail app), 215

replying to email messages, 230

Report a Problem dialog box, 177

repositioning items on Home screen, 113

requesting desktop versions of pages, 296

Require Authentication for Purchases dialog box, 179

resetting app preferences, 192

resolution
 

- Camera app, 369-371
- Samsung Camera app, 467

Resolution & Quality screen, 369-371

responding to notifications, 19-20

restarting, 97

Restore button/screen, 102

restoring devices
 

- Google backups, 101-102
- sync and management apps, 102-103

Restricted Profile button, 46

restricted profiles, 44
 

- creating, 46-47
- deleting, 48
- switching, 47

restricting background data, 146

Retweets dialog box, 441

reviewing photos, 376-377

rfc822msgid: search operator, 237

Ring button, 104

Ring Device dialog box, 104

Ring Volume slider, 17

ringing devices, 105

Ringtone Maker app, 348

ringtones
 

- contacts, 298
- creating, 348
- email notifications, 223, 226
- Facebook Messenger, 422
- hangouts, 363
- notifications, 442
- phone calls, 340, 348
- Twitter notifications, 442

Ringtones dialog box, 348

ripping CDs, 389-392

roaming, enabling/disabling, 141-142

rotating screens, 12

Rule Name button/dialog box, 26

rule of thirds, 374

rules (Do Not Disturb), 26-28

running
 

- Android File Transfer app, 80-81
- apps, 185
- sync apps, 78, 89

---

## S

S Health, 466

S Note, 465

S Planner, 466

S Voice app, 465

Safe Browsing, 277, 284

Safe mode, 191-192

SafeSearch filter, 252

Samsung
 

- accounts, 450-477
- apps, 465-466
- Camera app, 466
  - effects, 468
  - flash, 467
  - focus, 467
  - front/rear camera, 468
  - grid lines, 472
  - HDR, 468
  - locations, 472
  - modes, 468-470
  - opening, 466
  - photos, 468
  - RAW files, 472

- resolution*, 467
- reviewing photos*, 472
- settings*, 467, 470-472
- timer*, 468
- Tracking Auto-Focus*, 471
- videos*, 468-471
- voice control*, 472
- volume keys functions*, 472
- zooming*, 466
- Facebook Messenger, installing, 418
- gestures, 454-456
- Internet browser, 472
  - bookmarks*, 475
  - desktop versus mobile versions of pages*, 474
  - interface*, 473
  - multiple tabs*, 475
  - page navigation*, 473
  - Quick Access screen*, 476
  - saving web pages*, 474-475
  - secret browsing*, 477
  - syncing open pages*, 477
  - web page shortcuts*, 477
- Kies 3 app, running, 90
- Kies app, 75
- My Files file explorer, 66
- Smart Switch app, 75, 89
- TouchWiz, 16, 95
  - animations, turning off*, 478
  - buttons*, 450-451
  - creating folders*, 456
  - default launcher, setting*, 119
  - deleting folders*, 457
  - gestures*, 454-456
  - Home screen*, 451-454
  - Multi Window*, 462-465
  - navigating*, 451-452
  - notifications*, 459
  - opening apps*, 456
  - Quick Settings bar*, 460
  - Quick Settings panel*, 461
  - rearranging apps*, 458
  - recovering disabled apps*, 458
  - settings*, 461
  - turning on/off features*, 477-478
  - uninstalling apps*, 458
  - versions*, 450
- Save Passwords feature (Chrome), 276, 279
- saving
  - maps for offline use*, 264-265
  - web pages*, 474-475
- scanning documents, 317
- Screen Pinning screen, 187
- screening phone calls, 348
- screens. *See also* names of specific screens
  - auto-fitting email messages*, 215
  - brightness, adjusting*, 18
  - casting to Chromecast devices*, 327
  - live wallpapers*, 51
  - rotating*, 12
- screenshots, 383
- SD cards, 17
  - adding*, 55-56
  - adopting*, 59
  - app compatibility*, 58-59
  - converting adopted back to portable*, 58
  - erasing*, 60-61
  - files, transferring*, 93
  - formatting*
    - OS X*, 61-62
    - Windows*, 61
  - Marshmallow configuration*, 57-58
  - reformatting*, 56
  - remote locking and wiping*, 104
- SDHC (Secure Digital High Capacity) cards, 56
- SDXC (Secure Digital eXtended Capacity) cards, 56
- search engines, 273
- Search Language screen, 252
- search operators, 236-237
- Search Twitter screen, 438
- searching
  - apps on devices*, 417
  - email messages*
    - Boolean operators*, 238
    - keywords*, 235
    - search operators*, 236-237
  - files/folders*, 66
  - folders*, 313
  - Google
    - Now Information feature*, 4
    - Search box*, 2
  - info with Chrome*, 294
  - phones*, 254-255
  - places on Maps app*, 263

