25th Anniversary Edition

A Little Bit of Everything



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A Little Bit of Everything

25th Anniversary Edition

by the For Dummies family of authors



A Little Bit of Everything For Dummies®, 25th Anniversary Edition

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Foreword

We can map the growth of the *dummies* series to the evolution of technology in our lives.

In 1991, corporations were replacing typewriters with personal computers on everybody's desk. The PC, which previously could have been dismissed as a technophile's tinker-toy, was now becoming the essential business productivity tool.

All these workers, faced with these new machines, people who thought they were reasonably intelligent, suddenly started feeling threatened and intimidated and, we dared to say it, dumb.

So *DOS For Dummies* immediately resonated on contact with consumers. They turned a book that some accounts initially refused to stock into a word-of-mouth bestseller.

And for the next three years they bought *dummies* books, millions of them. And wrote us letters (maybe not millions of them, but lots). They thanked us for teaching them how to use their computer, their operating system, their applications. And they asked for *dummies* books to apply those technologies to their lives. Our first response in 1994 was *Personal Finance For Dummies*, another bestseller.

This coincided with another debut in 1994, the first World Wide Web conference, held in Geneva, Switzerland. The Web was introducing the Internet to computer users, and the role of the PC/Mac in peoples' lives was changing again. Computing devices became microwave ovens of information, allowing people everywhere to explore every area of human interest and endeavor.

So *Internet For Dummies* was published that year, winning a first-place award from the Computer Press Association. And so we looked beyond computing itself, to the areas of work and life the Internet could touch, to expand our list and reach.

Our reach also expanded beyond the U.S., and even the English-speaking world, Before the decade was over *dummies* books had been published in over 30 languages, from Albanian to Turkish. In the early years, many publishers questioned whether the series would work in their language market. The answer today is a global phenomenon.

Our reach also expanded beyond books. In 1996 a license agreement with EMI brought *Classical Music For Dummies* enhanced CDs to market. Critically and commercially successful, the series initiated the *dummies* licensing program of products and services that has included software, consumer electronics, instructional DVDs, DIY home improvement kits, online support services, beginner musical instruments, and more.

Today, as books themselves have reached beyond traditional print formats to digital, *dummies* continues to expand, into e-books, websites, enhanced e-books, and mobile applications. And again, this too is happening globally, as the Wiley team in Australia, Canada, Germany, the U.K., and U.S. work together to grow our print and electronic publishing program, which is further enhanced by contributions from licensee publishers in France, the Netherlands, Spain, and elsewhere.

It is remarkable to think that one book published in 1991 led to more than 1,800 further titles, with more than 250 million copies in print, translations in more than 30 languages, distribution in more than 100 countries – all enriching peoples' lives while making knowledge accessible.

David Palmer

Marketing Director, Wiley

Introduction

Welcome to a special e-book from a very special series celebrating a very special anniversary!

Twenty-five years, ago the very first *For Dummies* book, *DOS For Dummies*, was published in the United States. From that first printing of that first book came a series unlike anything in the publishing world, one that's global in both geography — we've been published worldwide in more than 30 languages — and in coverage. Go to any section of any bookstore and you'll see the familiar yellow-and-black covers, or go online and find an array of electronic products that the series has spawned. All promise an easy-to-understand approach to help you get where you want to go.

That's who the *For Dummies* series is all about, really — you. Whether you want to learn about computers, accounting, science, sports, art, or even wine, *For Dummies* is there for you, making good on our promise of Learning Made Easy! So when it came time to decide whom to invite to our 25th birthday party, the answer was easy: We're inviting you.

About This e-Book

No single volume can hope to summarize what thousands of titles have meant to millions of readers over the years, and we don't make any claim to do that in this e-book. Rather, this e-book celebrates the breadth and depth of the *For Dummies* series, offering 20 chapters from a list of books compiled by our global colleagues at John Wiley & Sons.

This list wasn't easy to compile, either. Ask a dozen *For Dummies* editors what their favorite book is, and you're likely to get as many different answers. Yet, we're confident that the chapters we've included give you a representative glimpse at why — no matter what the topic — our products have meant so much to so many people around the world. (And by the way, because this is a global project, you'll see some different flavors — or flavours? — of English throughout.)

How This e-Book Is Organized

So what's in this e-book? Well, we've grouped our chapters into five main parts:

- **Part 1**, **Personal Development**, offers four chapters that are all about making your life better and more meaningful. There's a chapter from *Eating Clean For Dummies*, and one from *Nutrition For Dummies*. Looking for more in life? Try the chapter from *Meditation For Dummies*. And if life has thrown you some challenges, check out the chapter from *Compassion Focused Therapy For Dummies*.
- **Part 2, Technology & Gadgets,** takes us back to the roots of our series, starting with a chapter from one of our all-time best-selling subjects, *Windows 10 For Dummies*. Want to dig deeper into computers? Check out the chapter from *Coding For Dummies*. Just want to figure out how to use the gadgets you've got? Then check out the chapters from *iPhone For Seniors For Dummies* and *GoPro Cameras For Dummies*.
- **Part 3, Business Boosters,** demonstrates the impact the *For Dummies* series makes in the real world for our fans. Want to start a business? Check out the chapter from *Business Plans Kit For Dummies*. Want to do more in the office? The chapter from *Office 2016 For Dummies* helps you do just that. *Small Business Marketing Strategies All-in-One For Dummies* has lots of ideas to help you size up the market, and when success rolls your way, we've got advice from *Investing For Dummies*.
- **Part 4, The Internet For Dummies,** demonstrates one of the key areas in which our series has helped fans be successful the online, always-connected world in which we live today! Chapters here come from *Blogging For Dummies, Facebook For Dummies, eBay For Dummies*, and *LinkedIn For Dummies*.
- **Part 5**, **Hobbies**, shares the fun that the *For Dummies* series helps readers have in their personal lives. These chapters from *Guitar For*

Dummies, *Bridge For Dummies*, *Chess For Dummies*, and *Digital Photography For Dummies* demonstrate how our approach has helped millions of people learn not just essential life and business skills, but about subjects that enrich their personal lives.

Icons Used in This Book

Icons — those little round graphics in the left-hand margins — have been part of the *For Dummies* series since the early days. We use them to highlight information that deserves a little extra emphasis or that can be grouped together. You may be thinking, "Grouped together?" Yes. Seriously. Try flipping (or scrolling) through a *For Dummies* book sometime, just to take an "icon tour." You'll notice that all the paragraphs associated with a particular icon have a particular theme. It's almost as though someone planned it that way…

Here are the core four icons that you'll find used throughout these chapters (and our series). We'll let you have the joy of discovering the other special icons yourself:



The most self-explanatory icon in our repertoire, we use this to highlight little things that make your life easier or your journey more productive.



warning Okay, the second-most self-explanatory icon we use. Ignore the advice in these paragraphs at your peril!



REMEMBER Some points shouldn't be forgotten. We've used this icon over the years to point out such items.



One of the hallmarks of the *For Dummies* series is that we get to the point. We use this icon to highlight information that you may

find interesting but is above and beyond the basics that you need to understand the subject at hand.

Where to Go from Here

Just keep scrolling down! The first chapter starts in just a couple of pages. Do you have to read these chapters in order? Of course not. That's never been a requirement of a *For Dummies* book. If something strikes your fancy, pause and read it for awhile. We promise: There's no quiz at the end.

ABOUT THE SERIES NAME

One of the most misunderstood things about the series has been the name — *For Dummies*. We want our readers to own the fact that they're a dummie, to be proud of it and their need for knowledge. They're intelligent people who know a great deal. They just need to know a bit about something new right now, or want to grow personally or professionally. They want someone to give them expert advice in plain English (or whatever language the book is printed in).

In fact, the series name came from such a situation. One of our series founders had an epiphany when a bookstore owner kept him waiting while tending to a customer with a question. This was back in the days when personal computers were new, and to use one you had to know a computer command language called DOS. "I don't understand how to use my computer," the customer said to the bookstore owner. "Have you got a book on DOS for dummies like me?"

Twenty-five years and more than 250 million books later, we've covered a lot more than just DOS. We've not only made everything easier for our readers, but we've also done so with the kind of expert advice and "get in, get out" information that has made our series a reference that our customers — smart, intelligent readers like you — turn to again and again for advice.

Part 1

Personal Development

FEATURING CHAPTERS FROM:

The 2nd edition of *Eating Clean For Dummies* (Print ISBN: 978-1-119-27221-2; ePub ISBN: 978-1-119-27222-9; ePdf ISBN: 978-1-119-27223-6), by Jonathan Wright and Linda Larsen.

The 4th edition of *Meditation For Dummies* (Print ISBN: 978-1-119-25116-3; ePub ISBN: 978-1-119-25117-0; ePdf ISBN: 978-1-119-25118-7), by Stephan Bodian.

The 6th edition of *Nutrition For Dummies* (Print ISBN: 978-1-119-13024-6; ePub ISBN: 978-1-119-13025-3; ePdf ISBN: 978-1-119-13026-0), by Carol Ann Rinzler.

Compassion Focused Therapy For Dummies (Print ISBN: 978-1-119-07862-3; ePub ISBN: 978-1-119-07869-2; ePdf ISBN: 978-1-119-07863-0), by Mary Welford.

Chapter 1

Meeting Special Dietary Considerations

IN THIS CHAPTER

Dealing with food allergies and gluten sensitivity

Going vegetarian while eating clean

Incorporating the vegan lifestyle into your eating clean plan

Special diets seem to be making their way into mainstream culture. Everybody knows somebody who's allergic to something or who can't eat one type of food or another. Food allergies, gluten sensitivity, and issues with meat and other animal products are three of the most common reasons why people practice special diets.

The good news is that even if you have someone with a food allergy or some strong food preferences in your family, you can still eat a clean diet. In fact, the clean diet is probably the best way to accommodate these needs and preferences!

In this chapter, we look at what food allergies are, why their numbers seem to be increasing, and how you can plan your meals to avoid allergenic foods. We also delve deeper into gluten sensitivity and look at the protein in wheat, barley, and similar products that can produce serious medical symptoms in people who are allergic or sensitive to it. We finish up by considering how vegetarian and vegan diets fit into the eating clean plan.

Food Allergies and Sensitivities

If you've ever faced a food allergy — whether you're the one with the allergy or someone in your family has it — you probably feel, well, picked on. After all, you now have a list of foods that are off your menu forever. Luckily, avoiding processed foods makes staying away from allergenic foods easier. An apple, for example, contains only apple — not 25 other ingredients that may or may not contain the food you're allergic to.

Doctors estimate that only 2 to 6 percent of the population actually has a true food allergy with development of antibodies specific to that food. The two major ways used to diagnose food allergies are blood tests and elimination diets. A small group of physicians, the American Academy of Environmental Medicine, also uses very precise skin tests called *dilution-titration* and *provocative neutralization*. Although "scratch tests" are relatively accurate for inhalant allergies, doctors generally consider them an inaccurate test for food allergies.

In this section, we look at what food allergies really are, how the body reacts to the food in question, and how to tell the difference between an allergy and a sensitivity. Then we list the main allergenic foods and give you tips on how to avoid them.

Understanding food allergies

A food allergy can develop at any point during your life. You can develop an allergy when you're 99 years old or never experience one at all. Doctors don't know what triggers an allergy, but they do know what happens when one develops.

Getting to know your immune system

A food allergy occurs when your immune system decides that one or more foods are attacking your body, and, as a result, it fights back. Your immune system is incredibly complex, comprised of lymph nodes, bone marrow, white blood cells (T-cells, b-cells, and many others), the spleen, the thymus gland, and tonsils. Its purpose is to protect you against bacteria, viruses, and any other substance your body perceives as foreign. The immune system usually works pretty well, keeping you healthy and free from disease. But sometimes it overreacts, causing allergies to develop.

Note: Food allergies can run in families, so genetics may play some part in development of this condition. Some studies also suggest that exposing fetuses to certain foods in utero can generate allergies. Pediatricians advise parents to introduce potentially allergenic foods to babies and toddlers gradually, in stages, so that if an allergy exists they can identify it early and eliminate the particular food from the child's diet.



reacts to the protein (or sometimes other molecules) in the food. People rarely have an allergic reaction to a food the first time they eat it. But sometimes people who are allergic to one type of food experience cross-reactivity to unrelated allergens the first time they eat or are exposed to that other allergen. For instance, people who are allergic to grass could have an immediate allergic reaction to potatoes, melons, tomatoes, watermelons, oranges, cherries, or peanuts. Or someone with a peanut allergy could have an immediate reaction to legumes, wheat, corn, plantains, or melons.

If your body decides a food is a foreign substance, it will create one of the following two types of antibodies in your blood:

- **» IgE antibodies:** These antibodies are associated with immediate allergic reactivity. The next time you eat an IgE-provoking food, the IgE antibodies, which are attached to mast cells in your mouth, esophagus, stomach, and skin, will release histamines and other chemicals into your bloodstream to "protect" you against the invader, causing a rapid allergic reaction.
- **» IgG antibodies:** These antibodies are associated with more delayed allergic reactions, which are usually more subtle and harder to connect directly with the food that provoked them.

Sometimes food allergies simply go away, or resolve. Scientists don't understand why this happens. Many children can literally outgrow allergies to eggs, soy, wheat, and milk. In fact, as many as 85 percent of children with allergies to those foods will outgrow them. Unfortunately, allergies to fish, shellfish, and nuts are usually life-long and can be very serious.

WHEN ALLERGIES TURN DEADLY

Although only a very small percentage of food allergens can be life-threatening, some people are so allergic to certain foods that they can die after simply kissing someone who has eaten it or touching that particular food. Everyone has heard of children with very severe peanut allergies. These severe reactions cause a systemic cascade in the immune system, overwhelming the body with histamines, which can cause a sharp drop in blood pressure, a narrowing of the airways, and anaphylactic shock. If not treated immediately, anaphylactic shock is deadly.

If you're severely allergic to one or more substances, always carry a medical ID along with an epinephrine pen or kit. This pen contains a measured dose of adrenaline (also known as epinephrine) in a syringe. If you have a severe allergic reaction to a substance, you inject yourself with this pen to stop the symptoms. There are different sizes of the pens for children and adults. Treatment for a severe allergic reaction doesn't stop with this injection; it just buys you time. You must still go to an emergency room for further treatment.

Identifying food allergy symptoms

Symptoms of an immediate food allergy (one caused by IgE antibodies) may include, from least to most serious

- » Rash or hives
- >> Tingling in the mouth
- » Abdominal pain
- » Dizziness or fainting
- » Difficulty swallowing
- » Nausea or vomiting
- » Difficulty breathing or wheezing
- Stomach pain
- >> Diarrhea
- » Chest pain
- >> Swelling of the mouth or tongue
- >>> Drop in blood pressure
- >> Anaphylactic shock

A visit to the doctor is in order if you or anyone in your family has experienced any of these symptoms after eating a specific food. Your doctor can run tests to positively identify the allergenic food and prescribe an EpiPen, which administers epinephrine, a chemical that stops the allergic reaction. She can also refer you to a nutritionist who can help you identify all the places where the allergenic foods can hide (such as eggs in salad dressings or peanuts in cookies).



REMEMBER The vast majority of food allergies are not life-threatening, but they certainly are unpleasant. Although some symptoms are easy to connect with their offending foods, others are much more difficult to identify and require help from a physician skilled and knowledgeable in food allergy diagnosis and treatment. These physicians are often not the same as those skilled and knowledgeable in treating inhalant allergies.

Dr. James C. Breneman, former chair of the Food Allergy Committee of the American College of Allergy, says that food allergies, particularly nonimmediate, delayed-response-type food allergies, can be partially or completely responsible for the following symptoms:

- >> Arthritis
- » Chronic lower back pain
- >> Eczema
- >> Itching
- >> Asthma
- » Recurrent infections of throat, sinuses, lungs, and bladder
- » Bedwetting
- » Canker sores
- Sallbladder attacks
- » Migraine headaches

Dr. Wright (one of the authors of this book) has followed Dr. Breneman's recommendations about the connection between food allergies and seemingly nonrelated symptoms since 1981 and has observed that you can prevent nearly 100 percent of gallbladder pain attacks, as well as nearly 100 percent of all bedwetting incidents, by carefully identifying and then eliminating specific food allergies.

Living with food allergies

If you've been diagnosed with a food allergy, you must be vigilant about what you do and do not eat. Fortunately, changing to the eating clean lifestyle can make avoiding particular foods much easier. Because common allergens, including gluten, MSG, nuts, and soy, can appear in everything from salad dressing to candy bars, you automatically eliminate some allergens from your diet by sticking to whole foods. So eat whole, unprocessed foods and a healthy mix of clean meats, fruits, vegetables, and whole grains and you may get control of your allergies as well as a healthier body.

CONSIDERING A RELATIONSHIP BETWEEN CLEAN EATING AND A REDUCTION IN ALLERGIES

A healthy, clean diet may lead to a reduction in allergies. Research published in *Science* magazine has found that people living in rural Africa, who eat very few processed and refined foods, have a healthier mix of bacteria in their intestines than Western populations. As a result, the immune systems of Africans are stronger than those of Western populations. A bigger variety of healthy gut microbes can help your immune system better detect the differences between true harmful objects, like viruses, and food proteins, so it doesn't overreact and create allergies.



REMEMBER Read labels carefully on the processed foods you do buy and figure out what names your particular allergen can hide behind. For people with severe allergies, eating a roll that was baked in a factory that uses eggs or soy in another product can be enough to trigger a reaction. For this reason, the FDA requires manufacturers to list the top-eight food allergens in "plain language" (in other words, no pseudonyms) on food labels. (If you're wondering which allergens make the top-eight list, check out the section "Avoiding key allergens.")

Be careful of cross-contamination! For someone with a severe allergy, eating a cookie that you removed from the cookie sheet with a spatula that touched a nut can be enough to trigger a reaction. If someone in your family has a severe allergy, keep your home and kitchen completely free of the offending food. For more information, see *Food Allergies For Dummies*, by Robert Wood (Wiley).

Decoding food sensitivity or intolerance

Food sensitivities and food intolerances are an entirely different matter. Some sensitivities are not intolerances. Areas of the body besides the gut and immune system can react to foods in an allergic fashion. For example, your nervous system can be sensitive to certain foods, causing you to have a seizure when you eat them. Many more people have food sensitivities than have true food allergies.

People can be intolerant to or sensitive to a variety of different foods and food ingredients. The most common ones are

- >> Lactose
- » Gluten
- >> Fructose
- >> Yeast
- » Additives and preservatives
- » MSG

A *food allergy* is a biological response to a perceived attack on your body. A *food intolerance* usually means someone doesn't have the enzymes to digest a particular food. And a *sensitivity* is any type of negative response to a food, such as flushing or a rapid heartbeat. Diagnosing a food sensitivity or intolerance can be very difficult, because the reaction to the food can be delayed by hours or days, while the body's reaction to a true food allergy usually happens within minutes. Plus, food sensitivity or intolerance sometimes depends on the amount of food you consume. For instance, some people aren't sensitive to a certain food unless they consume a large quantity.

HOW FOOD MANUFACTURERS HIDE ALLERGENS

Unfortunately, some of the less common allergens can hide behind different names on food labels. People who are allergic or sensitive to MSG, for instance, must read labels and watch out for dozens of terms ranging from *autolyzed yeast* to *calcium caseinate* to *soy protein*.

Allergens can hide in other places in processed foods, too. For example, food manufacturers can use peanuts or peanut protein in curry paste or pudding mixes, and eggs can hide in salmon pate or pasta shells.

The easiest way to protect yourself against hidden allergens (and to keep you healthy at the same time) is to eat clean, whole foods and make your own curry pastes, pudding, salad dressings, and snack foods.

Symptoms of food sensitivity or intolerance include

- » Nausea
- >> Vomiting
- >> Diarrhea
- >> Heartburn
- > Irritability
- » Cramping
- » Headaches

If you or a family member is experiencing any of these symptoms, you and your doctor can try to pinpoint which foods are behind them by doing one of the following:

» Elimination diet: In this diet, you eliminate most foods from your diet and consume very basic, bland foods in their place for a certain period of time — usually one or two weeks. Then you add foods back into your diet, one at a time, and monitor the symptoms closely. If you decide to try an elimination diet, be sure to do so only under the care of a physician or nutritionist.

» Breath test: If your body is unable to digest lactose, for instance, your doctor may have you take a breath test to verify that lactose is the problem. After eating a food containing the suspected ingredient (lactose, in this case), you breathe into a bag at certain intervals. The doctor then tests the air in the bag for the presence of hydrogen. Human breath usually contains very little hydrogen, but your body produces more hydrogen gases when bacteria in your GI tract cause undigested lactose to ferment. This test can also be used to test for lactose or sorbitol malabsorption.

As with food allergies, the only way to control a food intolerance is to avoid the offending food. Lucky for you, the eating clean lifestyle makes managing food intolerances much easier. After all, eating whole foods and avoiding processed foods help you keep hidden ingredients out of your diet so you can feel better and be healthier.

Avoiding key allergens

Although people can be allergic to or intolerant of many different kinds of food, nine foods cover 90 percent of all food allergies. Avoiding the foods you're allergic to is key. Watch out for cross-contamination and be vigilant. With practice, you'll get good at recognizing the presence of these foods in products.

Here are the nine main allergens, along with clean alternatives you can substitute for them in recipes and daily life:

w Cow's milk and other dairy products: A cow's milk allergy appears only in the first year of life. Infants who are nursed until they start eating regular food are most vulnerable to this allergy. Children may outgrow a milk allergy. People with lactose intolerance aren't allergic to milk; they can't digest lactose, the sugar in milk, which means they can't eat any dairy products made with cow's milk. Why not nurse your infant for as long as you can? It's basic "clean eating" for babies! If you don't or can't nurse your infant, or if your child is allergic to cow's milk, look for organic formulas, and be sure to prepare them with clean, safe water. These formulas should not

contain processed refined sugars, synthetic preservatives, palm oil, or carrageenan — read labels carefully. If you're eating clean, your infant can, too!

Peanuts: Peanut allergies can be life-threatening, and the tiniest amount of nut or nut dust can trigger a severe reaction. The protein in peanuts is very complex, which is why the reaction to it is so severe. If you don't outgrow this allergy, the reaction can become more severe over time.

Substitute other types of nuts as long as you know you're not allergic to them. In baking recipes, coconut or oatmeal make good substitutes for peanuts, and soy nuts provide a similar crunch and texture.

>> Tree nuts: Tree nuts include pecans, walnuts, Brazil nuts, and macadamia nuts, among others. Manufacturers use them in many foods you may not think contain nuts, like cereals, salad dressings, sauces, and ice cream. Although tree nut allergies can be quite severe, many of them aren't life-threatening.

Substitute toasted oatmeal or toasted breadcrumbs for chopped nuts in recipes.

Eggs: People usually outgrow allergies to eggs, but they can be lifelong and very serious. If you have an egg allergy, you must avoid anything made with eggs or egg protein, so watch out for terms on food labels like *albumin* and *egg protein*.

You can find some good egg substitutes in the store that mimic the function of eggs in baked goods. You can also combine 1 tablespoon of ground flaxseed with 3 tablespoons of water, beat the mixture well, and substitute it for one egg.

>> Fish: Fish allergies include allergies to cod, haddock, salmon, tuna, halibut, and other freshwater and saltwater fish. If you or someone in your family has a fish allergy, be careful with products like salad dressing, Worcestershire sauce, gelatin, and omega-3 supplements, which may contain fish products or extracts.

Substitute chicken or pork for fish in recipes.

» Shellfish: An allergy to shellfish can be an allergy to mollusks, including oysters and clams, or to crustaceans, including shrimp, crayfish, lobsters, and crabs. Avoid all shellfish and watch out for products like glucosamine, which can be made from the shells of crustaceans. Also avoid snails, squid, and scallops.

Or just substitute chicken or pork for shellfish in recipes.

- wheat: If you suffer allergy-type symptoms after eating wheat, you may have a true wheat allergy, or you may have celiac disease or non-celiac gluten-gliadin intolerance (check out the section "Gluten Sensitivity and Celiac Disease" for details). Food labels can hide many forms of wheat, using terms like farina, modified food starch, or bran, so be aware of the complete list of terms to avoid. You can find these terms on the Internet on sites such as www.glutenfreefoodslist.net and www.projectallergy.com. Substitute gluten-free mixes, flours, and other products for wheat-containing products.
- Corn: Corn allergies can be mild or severe, and many people with corn allergies show cross-reactions to other grains as well. People with corn allergies may react to corn pollen, cornstarch, or grass pollen. So avoid foods like corn tortillas, margarine, corn oil, corn syrup, cornmeal, grits, hominy, and many breakfast cereals.
 Substitute tapioca or arrowroot for cornstarch in recipes, and be sure to read labels carefully. You can find corn products in everything from peanut butter to fish sticks to cheese spreads.
- **>> Soy:** Soy allergies can be difficult to accommodate because you find soy byproducts in many processed foods. Plus, a protein in soybeans can cause a cross-reaction in people with peanut allergies. Read labels and get familiar with the list of terms used to identify soy in processed foods (go to www.projectallergy.com for a list of these terms). Avoid edamame, tofu, tempeh, miso, and soy nuts.

 You can substitute peas, green beans, or lima beans for edamame in

recipes. Use sour cream in place of soft tofu.

Following the clean eating plan can help you avoid these allergens, but keep in mind that you may need to be more strict about staying on the plan. While many people employ an 80 percent clean, 20 percent not clean strategy for their eating clean plan, you may find that your compliance needs to approach 100 percent. Regardless, relying on fresh, unprocessed, whole foods is an excellent way to control allergies and intolerances.



REMEMBER After you're diagnosed with an allergy and get familiar with the foods you need to avoid, you'll discover that adapting recipes to work with the foods you can eat is fairly easy to do. For instance, you can use quinoa in place of couscous in a salad recipe, substitute chicken thighs for salmon, or use almond milk or rice milk in place of cow's milk. As long as the food you use as a substitute is clean and fresh and a reasonable replacement for the allergenic food, most recipes work out just fine.