- tablets, 254-255
- Twitter, 438
- widgets, 109
- secret browsing (Internet app), 477
- Secure Digital eXtended Capacity (SDXC) cards, 56
- Secure Digital High Capacity (SDHC) cards, 56
- Secure Sockets Layer (SSL), 199
- security
  - 2-step verification (Google accounts), 238
    - Android devices*, 240
    - computers*, 238-239
    - logging in*, 240
    - reinforcing*, 239-240
  - authentication
    - Facebook*, 431-434
    - purchases*, 179
  - certificate authorities (CAs), 199
  - closed networks, 150
  - Cloud Print app, 321
  - decryption, 135-136
  - digital certificates
    - Exchange Server accounts*, 209
    - SSL and TLS*, 199
  - email, 197-200
  - encryption, 132-135, 272-273
    - disadvantages of*, 133
    - Google Drive*, 316
    - Marshmallow devices*, 132
  - Facebook, 427
    - activity log*, 428
    - audience, choosing*, 427
    - blocking people*, 430-431
    - Privacy Shortcuts screen*, 427
    - two-factor authentication*, 431-434
    - who can contact*, 429
  - lock screen, 2
  - photo locations, 371
  - PIN2, 344
  - remote locking and wiping, 104-106
    - ringing devices*, 105
    - SD cards*, 104
  - screen locks, 46
  - shared devices, 48
  - SIM cards, locking, 350
  - Twitter
    - login verification*, 446-447
    - privacy*, 442-443
  - Wi-Fi Protected Setup, 156-157
- Security Incidents (Chrome), 277
- Security screen, 183
- Select a Backup to Restore screen, 103
- selecting. *See* choosing
- Selective Focus mode (Samsung Camera app), 469
- Send Feedback dialog box, 267
- sender images (email), 215
- sending
  - calls directly to voicemail, 349
  - email messages, 231-232
  - hangout messages, 362
- Sense (HTC), 95-96
- sensors (screen orientation), 12
- Separate Contact dialog box, 302
- separating contacts, 302
- servers
  - email ports, 205
  - incoming mail, 197, 204
  - mail, 198
  - outgoing mail, 197, 206
  - proxy, 160-161
- Service dialog box, 342
- service set identifiers (SSIDs), 150
- Session Initiation Protocol (SIP), 342
- Set Backup Account dialog box, 99
- Set Lock button, 46
- Set Up Email screen
  - displaying, 200
  - personal accounts, 204, 208
- Set Up New User screen, 45
- Set Up Now button, 45
- Set Up User Now dialog box, 44
- Set Up Wi-Fi Hotspot dialog box, 165
- Set Up Your Phone screen, 239
- Set Up Your SD Card screen, 57
- Set Wallpaper screen, 454
- settings
  - Access Point Name (APN) setting, 143
  - brightness, adjusting, 18
  - Calendar app, 304
    - choosing events from Gmail*, 306
    - general*, 304-306
    - individual calendars*, 307