GMO FOODS AND ALLERGIES

In 1996, some manufacturers started putting DNA from certain foods into the seeds of soy, corn, cottonseed, and canola plants; the results are called *genetically modified foods* (or GMO foods). Specifically, manufacturers modified soybeans with a gene from a Brazil nut. Predictably, people allergic to tree nuts had reactions to those soybeans.

GMO foods may also be creating new proteins that many people could be allergic to. But no one will know for sure until people become sick.

Try to avoid GMO foods if you have allergies, and avoid them even if you don't!

Gluten Sensitivity and Celiac Disease

Celiac disease and non-celiac gluten sensitivity are both part of a special category of food allergies. A gluten allergy doesn't result in breathing problems or shock (like some severe food allergies do), but it can cause long-term damage to the body if left uncontrolled. People who are sensitive to gluten react to *gluten*, a protein found in wheat, rye, barley, and oats.

Celiac disease is a genetic disorder that develops into a chronic illness in which gluten damages the villi in the intestines, leading to poor absorption of nutrients and serious illness caused by vitamin deficiencies. Non-celiac gluten sensitivity is a response to the glutenin and gliadin proteins that make up gluten, and it's also associated with significant nutrient malabsorption.

In this section, we look at the differences between non-celiac gluten sensitivity and celiac disease, and we show you how to handle these conditions with the eating clean diet plan.

Identifying gluten sensitivity

Both non-celiac gluten sensitivity and celiac disease cause poor absorption of many essential nutrients, including essential amino acids, minerals, folate, and fat-soluble vitamins, including vitamin D. Celiac disease and a sensitivity to gluten can also lead to depression, chronic illnesses, or serious diseases like osteoporosis and cancer. (In fact, men who develop osteoporosis at a relatively young age often have nonceliac gluten sensitivity.)

In addition to malabsorption and other chronic illnesses, non-celiac gluten sensitivity may also cause the following symptoms:

- » Mouth sores
- >> Chronic indigestion

- » Intestinal gas
- » Bloating and cramping
- >> Ulcers
- » Chronic diarrhea
- >> Chronic constipation
- » Muscle weakness
- » Chronic fatigue
- » Bone or joint pain
- >> Skin rashes

Symptoms of celiac disease may include:

- >> Chronic diarrhea
- » Abdominal pain
- >> Weakness
- >> Smelly, fatty stools
- » Bone or joint pain
- » Osteoporosis
- » Weight fluctuation
- >> Thyroiditis
- >> Osteoporosis
- » Bone or joint pain
- >>> Unexplained anemia

There's considerable overlap in symptoms of these two problems with gluten, but not total identity. Unfortunately, many of these symptoms can also be symptoms of other diseases or medical conditions, so be sure to see a doctor skilled and knowledgeable in the diagnosis of food allergies and sensitivities if you suspect a gluten sensitivity.

Doctors confirm a diagnosis of celiac disease with blood tests to measure the presence of antibodies against gluten and an intestinal biopsy to examine the intestinal wall. The diagnosis of non-celiac gluten sensitivity is best made with the anti-gliadin secretory IgA antibody test, done with a stool specimen.

Unfortunately, gluten sensitivity can be difficult to diagnose. A low or low-normal level of *triglycerides*, commonly measured blood fats, is often a sign of non-celiac gluten sensitivity. But the elimination diet can be the most inexpensive and efficient way to pinpoint gluten sensitivity. Eliminate gluten from your diet, and if you feel better, it's probably the problem.

SHOULD YOU AVOID GLUTEN EVEN IF YOU AREN'T SENSITIVE?

So should people who aren't gluten sensitive or who don't have celiac disease avoid gluten? Some nutritionists think so. Interestingly enough, human beings don't need to consume any gluten-containing foods to be healthy.

If you aren't experiencing symptoms of gluten sensitivity or celiac disease, you can try a short experiment: Eliminate gluten from your diet for a period of two to three weeks and see how you feel. If you feel much better without gluten in your diet, then try to avoid it.

Dr. Christiane Northrup says that many women over the age of 40 should avoid gluten because it can be difficult to digest. People who suffer from fibromyalgia, certain skin conditions like dermatitis herpetiformis, asthma, rheumatoid arthritis, or irritable bowel syndrome (IBS) may also want to avoid gluten because gluten can aggravate those conditions. Talk to your doctor or a nutritionist about this issue to decide whether you should adopt the gluten-free lifestyle.

If you think you have a gluten sensitivity but all your tests are negative, try eliminating gluten from your diet anyway. Go on a gluten-free diet for a few weeks; then add gluten back in. If your symptoms reoccur, you may want to kick gluten to the curb.



remember People who test negative for celiac disease can still be sensitive to gluten. After you and your doctor rule out other diseases, and if you feel better eliminating gluten from your diet, continue on that path. Also keep in mind that you can have non-celiac gluten sensitivity with no gastro-intestinal symptoms at all; just look at the previous list of symptoms for proof!

Developing a gluten-free diet and lifestyle

If you or a member of your family has been diagnosed with celiac disease or non-celiac gluten sensitivity, removing gluten from your diet is very important. After all, "cheating" on this diet can permanently damage your intestines, which can lead to osteoporosis, depression and other mental illnesses, cancer, and other diseases associated with malnutrition (see the preceding section for details).

Setting up a gluten-free kitchen is an important first step in managing gluten sensitivity or celiac disease. Empty and thoroughly clean your kitchen and everything in it, including bread machines, toasters, cutting boards, and all utensils that may have been in contact with wheat, barley, rye, or oats. Even a tiny crumb can cause a reaction in someone with a severe case of celiac disease or gluten sensitivity.

Throw away any foods that contain gluten or that you suspect may have gluten. Then go shopping for safe foods, keeping a list of forbidden ingredients close at hand. Remember that gluten can hide in many different products, including prescription drugs, grated cheese, soy sauce, beer, and whiskey.



If you have to avoid gluten, you can include processed foods in a clean eating plan to make it work for you. Gluten-free baking mixes, gluten-free flour mixes, pasta made from rice, and other gluten-free products contain unusual ingredients like xanthan gum, which helps add structure to baked goods. But that and other additives like guar gum and gelatin are natural products so they still fit into your clean eating lifestyle. If you crave bread but can't eat gluten, use a gluten-free substitute instead of depriving yourself or eating wheat products.

If you have to buy processed foods for someone with celiac disease or non-celiac gluten sensitivity, be sure to avoid foods with the following label terms and ingredients:

- **» Barley:** This grain can hide in ingredient lists under the terms *malt*, *flavorings*, *coloring*, *flavor enhancers*, *hydrolyzed plant protein*, or *hydrolyzed vegetable protein*. Rice is a good substitute.
- **» Bran:** Bran is the outer covering of a cereal grain. It can come from corn and rice, as well as wheat, rye, and oats. Make sure the bran in any food's ingredient list comes only from corn or rice before you buy it.

- **Bulgur:** Bulgur is simply wheat grains that have been processed or crushed so that they cook quickly. Use quinoa or rice as a substitute.
- **>> Cereal:** Avoid any cereal product made from wheat, oats, barley, rye, triticale, or spelt. Look for cereals made from rice, corn, millet, quinoa, sorghum, wild rice, and teff.
- **» Couscous:** This pasta is made from steamed and cooked wheat. You see it most often as a side dish or in salads. Substitute millet or quinoa for couscous in recipes.
- **» Dinkle:** Dinkle is another name for spelt, which is a form of wheat.
- **Farina:** People often cook and serve this cereal as a hot cereal or a side dish similar to polenta. For a substitute, use cooked cornmeal.
- **>> Flour:** If you see this general term on a label, contact the manufacturer to find out which type of flour is in the product. However, we recommend avoiding these products even if you know the flour doesn't contain gluten, simply because manufacturers can change formulations without giving any notice.
- **» Food starch:** This ingredient can come from wheat, potatoes, rice, or corn. The term is too unspecific to be safe; avoid products with food starch in them.
- **» Graham flours:** This term is just another name for wheat flours. Substitute gluten-free flour mixes.
- **Hulls:** Again, this word is too broad. Hulls from which grain? Unless the food's label specifically says *gluten-free*, assume that the hulls contain gluten and avoid it.
- **>> Kamut:** A member of the wheat family, this ancient grain is very large. Some people who are gluten sensitive can eat this grain, but try it only under a doctor's or nutritionist's supervision. Substitute quinoa for this ingredient in recipes.
- **» Malt:** This ingredient is made from dried sprouted grain, usually wheat; it's used in brewing and as a food additive.
- **» Matzo:** Unleavened bread is usually made from wheat, so although it's unleavened (without yeast or baking powder), it isn't suitable for

- a gluten-free diet.
- **Modified food starch:** Used as a thickener, stabilizer, and emulsifier, this ingredient appears in many foods. It's usually corn based, which is acceptable, but it may be made with wheat. Check with the manufacturer to make sure. (If the product is made in the United States, it must have a wheat ingredient disclaimer on the label.)
- **» Oats, oat bran, gum, or fiber:** Oat products don't contain gluten naturally, but cross-contamination is a real concern. Add oats to your diet carefully, and be sure to use only those products that have been grown and processed in a gluten-free environment or dedicated mill. See the nearby sidebar for more on oats.
- **» Rye:** Rye is one of the big three grains to avoid in a gluten-free diet because it contains gluten.
- **Seitan:** This vegetarian protein substitute (which is often called *wheat meat*) is made from gluten, so people with gluten sensitivity and celiac disease need to avoid it.
- **Spelt:** Although spelt is a non-wheat flour, it does contain gluten, although at a lower concentration than wheat. It's on the unsafe list for people with celiac disease and gluten sensitivity.
- **» Triticale:** This grain is a cross between rye and wheat, two of the main grains you must avoid on a gluten-free diet.
- **» Udon:** This Japanese noodle is made from wheat. Substitute rice noodles or other gluten-free noodle products.
- **» Wheat:** Obviously, you must avoid this one!

Because the eating clean plan focuses on eating lots of fruits and vegetables, clean meats, and grains like rice and corn, it's a fairly simple way to accommodate a gluten-free diet. Plus, you automatically eliminate a lot of potential problem foods because one main element of the eating clean plan is avoiding processed foods.

WHAT ABOUT OATS?

Oats are frequently grouped with the grains to avoid if you're gluten sensitive or have celiac disease. But oats themselves don't contain gluten, so why do people group them with wheat, barley, and rye? Farmers often grow oats in fields right next to wheat, barley, and rye, so cross-contamination is the big issue. Plus, manufacturers often process oats in the same plant as the other gluten-containing grains. Just a tiny amount of gluten can cause a severe reaction in some patients.

If you shop carefully, you may be able to find oats that are grown and processed with no exposure to wheat, barley, or rye. Look for oats in containers marked by the Gluten-Free Certification Organization as being gluten-free. Just be careful when you first decide to add oats to your diet and consume oats in moderation. Not all celiacs can consume uncontaminated oats.



For more information about avoiding gluten, check out *Living Gluten-Free For Dummies* by Danna Korn, *Gluten-Free Baking For Dummies* by Dr. Jean Layton and Linda Larsen, and *Celiac Disease For Dummies* by Ian Blumer and Sheila Crowe (Wiley).

Vegetarian Diets

People who avoid eating animal products are loosely classified as *vegetarians*. Although the eating clean plan includes clean meats and other animal products, you can easily adapt it to fit your vegetarian lifestyle.

In this section, we look at the different classifications within the vegetarian lifestyle and explain how you can accommodate each one with the clean eating plan.



REMEMBER Because animal products are the best source of complete protein, getting enough protein is the main concern of any vegetarian diet.

Combining foods and eating a varied diet are the best ways to get enough protein if you want to avoid eating animal products.

Understanding the levels of vegetarian diets

When someone claims to be a vegetarian, most people assume the person doesn't eat red meat, fish, poultry, pork, or eggs. But vegetarianism has different levels, all defined by what their proponents will and will not eat.

Here's a list of the main levels of vegetarianism, from most relaxed to most dedicated:

- **» Flexitarian:** These vegetarians sometimes eat a vegetarian diet and sometimes eat meat. They may pick a day or two out of the week to eat only vegetarian products.
- **» Pollo vegetarian:** Although you may find it difficult to believe, people in this group add chicken to their "vegetarian" diet. Because they don't eat red meat, they consider themselves vegetarians.

- **Pescatarian:** Fish lovers add fish to their vegetarian diets. They eat salmon, halibut, cod, and other white fish, along with shellfish like shrimp and clams. Many vegetarians add fish to their diets to capitalize on the healthy benefits in omega-3 fatty acids.
- **» Ovo-lacto vegetarian:** This category includes people who eat eggs (ovo) and dairy products (lacto). Milk, cheese, yogurt, sour cream, and egg products are on this diet's list of foods okay to eat. This variation has some variations of its own: Some people add only eggs to their vegetarian diet, while others add only milk products.
- **>> Vegan:** Vegans are the truest vegetarians; they don't eat any food produced by animals or made using animals.
- **Raw vegan:** Like vegans, people in this category consume only plant-based foods, but, to take it a step further, they don't heat any of their foods above 115 degrees for nutritional reasons. This diet is also called the *raw food diet* or the *macrobiotic diet*.
- Fruitarian: People in this group don't eat anything based on killing. So they eat the products of plants, such as fruit, nuts, and seeds, but they don't eat anything that harms or kills a plant, let alone an animal.

Accommodating these different vegetarian diets is easy to do with the clean eating plan. You just have to make sure that someone following one of these diets eats a wide variety of food (as wide as the plan allows) and considers adding a vitamin supplement to the diet. Protein, vitamin B12, and sometimes iron are the main nutrients you need to worry about in vegetarian diets, more so as the diet becomes "stricter." Vitamin B12 can be more difficult than protein and iron to incorporate into clean vegetarian diets, so vegetarians often have to take supplements to get this nutrient.

Combining foods for complete proteins

The main challenge for vegetarians — since most of them eat plenty of fruits and vegetables — is getting enough protein in their daily diet. Although nutritionists used to recommend eating protein at every meal,

they now know that vegetarians can balance protein intake over a whole day. So you don't have to combine proteins at every meal to get a good amount of *complete protein* (that is, all the essential amino acids human beings need).

Most healthy adults need about 50 grams of complete protein every day. Pregnant and nursing women and people with chronic health problems may need more. Because only animal products (with a few exceptions) contain complete proteins, vegetarians must combine protein sources in combinations called *complementary proteins*. Of course, vegetarians who eat eggs, milk, or fish don't have to worry about getting enough protein.

Eating a variety of protein sources is key. The best protein sources for vegetarians include the following:

- **» Grains:** Only amaranth, quinoa (which is really a seed!), buckwheat, and spirulina (which is an algae) contain all the essential amino acids your body needs. Use these hearty foods as hot cereal, in casseroles, and in side dishes. Although these foods provide complete proteins, they don't score 100 percent on the Protein Digestibility Corrected Amino Acid Score (PDCAAS).
- **>> Soy protein:** Soy protein has all the essential amino acids and scores 100 percent on the PDCAAS scale. You can add soy flour, soybeans, and other products, including tofu, to your clean vegetarian diet.
- **» Legumes with grains:** This protein combination pairs legumes, which are missing the amino acids methionine, cystine, and tryptophan, with brown rice or wheat, which are rich in those amino acids. Other good combinations include beans with tortillas, hummus with bread, or garbanzo beans (also called chickpeas) with brown rice.
- **Degumes with nuts:** Combining legumes, which include black beans, kidney beans, garbanzo beans, cannellini beans, and brown beans, with nuts like pecans, peanuts, walnuts, hazelnuts, and almonds, provides complete protein.

- **Degumes with seeds:** Combining seeds, including sesame seeds, sunflower seeds, pumpkin seeds, chia, and flaxseed, with legumes provides complete protein. Hummus, which is a combination of garbanzo beans and sesame seeds, is a great way to combine these foods in a vegetarian diet.
- **>> Seitan and meat substitutes:** These protein sources are processed, so you may want to include them sparingly in your clean diet. But because they provide 100 percent of all the essential amino acids, they're acceptable on the eating clean plan.

Vegetarians also need to make sure they get enough calcium, iron, and vitamin B12. (The main sources for these nutrients are dairy products and red meat.) Good vegetarian sources of calcium include dark leafy greens, broccoli, almonds, rice milk, and fortified juices. Good sources of iron include lentils, soy, spinach, dark leafy greens, and garbanzo beans. One brand of nutritional yeast, Red Star T-6635+, contains active vitamin B12. Other vegetarian sources of vitamin B12 include fortified cereals and soy products, but read the labels carefully. Often, supplemental vitamin B12 is the easiest and most reliable source.

LIMITING AMINO ACIDS

The amino acid that's in short supply in any grain, legume, nut, or seed is called a *limiting amino acid*. Your body needs nine amino acids that it can't make on its own. On a vegetarian diet, legumes, grains, nuts, and seeds have all the amino acids you need, but each food is missing one or more of them.

Think of your body as a bike repair shop. If the shop doesn't get enough handlebars (one type of protein), it can make only a limited number of bicycles. But if a new supplier delivers lots of handlebars, the shop can produce many bikes. The same thing is true with vegetarian diets and limiting amino acids.

The Vegan Lifestyle

Veganism is the purest form of vegetarianism. People following this diet eat no animal products at all. In fact, some even avoid honey produced by bees, and many don't wear leather, silk, wool, or fur. Like vegetarians, vegans must eat a varied diet to get a good amount of nutrients.

In this section, we look at what nutrient-related challenges vegans face, why protein is key, and how the eating clean plan can make getting essential nutrients easier even when you're avoiding animal products.

Getting plenty of nutrients on the clean vegan diet

Most vegans already avoid processed foods because manufacturers use animal products like butter, eggs, and protein extracts to make many of them. But if you decide to go the vegan way, make sure you eat a rich variety of dark leafy greens, fruits, vegetables, nuts, seeds, legumes, and grains to get all the nutrients you need. A good multivitamin can help fill in any missing nutrients; you may also want to add specific supplements to your diet.

For best health, vegans need to focus on getting the following nutrients:

- **» Calcium:** To get enough calcium, eat a lot of dark-green vegetables, soy or rice milk that has been fortified with extra calcium, and tofu made with calcium sulfate. You may also add a calcium supplement to make sure you're consuming enough of this bone-strengthening mineral.
- **» Vitamin D:** The vegan diet doesn't include many vitamin D-rich foods. You can find fortified orange juice and rice and soy milk, but the best source of vitamin D is sunshine. Expose your skin to the sun at least a few minutes per day until the first sign of pinkness, but don't use sunscreen during this time because sunscreen limits your skin's ability to make this essential vitamin. At the point of pinkness,

- cover up or apply a sunscreen. You can also add a vitamin D supplement to your diet.
- **>> Iron:** You can obtain iron by eating kidney beans and other legumes, blackstrap molasses, dark leafy greens like Swiss chard, kale, beet greens, soybeans, and fruits like grapes and watermelon.
- **» Vitamin B12:** The recommended daily allowance (RDA) for this vitamin is quite low, but vegans need to be sure they get enough of it. The nutritional yeast we discuss in the section "<u>Combining foods for complete proteins</u>" as well as some fortified soy milks and cereals are good sources, but you may need to add a supplement to your diet.

Remembering that protein is key

Getting enough protein is the key to maintaining a balanced vegan diet. You need to combine proteins in the vegan diet the same way you do in the vegetarian diet (see the section "Combining foods for complete proteins"). Also include tofu, textured vegetable protein (TVP), and protein powder in your recipes. Remember that your body stores protein and draws upon those stores when needed, so you don't have to eat complete proteins at every single meal.

Eating a wide variety of clean vegetables, which provide good amounts of protein (albeit not the complete form), is a great way to get protein when you're living a vegan lifestyle. Here are some of the best vegetable protein sources:

- » Avocados contain 3 grams of protein per serving.
- **»** Russet potatoes, eaten with the skin, have 4 grams of protein per serving.
- **»** Broccoli has about 3 grams of protein per serving.
- Spinach has 2 grams of protein per serving.

So enjoy the vegan lifestyle on your clean eating plan. Remember the rule of clean eating: Combine protein with carbohydrates to satisfy your

appetite. Hummus, peanut butter, soy, and vegetable combinations are all delicious when you eat them with whole grains.

Chapter 2

Your Brain on Meditation and How It Impacts Your Life

IN THIS CHAPTER

Exploring meditation research through the decades

Discovering how meditation changes and shapes your brain

People have been meditating for thousands of years, drawn by a desire for spiritual enlightenment, heightened states of mind and mood, the health and longevity that longtime practitioners often enjoy, and, for some intrepid adventurers, a fascination with exploring the unknown just because it's there! As far as we can tell, our ancestors never bothered to measure meditation's effects objectively; they were sufficiently motivated by the subjective reports of their teachers and the meditators who came before them. Besides, the point was never to quantify the practice, but to experience the effects directly from the inside.

As meditation has entered the mainstream in the West, however, it's piqued the interest of researchers eager to prove (or disprove) its numerous purported benefits. Many of these researchers learned to meditate before entering academia and brought with them a personal as well as professional curiosity to discover how meditation holds up under rigorous scientific scrutiny. Their results — cited in prestigious academic and professional journals and written up in magazines, newspapers, and blog sites — have been overwhelmingly positive, providing even more impetus to the growing popularity of meditation.

In this chapter, I take you on a guided tour of meditation research, from early forays in the first half of the 20th century to the ongoing brain studies of the past decade. As the methods have grown more accurate and sophisticated, the research has grown more fascinating and revealing. Did you know that you can reshape your brain through meditation? Read on for details!

Tracing the Origins of Meditation Research

Decades before meditation made significant inroads in the West, a few pioneering academics were seeking out Indian yogis and Zen meditators in their native habitats for impromptu studies of meditation's impact on vital bodily processes. With the advent of Transcendental Meditation (TM) in the 1960s, a new wave of research, prompted by the technique's growing notoriety — and by offshoots like Herbert Benson's relaxation response — led to convincing evidence of meditation's far-reaching health benefits. Before long, the scientific establishment was taking notice, prompting further investigation and ultimately ushering in a new era of government-funded research and groundbreaking studies. But first, those humble beginnings

Wiring up yogis and Zen monks

The first scientific study of meditation occurred in the 1930s, when an Indian graduate student at Yale received a fellowship to study the physiological effects of his own yogic breathing and found that his oxygen consumption decreased by as much as 25 percent. Soon, other researchers followed in his footsteps, traveling to India to study experienced yogic meditators and conducting the first experiments using rudimentary scientific instruments like electrocardiograms (EKGs) and blood pressure gauges. For these Westerners who were schooled in the scientific method, the Eastern adepts they studied — yogis who could stop their hearts and enter deep states of absorption — were like exotic animals: worthy of study, no doubt, but having little relevance to ordinary human beings.

In the 1960s, researchers at the University of Tokyo conducted a pioneering study of Zen teachers and their students, measuring brain waves using electroencephalographs (EEGs) and tracking pulse rates, respiration, galvanic skin response, and responses to sensory stimuli. They found that the meditators underwent an orderly progression in brain wave changes, beginning with a shift to more and larger alpha

rhythms (brainwaves associated with relaxed attention) and culminating, as the meditation deepened, in an increase in theta (associated with deep relaxation, spiritual experience, and enhanced creativity). As it turns out, the predominance of alpha and, in more advanced meditators, theta, has proved in subsequent studies to be a consistent characteristic of meditation involving mindful attention.

Even more interesting, the researchers found that the Zen masters in their study didn't become habituated to a recurring sound the way ordinary controls did. Instead, they exhibited the same EEG patterns each time the sound occurred. In other words, they consistently maintained a calm, alert awareness to both internal and external sensations no matter how often they were stimulated.

CAN MEDITATION BE ACCURATELY MEASURED?

Throughout this chapter I speak in general terms about the benefits of meditation, which, as you may have noticed, are rather impressive. But in the interests of full disclosure, let me qualify these pronouncements with a few caveats:

Meditation techniques differ, sometimes significantly, and these differences
translate into dissimilar research results. For example, early researchers found that
some techniques were excitatory and seemed to increase emotional arousal and, in
some cases, even the symptoms of stress, whereas others were calming and stress
reducing.

Likewise, Transcendental Meditation (TM) researchers claim their technique confers certain special benefits and induces a uniquely coherent brainwave pattern that other methods do not, while proponents of mindfulness insist that present moment awareness has powers to change the brain and heal the body that other approaches lack. For this reason, any attempt to generalize about meditation from studies of one technique alone should be taken with the proverbial grain of salt.

- Even within a particular approach, meditators may have varying levels of expertise and experience and employ subtle differences in technique. For instance, one study of mindfulness may use mindfulness-based stress reduction (MBSR), whereas another may use vipassana or mindfulness-based cognitive therapy (MBCT). Are they similar enough to compare and contrast? And how does a researcher determine who is an advanced meditator and who is an intermediate or a beginner?
- Some experts insist that research on existing meditators fails to take into account the possibility that people who meditate already have certain health characteristics or brainwave patterns that draw them to meditate instead of achieving those characteristics or brainwaves through the practice itself. The only way to get truly accurate and unbiased results, these critics claim, is to select a group of people at random, teach half to meditate, and leave the rest as non-meditating controls.

In the end, though, these caveats are just fine points and don't detract in any way from the basic implications of the extensive research, which are that meditation is good for you at every level — mind, body, and spirit — in a multitude of significant ways.

Studying TM and the relaxation response

By the 1970s, meditation had gained a small but devoted following in the West, and researchers didn't have to travel to India or Japan to study its effects anymore — they could turn their attention to the growing cadre of Western practitioners. In particular, Transcendental Meditation, introduced in the late '60s by Maharishi Mahesh Yogi and championed by the Beatles, funded an extensive study into the method's effectiveness and generated a flood of scientific papers, many of them written under the auspices of the organization's own Maharishi International University (now known as the Maharishi School of Management).