- Camera app, 369
  - CIF format*, 371
  - locations*, 371
  - manual exposure*, 372
  - resolution/quality*, 369-371
- Cellular Network Settings screen
  - access points*, 143
  - data roaming*, 141-142
  - different carriers, connecting*, 144
  - displaying*, 140
  - network types, choosing*, 143
- Chrome, 270, 276-280
- Chromecast device, 324-326
- data limits, 144
- Exchange accounts, 224-226
- Facebook
  - accessing*, 423
  - alerts*, 425
  - Autoplay*, 425
  - browsing data, clearing*, 426
  - chat*, 426
  - Continuous Contacts Upload*, 425
  - language*, 426
  - links, opening*, 425
  - multiple accounts*, 434-436
  - news feed, managing*, 426-427
  - notifications*, 424-425
  - photos*, 426
  - privacy*, 427-431
  - sounds*, 425
  - two-factor authentication*, 432-433
- Facebook Messenger, 421-422
- Gmail accounts, 196
- Gmail app, 214
  - action confirmations*, 216
  - archiving messages*, 214
  - Auto-Advance*, 215
  - auto-fitting messages*, 215
  - conversation view*, 215
  - deleting messages*, 214
  - replying to messages with multiple recipients*, 215
  - sender images*, 215
  - swipe actions*, 215
- Google accounts, 216
  - attachment downloads*, 222
  - images*, 222
  - Inbox*, 216-217
  - labels*, 221
  - notifications*, 218
  - signatures*, 219
  - syncing messages*, 220
  - vacation responders*, 219-220
- Google Drive, 311
- Google Now, 245, 249
  - accounts & privacy*, 250-252
  - app suggestions*, 257
  - cards*, 245
  - languages*, 252
  - Now Cards*, 256, 259
  - Now on Tap*, 246
  - phone/tablet searches*, 254-255
  - voice*, 254
- Hangout accounts, 357-359
- Hangouts app, 354
- hard reset, 136-138
- IP, configuring, 158-159
- launcher default, 118-119
- location settings, 130-132
- locking settings, 124-125
- Maps app, 266-267
- personal email accounts, 222-224
- Phone app, 339
  - call forwarding*, 344-345
  - Call Settings screen*, 341-342
  - Caller ID*, 345-346
  - Caller ID by Google*, 346-347
  - Caller Waiting*, 346
  - display options*, 340
  - Internet calling*, 342
  - nearby places*, 347-348
  - outgoing calls, limiting*, 343-344
  - Quick Responses*, 340-341
  - sounds/vibration*, 340
  - voicemail*, 342-343
- proxy server, 160
- Quick Settings panel
  - opening/closing*, 6
  - screen brightness*, 18
  - screen rotation*, 12
  - Settings app, opening*, 7
- Samsung Camera app, 467, 470-472
  - modes*, 468-470
  - settings*, 470-472
- Text Correction, 35-36
- TouchWiz, 461
- Twitter, 439
  - accounts*, 439
  - content*, 443
  - data*, 444-445
  - display*, 444
  - locations*, 437, 445

- login verification, 446-447*
- multiple accounts, 446-447*
- notifications, 440-442*
- orders/payments, 443*
- privacy, 442-443*
- proxy, 445*
- signing out, 443*
- sounds, 444*
- volume levels, 17
- wallpaper, 113-114
- Wi-Fi, 151
  - advanced, 151-152*
  - digital certificates, 152-154*
  - Protected Setup (WPS), 156-157*
  - Wi-Fi Direct, 154-156*
- Settings app
  - app notifications, 23
  - audio volume levels, 17
  - Choose Screen Lock screen, 2
  - Do Not Disturb feature, 25
  - download notifications, 23-24
  - email account setup, starting, 201
  - Gesture Typing, 34
  - notifications, 21
  - opening, 7
  - personal dictionaries, 37
  - screen brightness, 18
  - skins, 7
  - Text Correction, 35
- Settings screen, 178-179
- Settings Shortcut widget, 20
- Share Via dialog box, 169
- Share Your Status screen, 353
- sharing
  - calendars, 309-310
  - contacts, 304
  - devices (security), 48
  - files, 66
  - Internet connections, 163-164
    - Bluetooth tethering, 169-171*
    - portable Wi-Fi hotspots, 165-166*
    - USB tethering, 164*
- Shazam app, 408
- shooting videos, 382-383
- Show Correction Suggestions switch, 35
- Show Gesture Trail switch, 34
- Show Scale on Map dialog box, 267
- sideloading apps, 180-185
- Sign-In & Security screen, 239
- Signature dialog box, 219
- signatures
  - email
    - Exchange accounts, 224*
    - personal accounts, 222*
  - Google accounts, 219
- SIM Card Lock Settings screen, 350
- SIM Cards
  - contacts, 303
  - locking, 350
- Simple Mail Transfer Protocol (SMTP), 198
- SIP (Session Initiation Protocol), 342
- SIP Accounts screen, 342
- SIP Calling dialog box, 342
- Site Settings (Chrome), 280-284
- size: search operator, 237
- skins
  - defined, 14
  - functionality, 15
  - Home screens, 108
  - OS updates, 15
  - Pulse Notification Light setting, 21
  - Settings app, 7
  - slow devices, 15
  - TouchWiz, 16
    - animations, turning off, 478*
    - buttons, 450-451*
    - Camera app, 466-472*
    - creating folders, 456*
    - deleting folders, 457*
    - gestures, 454-456*
    - Home screen, 451-454*
    - Multi Window, 462-465*
    - navigating, 451-452*
    - notifications, 459*
    - opening apps, 456*
    - Quick Settings bar, 460*
    - Quick Settings panel, 461*
    - rearranging apps, 458*
    - recovering disabled apps, 458*
    - Samsung apps, 465-466*
    - settings, 461*
    - turning on/off features, 477-478*
    - uninstalling apps, 458*
    - versions, 450*
  - wallpapers, 113