TM researchers claimed that the technique, which involves the repetition of a specially chosen mantra, induces a unique fourth state of consciousness distinct from the three familiar states of waking, dream sleep, and deep sleep. The primary characteristic of this fourth state, according to early TM researcher David Orme-Johnson, is the extraordinary brain coherence it elicits. *Coherence*, which can be measured by EEG, is the degree of correlation or synchrony between different parts of the brain. It's like the harmonious music created under a conductor's direction rather than the cacophonous noise generated when an orchestra tunes up. Orme-Johnson says, "All the benefits of TM can be explained by the increased EEG coherence it produces."

Based on his study of TM practitioners in the early '70s, Herbert Benson, MD, a cardiologist and professor at Harvard Medical School, identified what he called the *relaxation response*, a natural reflex mechanism that he found could be triggered by 20 minutes of daily meditation practice involving a quiet environment, repetition of a sound or phrase, a receptive attitude, and a comfortable sitting position. Essentially, he extracted what he considered the basic elements of TM from their spiritual context and promoted a generic alternative. Once initiated, this reflex apparently induces relaxation, reduces stress, and counteracts the fight-or-flight response. In subsequent studies, Benson found that the relaxation response had a beneficial effect on hypertension, headaches, heart disease, alcohol consumption, anxiety, and premenstrual syndrome. His 1975 bestseller, *The Relaxation Response*, was the first book to promote meditation to the mainstream on scientific grounds.

Measuring the health benefits of meditation

During the '70s and '80s, TM and relaxation-response research dominated the scientific study of meditation, and the results revealed meditation's exceptional benefits on a wide range of health measures, from blood pressure and cholesterol levels to longevity and frequency of doctor's visits. Here's a sampling of some of the research findings regarding meditation's effects on the body:

- **>> Heart rate:** Studies consistently show that the heart rate slows during meditation anywhere from 2 or 3 to 15 beats per minute, with greater declines for advanced meditators. At the same time (and possibly the reason for the decrease), cardiac output increases by as much as 15 percent.
- **» Blood pressure:** One of the most frequently studied parameters, blood pressure consistently decreased in a score of studies by as much as 25 mmHg systolic (among normal and moderately hypertensive subjects).
- **» Brainwaves:** As indicated earlier, meditators experience more alpha rhythms, both during and between practice sessions. Advanced meditators also have brief bouts of theta, during which they report feeling peaceful, spacious, and self-aware.
- **Dehabituation:** Whereas Zen meditators experience sounds freshly no matter how often they occur, yogic meditators (who are taught to withdraw their senses rather than heighten their awareness) habituate to sounds and gradually become less responsive.
- **» Stress chemicals:** As one might expect from a practice renowned for reducing stress, meditation brings down the levels of *cortisol* (the primary stress hormone produced by the adrenals) by as much as 25 percent in advanced practitioners and *lactate* (a chemical released into the bloodstream during stress) by as much as 33 percent.
- **» Cholesterol:** Regular practice of meditation reduces serum cholesterol levels as much as 30 mg/dL.

- **Metabolism:** Dozens of studies have found that meditation reduces oxygen consumption by as much as 55 percent, CO₂ elimination by up to 50 percent, and breathing rate from a norm of 14 to 16 breaths per minute to as few as 1 or 2.
- **Description Description D**
- **» Medical-care utilization:** An 11-year study of TM practitioners found they logged 74 percent fewer hospital days, 55 percent fewer outpatient visits, and 63 percent fewer total medical expenses than subjects in a nonmeditating control group.

Assessing the limitations of the early research

As promising as early meditation research may have been, it did have some significant limitations. Consider the following:

- » Many of the early studies failed to use the randomly chosen, control-group methodology that's generally considered the gold standard by the scientific establishment. Instead, some studies focused on only a handful of select subjects, and others didn't adequately compare meditating subjects to nonmeditating controls.
- Some of the research doesn't account for bias. Just as many studies of new medications are contaminated by the fact that they're funded by big pharmaceutical companies, some of the early TM studies were called into question because they were funded and even conducted by the TM organization itself. This critique was compounded by the fact that TM charges a considerable fee to teach its technique rather than offering it for no or minimal charge, as most other meditative traditions do. Of course, similar bias may creep in when longtime mindfulness practitioners study the benefits of

- mindfulness. (Many, though by no means all, of the TM research results have been replicated in subsequent studies.)
- >> The early researchers, through no fault of their own, had no access to the more sophisticated technology that's emerged and evolved in recent decades. As a consequence, most early meditation research focused on measurable behavioral, health, and lifestyle benefits rather than on more long-term neurological changes. Only in recent years have scientists been able to determine how profoundly and permanently meditation actually shapes the brain.

Mapping the Meditative Brain

Not long ago, scientists could get only a limited picture of brain functioning through EEG measures of the frequency and amplitude of the electromagnetic wave patterns generated by the brain. Now they have a growing understanding of which regions of the brain correspond to which neuropsychological functions and an increasingly refined ability to measure activation and even growth in particular areas. Hence, more and more research shows that meditation affects more than just outcomes. It shapes consciousness itself and influences how we experience life in a deep and lasting way.

As so often happens in science, many of these advances occurred as a result of growing technological sophistication. Rather than merely sticking electrodes on meditators' skulls and wiring them to basic EEG machines, scientists can now slide meditators into a functional MRI (fMRI) or a SPECT scanner and receive clear images of where and how the brain is being activated based on oxygen consumption (fMRI) or photon emission (SPECT). I wouldn't want to submit my brain to such intense scrutiny (or my body to one of those draconian devices), but hey, that's what volunteer test subjects are for, right? As a result of these technological advances, researchers can now pinpoint which areas of the brain a particular meditation practice activates. Then they can translate these findings into likely changes in behavior and mood.



REMEMBER The researchers' observations have significance not only for meditators and those who may like to use meditation to help reduce stress or alleviate illness, but they also reveal that the brain is far more malleable than scientists once thought. Indeed, this newly revealed *neuroplasticity* is inspiring efforts to use meditation and other techniques to keep the brain active and growing well into old age.

As the technology continues to evolve, the research will no doubt follow. And maybe one day in the not-too-distant future you will consult your doctor for depression or pain or cognitive decline and receive a prescription for meditation rather than painkillers, antidepressants, or Alzheimer's drugs.

In this section, I take you on a guided tour of the meditative brain, pointing out the regions that are most notably affected by regular meditation practice and explaining some of the changes that occur and how they can impact your life. I start off by looking at the growing importance of mindfulness in the field of meditation research.

Shifting mindfulness to center stage: Jon Kabat-Zinn and MBSR

In the 1980s and 1990s, the focus of meditation research began shifting from TM to mindfulness meditation, due largely to the groundbreaking work of Jon Kabat-Zinn. A longtime Zen meditator as well as a molecular biologist and professor of medicine, Kabat-Zinn founded the pioneering Stress Reduction Clinic at the University of Massachusetts Medical School in 1979 and began teaching a particular blend of present moment awareness and mindful hatha yoga he called mindfulness-based stress reduction, or MBSR.

Over the years, Kabat-Zinn and his colleagues at the clinic have taught people with a variety of health and stress-related problems. Subsequent studies have found that those who complete the eight-week MBSR program experience a significant reduction in stress, pain, and other symptoms and gain a boost in their immune system function. The clinic and other MBSR training programs have trained thousands of facilitators worldwide.



it quantifies and standardizes the teaching of mindfulness and strips it of its overtly spiritual components. As a result, scientists have a reliable reference point that allows them to compare and contrast their results. Mindfulness — which is freely available and commonly taught in a number of the world's spiritual traditions — gained additional recognition during this period through the study of the extraordinary meditative abilities of Tibetan monks and a series of dialogues between neuroscientists and the Dalai Lama.

Since the early 2000s, mindfulness research has grown exponentially, and today more studies of mindfulness are published each year than of every other method combined. There's even an online bulletin called *Mindfulness Research Monthly* that chronicles the latest developments.

PASSING STATES OR LASTING TRAITS?

When subjects are hooked up to devices like electroencephalographs (EEGs), electrocardiograms (EKGs), and blood pressure monitors while they're meditating, the results indicate only what happens to the body during the meditation process itself. In other words, the outcomes measure only states of mind or body that pass after the session has ended. But when subjects are studied over the course of time to determine whether, for example, their blood pressure remains lower between meditation sessions or they report being happier even after they give up meditation entirely, the results indicate the acquisition of traits that remain more or less constant throughout the meditator's life.

Early research focused primarily on states, but subsequent studies of the enduring health benefits of meditation emphasized the development of traits. For example, Transcendental Meditation (TM) studies showing that meditators have lower cortisol and cholesterol levels and generally live longer and use healthcare services less frequently suggest that meditation confers traits that persist between meditation sessions. Likewise, studies that show actual structural changes in the brain, like the growth of gray matter or increased inter-region connectivity, imply that the corresponding changes in cognition, emotion, and behavior last and become traits. Of course, given the extraordinary brain plasticity that researchers have documented, if you stop meditating for an extended period of time and focus your attention in significantly different ways, your brain could change back, and those hard-won traits could disappear!

Creating a working map of the brain

None of the advanced research into the impact of meditation on the brain would have been possible without sophisticated brain mapping and the growing appreciation of how different regions of the brain influence mind, mood, and behavior. Though multiple areas of the brain are generally involved, here are the main regions that seem to be activated by meditation (don't let the anatomical jargon throw you; I keep it simple):

- **» Prefrontal cortex:** This is the area of the brain responsible for complex planning, personality expression, decision making, delayed gratification, the moderation of social behavior, and the regulation and inhibition of emotions. As its name implies, the prefrontal cortex lies at the front of the cortex.
- **» Anterior cingulate cortex:** Situated around the corpus callosum (the structure that joins the left and right hemispheres of the brain), the

anterior cingulate cortex enables you to pay attention — including attention to attention itself — and acts as a bridge or mediator between thoughts and emotions. As a result, it performs a significant function in regulating emotion and the empathic "social brain."

- **>> Amygdala:** A primary component of the limbic system, or emotional brain, this almond-shaped structure plays a major part in the processing and remembering of emotional reactions, particularly fear, and the learning of emotionally based behaviors. The amygdala is largely responsible for the fight-flight-or-freeze response, which meditation helps regulate.
- **» Hippocampus:** This region plays an important role in the formation of new memories based on experienced events, in the consolidation of short-term memory into long-term memory, and in spatial navigation. Damage to the hippocampus is one of the early causes of Alzheimer's disease.

Pinpointing the location of positive emotions

One of the meditating academics I allude to earlier in this chapter, Richard Davidson, a distinguished professor of psychology and psychiatry at the University of Wisconsin, director of the Waisman Laboratory for Brain Imaging and Behavior, and director of the Laboratory for Affective Neuroscience and the Center for Investigating Healthy Minds, has focused his efforts on tracking positive emotion in the brain and on the ways in which meditation evokes it. In his early research, he discovered that the activation of the left prefrontal cortex (LPFC) closely correlates with the experience of positive emotion — the happier you are, the more your LPFC lights up — apparently because it helps dampen the negative emotions generated by the amygdala. By contrast, right prefrontal cortex (RPFC) activation correlates with negative emotions.

When he studied Tibetan Buddhist monks in the early 2000s, Davidson was amazed at how activated their LPFCs became, and he decided to

extend his studies to see whether ordinary people could achieve similar results. His seminal research revealed that subjects who completed an eight-week MBSR program increased their left-sided activation both at rest and in response to emotional stimuli. At the same time, they reported significant reductions in anxiety and other negative emotions, and these reductions continued long after the program ended. The implications? If you want to be happier ... learn to meditate!

Seeing how meditation changes the brain

Armed with the latest information on how the brain works, researchers have been studying the correlations between meditation, the activation of different parts of the brain, and changes in behavior, cognition, and emotion. The results are far from conclusive — they're more like tantalizing glimpses of a vast new terrain of exploration — but they do point to meditation's enormous potential for furthering human psychological and neurological development by activating, integrating, and coordinating various brain regions. Important new studies appear every year, investigating meditation's impact on the brain. The following sections show just a few of the more fascinating recent developments.

No doubt this field of investigation will continue to grow in the next few decades as devices for measuring the brain become more sophisticated, and the correlation between brain regions and cognitive and behavioral functions grows more precise. If you're curious about the latest discoveries, do an online search for "brain meditation research."

Growing more gray matter and shrinking the amygdala

One of the most exciting things about fMRIs is that they enable scientists to watch the brain change and grow — and grow it does under the influence of meditation! Researchers at Massachusetts General Hospital found that study participants who took the MBSR course and practiced mindfulness meditation for about a half hour a day for only eight weeks actually grew more *gray matter* (the neurological material of the neocortex, or higher brain) in regions associated with attention and memory, stress management, empathy, and emotional integration.

By contrast, the amygdala, the seat of stress and anxiety in the brain, shrank in size.



REMEMBER Now, rather than merely having the testimony of meditators who say they feel more loving, more focused, and less stressed out, scientists have measurable proof that the brain grows and changes in ways that correspond with meditators' subjective reports.

Reducing pain activation

Numerous studies have reported that meditators experience less pain than non-meditating controls. Recent fMRI research helps explain why. After just four days of mindfulness meditation training, participants in one study meditating in the presence of noxious stimulation reduced their pain unpleasantness by 57 percent and their pain intensity ratings by 40 percent. When researchers measured their brains, they found reduced activation in regions associated with pain as well as increased activation in the anterior cingulate cortex and other areas involved in regulating and reframing emotional intensity. Not only were the meditators' brains registering less pain, but they were also processing the sensory experience in ways that made it more bearable.

Enhancing brain connectivity and slowing age-related decline

Not only does meditation grow the gray matter in the brain, it strengthens and accelerates the connections between different regions throughout the brain and slows age-related brain atrophy. Using the latest brain-imaging technology, researchers at UCLA found that subjects who meditated had *white matter fibers* (those involved in brain connectivity) that were more numerous, more dense, and more insulated than those who didn't meditate. Researchers also found that these fibers declined far less as the meditating subjects aged. The differences were particularly pronounced in white matter connecting the front and back of the cerebrum as well as the frontal cortex (the area associated with decision making, delayed gratification, and emotional regulation) and the limbic system (the locus of emotion).



REMEMBER These findings provide further evidence that meditation assists in regulating and modulating emotion by helping to integrate the more self-reflective and emotional areas of the brain.

Minimizing the wandering, daydreaming mind

Although daydreaming is sometimes associated with increased creativity, recent studies show that people are significantly less happy when their minds wander than when they're engaged with the task at hand. Not surprisingly, brain research indicates that experienced meditators have decreased activation in an area of the brain called the *default mode network*, which is closely associated with the wandering mind. This decrease continues even when they're not meditating. Even more fascinating is the research finding that when the meditators' default mode is active, the brain regions that govern self-monitoring and cognitive control are active, too. In other words, meditators daydream less, but when they do, they're much more aware of it and come back more readily to present-moment awareness and the relative happiness it provides.

Rewiring the brain for success

One of the most accurate ways to focus and clarify scientific evidence is to conduct a meta-analysis of diverse studies on a particular question to determine whether and how much they agree. A recent meta-analysis of the research into how meditation shapes the brain came up with eight regions of the brain that are significantly altered in positive ways. Two regions in particular received special attention because of their impact on qualities that lead to success in business and other endeavors: the anterior cingulate cortex and the hippocampus.

Activation of the ACC improves *self-regulation* — the ability to purposefully direct attention and behavior, suppress impulsivity, and switch strategies flexibly and appropriately — which is crucial to effective decision making and problem solving. And growth in the hippocampus correlates with greater *resilience*, the ability, highly prized

in the business world, to bounce back and persevere in the midst of stressful situations. Other areas that showed positive change as the result of mindfulness practice were associated with perception, body awareness, emotion regulation, introspection, complex thinking, and sense of self.

Chapter 3

Building Your Healthful Diet

IN THIS CHAPTER

Introducing the 2015–2020 *Dietary Guidelines for Americans*Extracting advice on smart food choices
Adapting the *Guidelines* to your real life

There is no end to the list of really good people who want to help you find a diet that will make it possible for you to live healthy and practically forever. The American Heart Association says to edit your consumption of fats. The American Cancer Society says to eat more fruits and veggies. The American Diabetes Association says to eat regular meals so your blood sugar stays even. The Food Police pretty much say if it tastes good, forget it!

Happily, one group puts it all together: The U.S. Departments of Agriculture and Health and Human Services' *2015–2020 Dietary Guidelines for Americans* makes it possible to make and enjoy food choices that both taste good and benefit your body.

Discovering the Dietary Guidelines for Americans

The *Dietary Guidelines for Americans* is a collection of sensible nutrition suggestions first published by the U.S. Departments of Agriculture and Health and Human Services (USDA/HHS) as a skinny, 20-page booklet in 1980.

Since then, USD and HHS have published seven revised editions (1985, 1990, 1995, 2000, 2005, 2010, 2015). The one in 2010 weighed in at a hefty 110 pages, with so many words, sentences, and paragraphs — some repeated several times — that it was not released until January 31, 2011, one month into the timetable for the next edition.

The 2015–2020 edition of the *Guidelines* also took a while to arrive but made it onto the Internet by January 7, 2016, three weeks and three days faster than the previous one.

Surprisingly, the most user-friendly of the *Guidelines* remains the 2000 version, which seemed to have been written by real people who actually like real food. You could see this philosophy right upfront in the first sentence in the first paragraph: "Eating is one of life's greatest pleasures."

Contrast that with the first sentence of the *Dietary Guidelines for Americans 2005*: "The *Dietary Guidelines for Americans*, first published in 1980, provides science-based advice to promote health and reduce risk for chronic disease through diet and physical activity." Alas, what you saw was what you got: a frankly cranky, bare-bones, chilly presentation of the facts.

The 2010 edition was a verbose but directed pull-up-your-bootstrapsand-get-with-the-program document with a single-minded focus on the fact that too many Americans weigh too much. The take-away message could not be more clear: *Control what you eat to control your weight to control your health.* The 2015–2020 edition with three multi-section chapters, 14 appendices, and 19 tables and 24 figures, some of which compare Americans' performance to the recommendations to show exactly how bad people are at following dietary directions, delivers pretty much a similar common-sense dietary message but with a few important changes tossed in for flavor.

Finding What's New in the 2015–2020 Edition

In general, the changes in the *Guidelines* over the years can be tracked in subtle shifts in emphasis. For example, from 1980 to 1995, the *Guidelines* offered the simple admonition to "Eat a variety of foods." Then in 2000, that was expanded to suggest using the Food Guide Pyramid to make nutritious choices including a variety of grains, fruits, and vegetables. In 2010, the My Plate diagram arrived to push the Pyramid off the table, a move some consumers still regret.

The 2015–2020 edition continues this tradition with its rather plain vanilla recommendations:

- **»** Follow a healthy eating pattern across the lifespan. Eating patterns are the overall combination of foods and drinks that a person eats over time.
- >>> Focus on variety, nutrient-dense foods, and amount.
- >> Limit calories from added sugars and saturated fats, and reduce sodium intake.
- **»** Shift to healthier food and beverage choices.
- » Support healthy eating patterns for all.

Approaching the specifics, the *Guidelines* say that: "Healthy eating patterns include a variety of nutritious foods like vegetables, fruits, grains, low-fat and fat-free dairy, lean meats and other protein foods and oils, while limiting saturated fats, trans fats, added sugars, and sodium. A healthy eating pattern is adaptable to a person's taste preferences, traditions, culture, and budget."

Well, you bet "nutritious foods" are a good bet. But not just any old nutritious foods. The authors of the *Guidelines* have some specifics firmly in mind:

- **»** Dark green, red, and orange legumes (beans and peas), starchy, and other vegetables
- >> Whole fruits
- » Grains, at least half of which are whole grains
- Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages

After that, the 2015–2020 *Guidelines* take a short running jump into new territory. This edition

- Is the first edition to recommend a limit on how much added sugar you should consume each day
- » Eliminates a specific daily limit on fat and cholesterol consumption
- » Adds whole eggs to the list of high-quality protein foods (but recommends less protein each day for boys and adult men)
- » Says coffee, yes, regular caffeinated coffee, is a permissible pleasure

For more specific info on these new recommendations, read on through the following sections.

Take this with fewer grains of salt

In 1980, the *Guidelines* advised consumers to "Avoid too much sodium." By 2000, that had become "Choose and prepare foods with less salt." The 2015–2020 recommendations are the same as those from 2010.

Most Americans consume about 3,400 milligrams (1.5 teaspoons) of sodium a day. The *Guidelines* say, "Enough already," and advise everyone to cut that to 2,300 milligrams a day, or about 1 teaspoon of table salt. If you're older than 51 or are African American or have hypertension (high blood pressure), diabetes, or chronic kidney disease, the recommendation is even more stringent. People in this group, which includes about half of all Americans, should take in no more than 1,500 milligrams of sodium per day, or about ²/₃ teaspoon of table salt.

These recommendations have stirred some serious discussion because most people have no problems with sodium. They eat a lot one day, a little less the next, and their bodies adjust.

Others, however, don't react so evenly. For them, a high-sodium diet appears to increase the risk of high blood pressure. When you already have high blood pressure, you can tell fairly quickly whether lowering the amount of salt in your diet lowers your blood pressure. But no test is available to predict whether someone who doesn't have high blood pressure will develop it by consuming a diet that's high in sodium. That begs the question: Should medical advice that works for some people be applied to *all* people?



warning Don't reduce salt intake drastically without first checking with your doctor. Remember, sodium is an essential nutrient. That's why the *Guidelines* advocate moderate use, not *no* use at all.

IS IT FAT OR IS IT WATER WEIGHT?

Got a bathroom scale at home? Here's an interesting three-day experiment that shows how a high salt/sodium diet may affect your weight.

On Day One, weigh yourself as soon as you awake. For the rest of the day, go ahead, eat your little heart out — sorry, American Heart Association — binge away on high-salt/sodium potato chips and sausages.

On Day Two, you Surprise! probably weigh one, two, or even three pounds more than you did on Day One. Why? Sodium is *hydrophilic* (*hydro* = water; *philic* = loving). It doesn't increase the amount of fat in your body, but it does hold water in your tissues, which increases your weight.

Happily, the gain is temporary. Go back to your normal diet, cut out the extra salt/sodium, and on Day Three, your weight should be back to what it was on Day One.

Factor in the fats

The new rule on dietary fat and cholesterol — no rules — is a truly revolutionary dietary revelation.

As all good foodies know, until now, the *Guidelines* have laid out precise numbers on how much fat and cholesterol a healthy diet would allow, such as "no more than 10 percent of a day's calories from saturated fats" and "less than 300 milligrams cholesterol a day."

No more. The 2015–2020 *Guidelines* simply say to be smart but not obsessive: Just avoid the saturated fats and keep cholesterol consumption low.

This change in factoring fats was driven by the fact that when told to cut back on fats, most people just cut back on fats — good, bad and inbetween. But some fats, such as those found in certain plant foods like avocados and nuts, are good for you.

Word to the fat-wise #1: You can reduce your intake of solid fats in food, and thus your intake of saturated fats, simply by wielding a sharp knife to cut away as much visible fat as possible from meat and poultry as well as stripping off the fat-laden poultry skin.

Word to the fat-wise #2: Liquid fats, otherwise known as oils, are mixtures of saturated fats and unsaturated fats.

Subtract the added sugar

Another first for the new *Guidelines* is the recommendation to hold your consumption of added sugars to less than 10 percent of your daily calories. Notice the word *added* because this means editing your diet to reduce foods to which sugar is added, such as cakes and cookies — or coffee with three spoons of sugar — *not* to avoid foods with naturally occurring sugars such as fruits. The new *Guidelines* bless moderate coffee consumption because coffee is sugar-free, so don't mess with a good thing.

"NO CALORIES" MAY NOT MEAN "DIET-SAFE"

Diet sodas don't make the *Guidelines*' list of recommended sugar-free beverages. Why? Because some studies suggest that rather than helping you lose weight, these drinks actually lead to weight gain, perhaps by leading you to eat things you wouldn't otherwise have chosen ("I had a diet soda, so I can have a brownie").

In 2005, a team of researchers at the University of Texas Health Science Center, San Antonio, released data from an 8-year, 1,550-person study showing that among people drinking sodas sweetened with sugar, the risk of becoming overweight or even obese was

- 26 percent for those drinking up to ½ can daily
- 30.4 percent at ½ to 1 can daily
- 32.8 percent at 1 to 2 cans daily
- 47.2 percent at more than 2 cans daily

No surprise there. But look at the risk for people drinking diet soft drinks:

36.5 percent for those drinking up to ½ can daily

37.5 percent at $\frac{1}{2}$ to 1 can daily

54.5 percent at 1 to 2 cans daily

57.1 percent at more than 2 cans daily

In others words — unpleasant ones — statistically speaking, your risk of packing on the pounds rises with each can of diet soda you drink each day. Makes water look better and better, doesn't it?

Get adequate essential nutrients

For various reasons, even an adequate diet may be deficient in specific nutrients. One example is the fact that as we age, our bodies may be less able to absorb vitamin B12 from food, meaning that supplements are sensible.

As always, this edition of the *Guidelines* stresses the need to obtain adequate amounts of important nutrients.

Go fish for good food

Finding a balance in what fish to eat and how much can be challenging. On the one hand, fish provides undeniably beneficial omega-3 fatty acids EPA and DHA. On the other hand, some fish is contaminated with methylmercury, a toxic metal that can wreak neurological and cardiovascular havoc, particularly in the fetus and in children.

Taking this into account, the *Guidelines* recommend that most healthy people consume about 8 ounces of fish and seafood a week to get the 250 milligrams per day of EPA and DHA associated with a lower risk of death from heart disease among otherwise healthy people and an improved outcome for newborns.

The fish of choice include salmon, anchovies, herring, shad, sardines, Pacific oysters, trout, and Atlantic and Pacific mackerel. Children and women who are of child-bearing age, pregnant, or nursing should avoid *all* King mackerel, shark, swordfish, and tile fish, species widely acknowledged to be highly contaminated. And these two groups should eat no more than 12 ounces of fish a week, including no more than 6 ounces of canned albacore tuna.