- Skype, syncing, 84
- Sleep button, 50
- Sleep dialog box, 50
- sleep mode with Wi-Fi on, 152
- Slide Unlock method, 123
- Slow Motion mode (Samsung Camera app), 470
- smaller: search operator, 237
- smart alert gesture, 455
- Smart Dialer, 335
- Smart Keyboard Pro, 43
- Smart Lock, 125-126
- Smart Switch app, 75
- SMS Hangouts, configuring, 355-357
- SMTP (Simple Mail Transfer Protocol), 198
- Snapchat, 189
- social category (inboxes), 217
- social-media apps, 190
- social networking
  - Facebook
    - alerts, 425
    - Autoplay, 425
    - browsing data, clearing, 426
    - chat, 426
    - Continuous Contacts Upload, 425
    - deleting accounts, 436
    - deleting contacts, 415
    - downloading, 412
    - Find Friends feature, 413-414
    - friend invitations, managing, 415
    - language, 426
    - links, opening, 425
    - logging in, 412
    - multiple accounts, 434-435
    - news feed, managing, 426-427
    - notifications, 424-425
    - phone numbers, adding, 412-413
    - photos, 426
    - privacy, 427-431
    - settings, 423
    - sounds, 425
    - two-factor authentication, 431-434
    - uploading contacts, 416-417
    - videos, watching, 426
  - Facebook Messenger, 417
    - contacts, 420
    - groups, 420
    - installing, 418
    - logging in, 418
    - navigating, 420
    - notifications, 422
    - opening, 418
    - permissions, 418
    - phone number, adding, 419
    - ringtones, 422
    - settings, 421-422
    - sounds, 422
    - Text Anyone in Your Phone screen, 418
  - Twitter, 436
    - account settings, 439
    - configuring, 439
    - content settings, 443
    - data settings, 444-445
    - display, 444
    - Home screen, 437
    - locations, 437, 445
    - logging in, 436-437
    - login verification, 446-447
    - messages, 438
    - moments, 438
    - multiple accounts, 446-447
    - navigating, 437-438
    - notifications, 438-442
    - orders/payments, 443
    - privacy, 442-443
    - proxy settings, 445
    - searching, 438
    - signing out, 443
    - sounds, 444
- soft buttons, 451
- software updates, 94-96
- songs. *See also* music
  - downloading, 401
  - playing, 398-400
  - playlists, 405-406
- sorting files, 312
- Sound dialog box, 343
- Sound & Notification button/screen, 17
  - Do Not Disturb feature, 25
  - Interruptions, configuring, 30
  - notification light, 21
- SoundHound app, 408

## sounds

- calendar notifications, 305
  - casting to Chromecast devices, 327
  - encoders, 388
  - Facebook, 425
  - Facebook Messenger, 421-422
  - formats, 388
  - Phone app, 340
  - ringtones
    - contacts*, 298
    - creating*, 348
    - email notifications*, 223, 226
    - Facebook Messenger*, 422
    - hangouts*, 363
    - phone calls*, 348
    - Twitter notifications*, 442
  - storage space consumption, 70-72
  - Twitter, 444
  - voice, 254
  - volume levels, 17
- space available, checking
- Lollipop, 70-72
  - Marshmallow, 68-70
- spam, 234
- spare battery, 52
- spare charger, 53
- special characters, 33
- Speech Output button/dialog box, 41, 254
- Speed Dial tab (Phone app), 330
- actions, 331
  - contacts, 331-332
- Spell Checker, 120
- spelling, 35-36
- Splashtop app, 323
- sports (Google Now), 248
- Sports screen, 248
- Spotify, 386, 409
- SSIDs (service set identifiers), 150
- SSL (Secure Sockets Layer), 199
- starring email messages, 231
- Start of The Week dialog box, 304
- Start Time button
- Do Not Disturb, 27
  - interruptions, 31
- STARTTLS, 200

- status bar (Home screen), 2
- stocks (Google Now), 249
- Stocks screen, 249
- Stop Continuously Uploading Your Contacts dialog box, 417
- storage
- device internal storage space, 55
  - file explorers
    - built-in*, 66
    - HTC File Manager*, 67
    - Marshmallow*, 65-66
    - Samsung My Files*, 66
    - third-party*, 67
  - micro SD cards
    - adopting*, 59
    - app compatibility*, 58-59
    - SDHC*, 56
    - SDXC*, 56
  - SD cards
    - adding*, 55-56
    - converting adopted back to portable*, 58
    - erasing*, 60-61
    - formatting on OS X*, 61-62
    - formatting on Windows*, 61
    - Marshmallow configuration*, 57-58
    - reformatting*, 56
  - space usage, checking
    - Lollipop, 70-72
    - Marshmallow, 68-70
  - USB OTG
    - connecting*, 62
    - Lollipop, 63-64
    - Marshmallow, 62-63
    - pros/cons*, 62
- Storage screen, 70, 284
- Storage screen for Downloads, 24
- Storage & USB screen, 62
- streaming
- Chromecast devices, 324
  - music, 386, 409
- Street View (Maps), 264
- StrongVPN, 171
- subject: search operator, 236
- Suggest Contact Names switch, 36
- suggestions (typing), 34
- swappable batteries, 52
- SwiftKey keyboard, 43

swipe gesture, 12

switches, 10

switching

- among launchers, 117
- apps, 186
- keyboards, 32, 122
- restricted profiles, 47
- user accounts, 47

sync apps

- Android File Transfer, 74
  - disk image, ejecting, 80*
  - downloading, 79*
  - file management, 91*
  - file size limitations, 92*
  - installing, 79-80*
  - running, 80-81, 91*
- backing up devices, 100
- capabilities, 89
- HTC Manager app, 77
- installing
  - Android File Transfer on OS X, 79-81*
  - Windows, 76-78*
- launching, 89
- manufacturer, 75
- Phone Companion, 75, 81
  - configuring items for syncing, 84-87*
  - importing photos/videos, 88*
  - launching, 82-83*
  - transferring files, 88*
- restoring devices, 102-103
- running, 78, 89
- Samsung
  - Kies 3, 90*
  - Smart Switch, 89*
- third-party, 76
- updating, 90

Sync Frequency dialog box, 223-224

Sync Interval dialog box, 442

Sync Options screen, 225

syncing

- apps. *See* sync apps
- calendar, 84
- with computers, 74
  - Android File Transfer for Mac app, 74-75*
  - manufacturer apps, 75*
  - OS X, 75*
  - Phone Companion app, 75*
  - third-party apps, 76*
  - Windows, 75*

- email, 220
  - Exchange, 224-225*
  - personal accounts, 223*
  - Phone Companion app, 84*
- Excel, 84
- music, 84
- new devices from old devices, 74
- OneNote, 84
- open web pages (Internet app), 477
- photos, 84
- PowerPoint, 84
- Skype, 84
- songs, 394-396
- Word, 84

## T

Tablet Search screen, 254-255

### tablets

- decrypting, 135-136
- encryption, 133-135
- hard reset, 136-138
- phone calling, enabling, 351
- restricted profiles, 44
  - creating, 46-47*
  - deleting, 48*
  - switching, 47*
- tabs, managing, 291
- users, adding, 44

tabs (Chrome), 272, 289-293

### taking

- calls, 337-338
- photos
  - camera shake, 373-374*
  - flash, 375*
  - focusing, 372*
  - grid, 374*
  - HDR, 375*
  - lens blur, 378-379*
  - lenses, adding, 377*
  - manual exposure, 374*
  - panoramic, 378*
  - photo sphere, 377-378*
  - regular camera, switching, 372*
  - rule of thirds, 374*
  - Samsung Camera app, 468*
  - switching cameras, 376*
  - timer, 374*
  - tripods, 377*