Bring on the veggies

In 1980, the first *Guidelines* directed consumers to "Eat foods with adequate starch and fiber." By 1990, that had become, "Choose a diet with plenty of vegetables, fruits, and grain products." Today, the new, direct directive is to make half of your plate vegetables and fruits. Maybe the whole plate: The *Guidelines* say right out, no mincing words here, that vegetable-rich diets promise a variety of health benefits, including lower weight, a lower risk of heart disease, and — best of all — a longer life.

The *Guidelines*' Appendix 5, "Healthy Vegetarian Eating Pattern," and Table A5-1, "Healthy Vegetarian Eating Pattern: Recommended Amounts of Food from Each Food Group at 12 Calorie Levels," make the choices easy to follow. You can find even more reader-friendly Dummies-style info on this subject in *Plant-Based Diet For Dummies*, by Marni Wasserman (Wiley).

Get up and go

Regular physical activity is one of the simplest — and most important — things you can do on your own to improve your health.

According to the Department of Health and Human Services' 2008 Physical Activity Guidelines for Americans (online at www.health.gov/paguidelines/guidelines/), healthy adults need at least 2.5 hours of moderately intense physical activity each week, including muscle-strengthening exercises on two or more days each week. You won't be surprised to read that one chart in the new Guidelines, Figure I-2 to be exact ("Percentage of Adults Meeting the Physical Activity Guidelines"), shows that American adults aren't up to snuff. So get moving.

Exercise and weight

When you take in more calories from food than you use up running your body systems (heart, lungs, brain, and so on) and doing a day's physical work, you end up storing the extra calories as body fat. In other words, you gain weight. The reverse also is true. When you spend more energy in a day than you take in as food, you pull the extra energy you need out of stored body fat, and you lose weight.

You don't have to be a mathematician to reduce this principle to two simple equations in which E stands for energy (in calories), > stands for greater than, < stands for less than, and W stands for the change in weight:

If E in > E out: E total = +W If E in < E out: E total = -W

It's not Einstein's theory of relativity, but you get the picture.

Even being mildly active increases the number of calories you can wolf down without gaining weight. The more strenuous the activity, the more plentiful the calorie allowance. Suppose that you're a 25-year-old man who weighs 140 pounds. In that case, you require 1,652 calories a day to

run your body systems. Clearly, you need more calories for doing your daily physical work, simply moving around, or exercising.

Other reasons to exercise

Weight control is a good reason to step up your exercise level. But it isn't the only one. Here are four more:

- with more muscle tissue than the average bear. Because muscle tissue weighs more than fat tissue, athletes (even weekend-warrior types) may end up weighing more than they did before they started exercising to lose weight. But a higher muscle-to-fat ratio is healthier and more important in the long run than actual weight in pounds. Exercise that changes your body's ratio of muscle to fat gives you a leg up in the longevity race.
- who are fat around the middle as opposed to the hips (in other words an apple shape versus a pear shape) are at higher risk of weight-related illness. Exercise helps reduce abdominal fat and thus lowers your risk of weight-related diseases. Use a tape measure to identify your own body type by comparing your waistline to your hips (around the buttocks). If your waist (abdomen) is bigger, you're an apple. If your hips are bigger, you're a pear.
- **»** Exercise strengthens your bones. Osteoporosis (thinning of the bones that leads to repeated fractures) doesn't happen only to little old ladies. True, on average, a woman's bones thin faster and more dramatically than a man's, but after the mid-30s, everybody male and female begins losing bone density. Exercise can slow, halt, or in some cases even reverse the process. In addition, being physically active develops muscles that help support bones. Stronger bones equal less risk of fracture, which, in turn, equals less risk of potentially fatal complications.
- **Exercise increases brainpower.** You know that aerobic exercise increases the flow of oxygen to the heart, but did you also know that it increases the flow of oxygen to the brain? When a rush job (or a

rush of anxiety) keeps you up all night, a judicious exercise break can keep you bright until dawn. According to nutrition research scientist Judith J. Wurtman, PhD, when you're awake and working during hours that you'd normally be asleep, your internal body rhythms tell your body to cool down, even though your brain is racing along. Simply standing up and stretching, walking around the room, or doing a couple of sit-ups every hour or so speeds up your metabolism, warms up your muscles, increases your ability to stay awake, and, in Dr. Wurtman's words, "prolongs your ability to work smart into the night." Eureka!

How to exercise

There are three basic types of activity to strengthen heart and lungs, muscles, and bones.

- **» Aerobic activity** increases heart rate and breathing. Moderate aerobic activity includes walking briskly, bicycling on a level path, and dancing. Intense aerobic activity includes jogging, playing tennis, or bicycling uphill.
- **» Muscle-strengthening activity,** such as resistance training, increases the mass and strength of skeletal muscles that is, your arms, legs, back, and so on.
- **» Bone-building activity** is any exercise, such as running or lifting weights, that makes an impact on your bones.



warning Not everybody can — or should — run right out and start chopping down trees or throwing touchdown passes to control his or her weight. In fact, if you've gained a lot of weight recently, have been overweight for a long time, haven't exercised in a while, or have a chronic medical condition, you need to check with your doctor before starting any new regimen. (*Caution:* Check out of any health club that puts you right on the floor without first checking your vital signs — heartbeat, respiration, and so on.)

Do the Guidelines Work?

Yes. No. Maybe. And who knows?

On the plus side, the *Guidelines* offer a template for building a healthful diet.

On the down side, not many people take the time to do the building. It is impossible to prove a negative, so there is no way to say whether there would be even more overweight Americans without the *Guidelines*. What we know for sure is that obesity exploded in America while the *Guidelines* were available.

As a result, the release of the 2015–2020 *Guidelines*, like the publication of the previous seven editions, is likely to trigger specific criticisms from various corners of the food and nutrition world. In general, the critiques may echo broad complaints such as the following:

- **»** These are nice rules, but nobody follows them. After all, since 2005, the *Guidelines* have said to eat at least 2.5 cups of fruits and veggies a day, but studies show that only an infinitesimal 4 percent 4 out of every 100 Americans do that.
- >>> The continuing emphasis on food components, such as fats, carbs, vitamins, and minerals, contradicts the fact that real people eat food, not nutrients. People who espouse this point of view want the guidelines to recommend specific foods maybe even specific menus not theoretical nutrition concepts.
- where The Guidelines ignore the question of sustainability. Producing some foods, such as meat, requires more energy and more natural resources than do others, such as fruits and vegetables. In the years leading up to the release of the new Guidelines, there was much discussion about including a section on protecting the planet as well as the humans on it by promoting the consumption of foods that further the sustainability goal. But in December 2015, the U.S. Congress passed a spending bill containing a provision restricting the scope of the Guidelines to nutrition. When the Guidelines were

released minus any discussion of diet and the environment, the Physicians Committee for Responsible Medicine quickly filed a lawsuit against the USDA and HHS, charging that the agencies had bowed to the food industry, notably meat producers, in writing the new rules on cholesterol. In other words, a discussion to be continued.

Nonetheless, the *Guidelines*, imperfect though they may be, do offer *guidelines* on how to eat smart.

To encourage that, the authors want people to work together toward a common goal: to create partnerships with food producers, suppliers, and retailers to convince them to increase access to foods that align with the *Dietary Guidelines*, and to continue to promote the availability of healthful food and food products in restaurants, as well as promote participation in physical activity programs offered in various settings.

The more or less final word

Life is not a test. No one loses points for failing to follow the USDA/HHS advice every single day of the year.

So this may be the real rule: Let the good times roll every once in a while. Then, after the party's over, compensate. For the rest of the week, go back to your exercise regimen and back to your healthful menu emphasizing lots of the nutritious, delicious foods that should make up most of your regular diet.

In the end, you're likely to have averaged out to a desirable amount with no fuss and no muss and be right in line with that headline from the first page of the 2000 *Guidelines* that I mention at the beginning of this chapter: "Eating is one of life's greatest pleasures."

WHERE TO FIND THE GUIDELINES

To read and/or download the *2015–2020 Dietary Guidelines for Americans* or the Executive Summary, go to www.health.gov/dietaryguidelines/2015.

Prefer print? Hard copies of the 2015–2020 *Dietary Guidelines for Americans* are available from the U.S. Government Printing Office either by phone at (866) 512-1800 or from http://bookstore.gpo.gov.

Chapter 4

Making Sense of Life's Challenges

IN THIS CHAPTER

Realising the trickiness of your brain

Appreciating the difficulties you face

Recognising the challenges in your environment

Our experiences, influences, and biology can mean our *lives can live us* rather than *us living our lives*. We're prone to shame, self-criticism, acting on impulses, negative judgements of others, and an array of psychological difficulties. Sometimes we embark on destructive and addictive behaviours in an attempt to adapt and cope with the challenges around us.

Compassion Focused Therapy reminds us that we're the product of evolution, of repeated patterns that have been created and developed in our brains over millions of years. The functions and capacities of our evolved brain have been hugely important for the creation and survival of our species — but they come with drawbacks.

Each one of us is not the first and we won't be the last to have certain experiences, feel particular emotions, have certain thoughts, or behave in particular ways. Waking up to this, we begin to feel connected to others rather than different.

Understanding the influences of our environment, experiences, and biology allows us to press the pause button on our hectic lives and make choices. Do we want to live on automatic pilot, or instead put our efforts into cultivating our compassionate mind and compassionate self?

By looking to your compassionate mind for guidance, you can begin to consciously *grow through your life* in a way that's helpful to you, choosing the version of yourself that you want to be.

In this chapter, we consider how and why our brains have evolved such complicated and tricky response mechanisms, and what the implications are for our lives. We also reflect on our individual nature, and consider the impact that our close environment and the wider world around us has on our state of mind.



REMEMBER With this understanding of how our brains work and why we deal with life's challenges in the way that we do, we can more effectively open ourselves to compassion. Without this understanding we can too easily fall into the trap of negative judgements, self-criticism, and shame.

Recognizing That You Have a Tricky Brain

In this section, I look at some of the problems that we encounter due to the design and functioning of our brains. We use the term *tricky* to reflect our brains' complexity but also the problems our brains can cause us. We also consider how you can have mixed emotions, fall into specific roles, and relate to yourself in unhelpful ways. I provide lots of exercises and examples to help you appreciate just how complicated we are and how many challenges we face. Some of them may bring a knowing smile to your face as you see the common traps that you yourself may fall into.

Considering evolution, from reptile, to human

Evolution builds on previous designs and doesn't allow a return to the drawing board. As such, the human brain is built upon the mammalian brain, which, in turn, is built on the reptilian brain.

To help you visualise this development process, check out this exercise. It's based on a simplified evolutionary understanding and helps to illustrate the complex biological basis for our more instinctive behaviours, thoughts, and emotions.

Draw an oval in the centre of a piece of paper. This oval represents the brain of a reptile (it may help to bring to mind a lizard or turtle). Making sure that your oval is big enough, make a note within it of all the things that reptiles are interested in and the skills they have. The following list gives you some ideas to choose from. (*Note:* You will return to this list throughout this exercise!)

Possible skills and interests for reptiles, mammals, and humans

Displays of aggression	Forming hierarchies
Forward planning	Gaining and defending territory
Impulsiveness	Keeping away from others
Living in groups	Mating
Nurturing young	Play
Rapidly detecting threats	Reasoning and reflection
Self-awareness	Symbolism and creativity
Thinking about the past and future	Thinking about thoughts
Thinking about what others are thinking	Water and shelter

Now draw a larger oval around the first oval. This larger oval represents the mammalian brain (it may help to bring to mind a monkey). Using the preceding list of possibilities, make a note of what you think a mammal's skills and interests may be in the doughnut-shaped space around the reptilian brain (no need to include the things that you've already noted in the inner reptilian brain oval).



It may help to put a line through each of the skills and interests from the earlier list as you use them.

Finally, draw a third, larger oval around the first two ovals. This final encompassing oval represents the human brain. Use the preceding list to fill the newly created doughnut-shaped space around the mammalian brain with all the additional things that humans are interested in and the unique skills that we have (once again, there is no need to include the things that you've already noted for reptiles and mammals and that humans also share).

Stand back from the image that you've drawn and the accompanying words within it. Consider what you and every other person is up against. In one form or another *all* these skills and interests are part of us: We can be territorial and detect threats very rapidly; we spend time working out our place in the pecking order; we require the nurturing of others; we

think about the past and future; we think about thought itself; and we even worry about what everyone else is thinking!

EVOLUTION: FACT OR THEORY?

Compassion Focused Therapy (CFT) draws heavily on the concept of evolution and the impact it's had on our bodies — especially our brains. Central to evolution is the belief that humans evolved from single-celled organisms, and from reptiles and apes. The process of natural selection makes certain traits, characteristics, physical attributes, and skills more common and others less so.

However, you can find other theories on how we came to be. For example, many people believe in the idea of 'intelligent design' (that is, the belief that there's an intelligent cause or force behind the features of the universe and living things, rather than natural selection). Others believe that human beings were created and that we didn't descend from any other animal life.

Instead of seeing the differences between each theory and discarding any idea that doesn't seem possible, it's helpful to look toward the similarities between theories and to respect differing views. Hopefully, we can all agree that we have a very tricky brain that has evolved at least since human beings existed (and that in itself is a very long time). In addition, perhaps we can also agree that our brain development is influenced by our experiences, and in this chapter we look at this aspect in a lot more detail.