- volume buttons*, 372
  - zooming*, 372
- screenshots, 383
- videos, 468
- tap gesture, 12
- Tap & Go screen, 74
- tap and hold gesture, 12
- Tap to Wake switch, 18
- task-killer apps, 193
- telemarketing do not call list, 349
- telephoto lenses, 377
- tethering
  - Bluetooth, 163, 169-171
  - USB, 163-164
- Tethering & Portable Hotspot screen, 163
- text
  - entering
    - alternative keyboards*, 43
    - dictation*, 40-42
    - emojis*, 42
    - hardware keyboards*, 38-39
    - keyboards*, 34
    - onscreen keyboard*, 32-34
    - personal dictionaries*, 37
  - Text Correction, configuring, 35-36
- Text Anyone in Your Phone screen, 418
- Text Correction, configuring, 35-36
- text responses (phone calls), 338
- themes (TouchWiz skin), 454
- Themes screen, 454
- third-party
  - batteries/chargers, 53
  - file explorers, 67
  - PrinterShare app, 319
  - sync and management apps, 76
- three dots (Menu button), 9
- time zones (Calendar app), 304
- timeline (Maps app), 262
- timers (Camera apps), 374, 468
- TLS (Transport Layer Security), 199
- to: search operator, 236
- Total Audio Converter app, 391
- Total Audio Converter for Windows app, 393
- Total Silence button, 28
- Touch to Search (Chrome), 278
- touchscreen gestures, 12
- TouchWiz skin, 16, 95
  - animations, turning off, 478
  - apps
    - opening*, 456
    - rearranging*, 458
    - recovering disabled*, 458
    - Samsung*, 465-466
    - uninstalling*, 458
  - buttons, 450-451
  - Camera app, 466
    - effects*, 468
    - flash*, 467
    - focus*, 467
    - front/rear camera*, 468
    - grid lines*, 472
    - HDR*, 468
    - locations*, 472
    - modes*, 468-470
    - opening*, 466
    - photos*, 468
    - RAW files*, 472
    - resolution*, 467
    - reviewing photos*, 472
    - settings*, 467, 470-472
    - timer*, 468
    - Tracking Auto-Focus*, 471
    - videos*, 468-471
    - voice control*, 472
    - volume keys functions*, 472
    - zooming*, 466
  - folders
    - creating*, 456
    - deleting*, 457
  - gestures, 454-456
  - Home screen
    - customizing*, 452-454
    - navigating*, 451-452
  - Multi Window, 462-465
  - navigating, 451-452
  - notifications, 459
  - Quick Settings bar, 460
  - Quick Settings panel, 461
  - settings, 461
  - turning on/off features, 477-478
  - versions, 450
- TrackID app, 408

- transcoding files, 392-393
- transferring
  - files
    - Bluetooth connections*, 168-169
    - Dropbox*, 93
    - email*, 94
    - Google Drive*, 93
    - OneDrive*, 93
    - SD cards*, 93
    - wireless connections*, 93
  - music, 386-387
- translation services (Chrome), 284
- Transport Layer Security (TLS), 199
- Transportation screen, 249
- Treat as Priority switch, 22
- tripods, 377
- troubleshooting
  - Android File Transfer app, running, 80-81
  - camera shake, 373-374
  - download notifications, 23
  - slow devices, 15
  - update/restore problems, 97
  - Wi-Fi connections, improving, 161-162
  - Wi-Fi Direct connections, 156
- Trust This Computer screen, 239
- Trusted Devices (Smart Lock), 125-126
- Trusted Face (Smart Lock), 125-127
- Trusted Places (Smart Lock), 125-127
- Trusted Voice (Smart Lock), 125, 128
- TTY Mode, 344
- TTY Mode dialog box, 344
- Tumblr, 189
- Tuneln Radio, 409
- turning on/off
  - Airplane mode, 50, 140
  - automatic screen rotation, 12
  - Caller ID by Google, 346-347
  - communications services, 51
  - Do Not Disturb, 29-30
  - Facebook Continuous Contacts Upload feature, 416-417
  - Gesture Typing feature, 34
  - Interruptions, 31-32
  - live wallpapers, 51
  - lock screen, 2
  - Nearby Places, 347-348
  - notification light, 21
  - notifications, 23
  - options, 10
  - TouchWiz features, 477-478
  - Wi-Fi, 147-148
- TV & Video screen, 249
- Tweets screen, 441
- Twitter, 436
  - configuring, 439
  - content settings, 443
  - data settings, 444-445
  - display, 444
  - Home screen, 437
  - locations, 437, 445
  - logging in, 436-437
  - login verification, 446-447
  - messages, 438
  - moments, 438
  - multiple accounts, 446
    - configuring*, 446
    - switching between*, 447
  - navigating, 437-438
  - notifications
    - screen*, 438
    - settings*, 440-442
  - orders/payments, 443
  - privacy, 442-443
  - proxy settings, 445
  - searching, 438
  - signing out, 443
  - sounds, 444
- two-factor authentication (Facebook), 431
  - login approval codes, 433-434
  - setting up, 432-433
- typing
  - alternate characters, 33
  - dictation, 40
    - configuring*, 40-42
    - microphones*, 42
  - emojis, 42
  - fractions, 34
  - Gesture Typing, 34
  - Google Voice Typing feature, 121
  - keyboards
    - alternative*, 43
    - changing*, 122
    - emojis*, 42
    - gestures*, 34
    - Google Keyboard*, 121
    - Hacker's Keyboard*, 43

*hardware keyboards*, 38-39  
*onscreen keyboards*, 32-34  
*selecting*, 121  
*shortcuts*, 38, 185  
*Smart Keyboard Pro*, 43  
*SwiftKey keyboard*, 43

numbers, 33  
 personal dictionary, 37  
 special characters, 33  
 suggestions, 34  
 Text Correction, 35-36

## U

Ultra Power Saving mode, 52  
 unchecking, 10  
 uninstalling apps, 191, 458  
 Unknown Sources switch, 183  
 Unlock Selection screen, 46  
 unlocking  
   devices with fingerprints, 128-129  
   lock screen, 2  
 updates category (inboxes), 217  
 updating  
   apps, 96-97  
   calendars, 308  
   Camera app, 366  
   Chromecast devices, 326  
   languages, 41  
   maps, 265  
   OS, 15  
   problems, troubleshooting, 97  
   software, 94-96  
   sync and management apps, 90  
 upgrading batteries, 53  
 uploading  
   documents to Google Drive, 317  
   Facebook contacts, 414-417  
 Usage and Crash Reports (Chrome), 278  
 Usage Cycle Reset Date dialog box, 144  
 USB  
   cables, recharging devices, 53  
   keyboards, 38  
   OTG (On-The-Go) storage, 38  
     *connecting*, 62  
     *Lollipop*, 63-64  
     *Marshmallow*, 62-63

*memory stick*, 182  
*pros/cons*, 62  
 tethering, 163-164  
 Use Details screen, 50  
 User Account Control dialog box, 77  
 User Controls area (Settings screen), 179  
 users  
   accounts  
     *creating*, 44-45  
     *deleting*, 48  
     *nonowner*, 45  
     *owner*, 45  
     *switching*, 47  
   multiple, 44  
   restricted profiles, 44  
     *creating*, 46-47  
     *deleting*, 48  
     *switching*, 47  
   shared devices, 48  
   wallpaper reviews, 114  
 Users button/screen, 44

## V

Vacation Responder screen, 220  
 vacation responders  
   Exchange, 224  
   Google, 219-220  
 VBR (variable bit rate), 388  
 versions, 2  
   current device, determining, 15  
   numbers and names, 14  
   TouchWiz skin, 450  
   web pages, 474  
 vibrations (Phone app), 340  
 Video Collage mode (Samsung Camera app), 469  
 videos  
   battery consumption, 51  
   casting to Chromecast devices, 327  
   CIF format, 371  
   Facebook, watching, 425-426  
   importing, 78, 88  
   resolution, 370-371  
   Samsung Camera app, 470-471, 468  
   shooting, 382-383  
   storage space consumption, 70-71

viewing. *See* displaying

virtual buttons, 451

virtual private networks. *See* VPNs

Virtual Shot mode (Samsung Camera app), 470

VNC (Virtual Network Computing), 323

voice control (Samsung Camera app), 472

Voice screen, 253

voice settings (Google Now), 254

Voice Typing, 40
 

- configuring, 40-42
- microphones, 42

voicemail, configuring, 342-343

Voicemail Number dialog box, 343

volume keys (Samsung Camera app), 472

volume levels, 17

Volume panel, 31

VPN button/screen, 172

VPNs (virtual private networks), 171
 

- configuring, 172-173
- connecting, 173-174
- services, 171

## W

---

waking devices, 18

wallpaper
 

- downloading, 114
- live wallpapers, 51, 114
- setting, 113-114
- TouchWiz skin, 454
- user reviews, 114

Wallpaper button, 51

Want Help with Any Screen? Turn On Now on Tap dialog box, 246

WAV (Waveform Audio File Format), 388-389

web addresses, adding to Home screen, 111

web browsing, 288, 291

web browsing (Chrome), 286-289
 

- bookmarks, 292-293
- browsing incognito, 294-295
- requesting desktop sites, 296
- returning to pages you visited earlier, 293
- returning to recent tabs, 293

searching for info, 294

tabs, managing, 289-291

web pages
 

- bookmarking, 475
- browsing secretly, 477
- desktop versus mobile versions, 474
- multiple open, 475
- navigating, 473
- Quick Access screen, adding, 476
- saving, 474-475
- shortcuts, 477
- syncing open, 477

websites
 

- Android
  - Developer*, 383
  - Device Manager*, 104
- CyberGhost VPN, 171
- doubleTwist, 76
- Google Now options, 248
- IPVanish, 171
- LogMeIn, 323
- National Do Not Call Registry, 349
- PrinterShare, 321
- Splashtop, 323
- StrongVPN, 171

Weekend button/screen, 26

Welcome to Android Device Manager screen, 104

What Number Can People Use to Reach You screen, 419

When Calls and Notifications Arrive button, 30

Where Reply Is button, 27

whitelists, 157

widgets
 

- adding to Home screen, 109-110
- battery consumption, 51
- Clock, 3
- defined, 3
- finding, 109
- Notification Log, 21
- Settings Shortcut, 20
- TouchWiz skin, 454

Widgets screen, 454

Wi-Fi
 

- analyzer apps, 162
- closed networks, connecting, 150
- data usage, displaying, 146

- digital certificates, 152-154
- frequency bands, 152
- improving connections, 161-162
- Internet connections, sharing, 163-164
  - Bluetooth tethering, 169-171
  - portable Wi-Fi hotspots, 165-166
  - USB tethering, 164
- IP settings, configuring, 158-159
- MAC addresses, 157
- networks
  - connecting, 149-150
  - forgetting, 163
  - notifications, 151
- Protected Setup (WPS), 156-157
- proxy servers, 160-161
- settings, 151-152
- stumbler apps, 162
- turning on/off, 147-148
- VPNs, 171
  - configuring, 172-173
  - connecting, 173-174
  - services, 171
- whitelists, 157
- Wi-Fi Direct
  - connecting, 154-155
  - troubleshooting, 156
- Wi-Fi Frequency Band dialog box, 152
- Wi-Fi Protected Setup (WPS), 156-157
- Window Animation Scale dialog box, 479
- Windows
  - devices
    - accessing, 75
    - connecting, 78-79
  - Phone Companion app, 81
    - configuring items for syncing, 84-87
    - importing photos/videos, 88
    - launching, 82-83
    - transferring files, 88
  - SD cards, formatting, 61
  - sync and management apps
    - capabilities, 89
    - installing, 76-78
    - launching, 89
    - running, 89
    - updating, 90
  - USB tethering, 164

- wireless connections
  - Airplane mode, 139-140
  - files, transferring, 93
- Word, syncing, 84
- work addresses (Maps), 266
- WPS (Wi-Fi Protected Setup), 156-157
- WPS Push Button, 156
- WPS Push Button Setup dialog box, 156
- writing email messages, 231-232

---

## X-Y

- XLD app, 393
- Yahoo! search engine, 273
- Yes button, 27
- Yes, Maybe, or Not Replied button, 27
- Yes or Maybe button, 27
- Your Account Is Set Up and Email Is on Its Way screen, 208

---

## Z

- zoom lenses, 377
- zooming
  - Camera app, 372
  - Maps app, 262
  - Samsung Camera app, 466