Looking at old motives and new capacities

Our evolved brain creates a tendency for mental loops and conflicts (as one reaction leads to another, much like a pinball). Here are a number of scenarios that demonstrate the challenges that your evolved brain can present you with — see if any of them are familiar to you!



It may help you to recall the oval diagram that you drew in the exercise in the preceding section as you work your way through each of the following scenarios.

Consider the following:

>> Imagine that you're the first to board a train. The second passenger sits directly in front, behind or next to you. What happens then? It's likely that your territorial brain has a lot to say about it. You may feel anxious or angry and have related thoughts about that person and yourself.

Intellectually, you know that there's nothing wrong with someone sitting so close to you. That person may be trying to be more sociable because he's lonely or may always sit there as a matter of routine. However, your territorial brain generally gets the better of you and, until getting off, you're likely to continue to feel wound up in one form or other.



REMEMBER When a lizard's territory is breached, it takes a defensive stance and may become aggressive. In the same way, the reptilian aspect of our brain reacts to a range of situations, including the one in the preceding example — but then it triggers our amazing human brain's capacities, such as imagining what may happen next, predicting what someone else is thinking, and maybe also judging ourselves.

This toxic mix of reptilian territorialism and our human capacities can result in arguments, road rage, boundary disagreements, and acts of revenge — even wars. We may then employ lethal weaponry that we've spent money and time developing. Meanwhile, the lizard doesn't have such capacities at its claw-tips!

- Imagine that you've got your favourite food in the house. Maybe it's chocolate, nuts, crisps, sweets, or cream cakes. How long are you able to resist its call from the cupboard? Maybe you have just one or two at first, but this then turns into one more, and then another one? With a full belly you may tell yourself off, even beat yourself up. This is your human brain stepping in and reflecting on what you've eaten and predicting weight gain and maybe ill health in the future. Left to its own devices, the human aspect of your brain sees this over-indulgence as a threat and takes a negative and critical tone.
- Imagine a dog, having sneaked a string of sausages and wolfed them down, thinking 'I'm so greedy' or gazing at its reflection in a window and thinking 'Gosh, I look so fat!' Not very likely, is it! A dog's brain is simply not designed like ours. Lucky dogs!



REMEMBER For much of human evolution, food was scarce. It was beneficial for humans to eat whenever they had the opportunity, and for this reason we developed a tendency to 'see food and eat it'.

But now, in many parts of the world at least, you have never-ending opportunities to eat, meaning that food is often difficult to resist. (While driving, I have been known to throw half-eaten bars of chocolate onto the back seat of my car as an attempt to stop me finishing the bar — and even then I sometimes stop and retrieve it 'because I have to'!)

- Imagine that you find someone attractive but you're already in a relationship. Maybe the person isn't the gender you're usually attracted to or not generally your type. How likely are you to tell yourself off about it, worry about what this means, or monitor others to see if they're aware of your attraction?
 - Of course, it's perfectly normal for us to be attracted to others. It's also helpful to stop ourselves acting on our urges if doing so would be damaging to us or other people but we can also create rules that are unhelpful and can damage our sense of self. If we don't understand ourselves, we're more likely to relate to ourselves in a hostile way. It's better if we compassionately understand our urges and then make helpful choices.
- Imagine that you've got an interview or date. Just thinking about it may make your heart race. But your awareness of the importance of your performance in this scenario can actually get the better of you and may be your undoing.

You know that it's helpful to keep a calm head, but you can't stop your mind flitting from one thing to another, making negative predictions and monitoring other people's reactions. You may then become aware of your own anxiety and start to monitor it and to worry that it's beginning to show — and so the negative loop of automatic reaction and monitoring is reinforced, becoming even stronger.

After the event, you may go over and over it in your mind. Negative images — some real, some imagined — may pop into your head and you may berate yourself for the stupid answers you gave while performing under pressure.

» Imagine pulling out of a junction and suddenly hearing a horn blare, alerting you that another car is approaching. The car swerves and narrowly misses you. Your heart races, but you're also relieved that you somehow avoided a serious accident.

Hours, days, and even months later, your mind returns to the near miss. You think about what could've happened and experience a surge of panic all over again. You may tell yourself off repeatedly and begin to avoid driving, judging yourself not safe to be on the road.

Unfortunately, although experiences come and go, we're prone to rumination, and we worry and judge ourselves. Experiences can stay with us for life, undermining our wellbeing.



REMEMBER A cat won't sit and ruminate about a near miss or worry about what it means for its future. Your average moggy simply finds some other mayhem and mischief to get involved with!

Imagine that you've overslept and you find yourself running for a rush-hour train. You board just in time. Out of breath and sweating, you squeeze down the carriage to get some air. Aware of your dry mouth, heavy breathing, and light-headedness, you worry that you won't be able to swallow, you'll struggle to catch your breath, or you may even faint. You wonder what others are thinking of you. What happens to your anxiety then? Panic is likely to set in, and it becomes a battle to keep it under control.



REMEMBER Lizards don't plan their day, consciously working out how to get from A to B, or worry about getting somewhere on time. Nor are they aware of their breathing, busy checking their pulse or worrying about what other lizards are thinking of them!

Our amazingly complex and tricky human brain consciously monitors others and ourselves, and worries or gets angry about the things we become aware of. We even worry about worrying, and get angry about being angry! This is all perfectly normal, but it can become problematic.



Being aware of these human responses gives us the choice and opportunity to address feelings of shame and being self-critical. An in-depth understanding of ourselves, that includes understanding why we behave, feel, and think the way we do, provides the foundation of compassion for ourselves and others.



REMEMBER Our tendency for conflict and self-monitoring can result in all sorts of difficulties. We may struggle in anxiety-provoking situations and not achieve our goals. We may ruminate or criticise ourselves and become depressed. We may worry and experience panic attacks.

Obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD), social anxiety, health anxiety, and low self-esteem are just some of the difficulties we may struggle with as a consequence of our brain design.

Regulating our emotions: The three circles

Three brain systems have evolved within us to help organise our mind, and each gives rise to different emotions, feelings, urges, and desires that influence both our minds and bodies. CFT refers to these systems as the *three circles*.

The relative development and strength of each system, or circle, has a strong impact on our everyday lives because one or two of these may begin to dominate or 'rule the show'. If your three circles become imbalanced, this can have a negative impact on your wellbeing.

Appreciating your mixed emotions

Ever find that you're excited about something you're scared to death about, angry with someone you love, or relieved about something that's incredibly upsetting? It's all perfectly normal, but if you're not aware of it, you may tell yourself off and feel confused.

Consider the following scenarios to explore this concept further:

- Imagine that your boss criticises your work in a hostile manner. You may feel anxious that you'll lose your job, angry that your boss doesn't appreciate your effort, and sad because you feel that you're not good enough.
- >> Imagine that you're caring for your frail partner. Having asked him to move so that you can change the bed for him, he snaps at you. You feel angry with him, yet, aware that he's easily frustrated, you also feel a pang of guilt and sadness. This is quickly followed by anxiety about how long you can continue to care for him.
- » Imagine the day before your wedding. You're excited, but you're also anxious about whether things will go okay. Fleeting doubts pop into your mind and you become frustrated with yourself for even entertaining them. Excitement, anxiety, and frustration seem to roll into one and you end up feeling detached and exhausted.

Tricky, isn't it? We can feel multiple emotions about a single event, and when they come fast and furious it can pave the way to self-criticism, shame, and feelings of being overwhelmed. It's like a game of pinball —

but now it's 'multi-pinball', with large ball-bearings clashing against each other in all manner of ways. It's not your fault, however; it's a consequence of the tricky brains that we all have.

Understanding our social roles and relationships

Different relationships draw out different aspects of us. For example, at times we're in a dominant role, in others we're subordinate; we may be care-giving during one period or in one relationship, and care-receiving in another. Paul Gilbert, the founder of CFT, refers to these various aspects of ourselves as our *social mentalities*, and each organises the brain in a different way to help us achieve certain goals. We're born with the capacity for many of these roles, and they develop dependent upon our experiences and environment (see the nearby sidebar 'Paul Gilbert's social mentality theory' for more information). We may use them consciously or unconsciously, depending upon our situation.

PAUL GILBERT'S SOCIAL MENTALITY THEORY

Paul Gilbert first proposed *social mentality theory* in 1989. The theory explains how our mind organises itself to form different relationships. Different mentalities motivate and prepare us for different interactions with others. They organise our attention, emotion, cognition, and behaviour in pursuit of our goals. In simple terms, our social mentalities are associated with the goals of gaining or giving care, cooperation, competition, or sexual goals.

Imagine your goal is to have sexual contact with someone. This will affect where you look, what thoughts occupy your mind, the emotions you feel, how you act, and the way your body feels. Now contrast that with a situation in which you're motivated to care for someone. Consider what you attend to then — the thoughts you have, your emotions, your behaviour, and your physical sensations. Finally, if you're in a competitive mentality (where your goal is to outsmart or outrun someone else), consider how that may affect your attention, thoughts, feelings, behaviour, and body.

Understanding our own and other people's mentalities can help us account for seemingly unusual behaviour. For example, seeing someone cry is likely to trigger a caring mentality; however, if we're in a competitive state of mind, someone else's tears may be experienced as a triumph. Our mentalities, or other people's motivations, can also be misread and cause problems. For example, men report that they may think twice about approaching a child who is lost and distressed for fear that others will see their contact with the child in a negative way.

Our social mentalities impact not only ourselves but also other people. Consider two contrasting examples:

- If you're highly competitive (be it with yourself or others), you're less likely to help others, and this will affect your day-to-day life and the lives of those with whom you're competing.
- If you're mostly in a care-giving mentality, this may impact on your own wellbeing and, if taken to an extreme, you may become exhausted. It may also prevent others from developing their confidence (because they fail to learn things they could do for themselves).

The key to social mentality theory is that we're all constructed in particular ways dependent upon the goals we and other people are motivated towards. Social mentalities are extremely helpful to us but can cause us problems if we misread other people's intentions, become fixed in one way of relating to ourselves, or are on the receiving end of particular mentalities from others.

Our wellbeing is related to how well we can move between, adapt, and develop these different brain states. If we get stuck in one role, type of

relationship, or strategy, we may not be able to adapt to changes in our life or our circumstances.

Here are a few examples of the problems that can arise if we struggle to move between different social mentalities:

- >> If you're a professional footballer and you've trained your brain to be competitive with yourself and with others, it's unhelpful for you to then be competitive when you're playing football with your 7-year-old child. It's more helpful to put your competitive mentality to one side and to think about what your son or daughter needs to develop his or her own confidence and skills.
- >> If you've spent much of your life caring for others, and resisted any opportunities to be cared for yourself, you may find it a struggle when you become unwell and require treatment.
- » If you've been cared for during much of your life, it may be difficult to switch into a care-giving or dominant role if the need requires it.
- **»** If you've spent years looking out for and pursuing sexual partners, it can be difficult to commit to a monogamous relationship and interact with others without flirting.

Understanding the roles that we fall into and develop is helpful to us because, by better understanding ourselves, we're less prone to shame and self-criticism and more open to viewing ourselves with compassion. This insight, and the knowledge that we can train our brain in a way we can choose, can result in helpful changes.

Understanding your sense of self

Our sense of self is linked to our experiences and memories and to a feeling of consistency in our views, values, behaviours, relationships, and emotions. The brain gets used to itself — what we're likely to do, say, and feel in a range of situations. It's similar to us getting used to other people: We have a sense of others that's based on a catalogue of information we have about them.

Being aware of ourselves as 'I' or 'me' comes with an awareness of other people as being separate to us, with different views and motivations. This self-awareness, together with our tendency to place ourselves in hierarchies (for example, to judge ourselves as less attractive, able, or intelligent than others), means that we compare ourselves to others in a more complex way than other species do.

But we're more likely to judge ourselves negatively, and predict this to be the view that others hold of us. We judge ourselves as 'inferior' and may label ourselves as a 'failure'. Shame, anger, frustration, anxiety, disappointment, and depression may follow. We may then engage in self-criticism, strive 'to prove' ourselves, avoid situations, and withdraw from other people. These behaviours can not only affect our relationships with others but can also have a big impact on the relationship we have with ourselves. Once again, an amazing human capacity (our sense of self) leaves us open to incredible difficulties.



REMEMBER Your sense of self creates an inbuilt tendency to protect and defend itself (even if we don't like the self we believe we are!). It also creates the tendency to judge, criticise and attack others. From an evolutionary perspective, it provided a way for our ancestors to ensure that genes would be passed on, and it's how we also ensure that our genes are passed on today. By understanding our tendency to defend ourselves and judge others (due to our tricky brain), we open our mind to a more compassionate understanding of ourselves and others.

Your sense of self can give you an incredible experience of aloneness. This is because you may feel judged and have a sense of being 'other' or an 'outsider'. But it's also the birthplace of your motivation for connecting with others.



REMEMBER CFT is not about thinking 'I'm brilliant' or that you're better than others. It's about seeing yourself, in the context of your life and evolution, as connected to others and every other living thing. Your compassionate mind can then help you to consider what would be helpful and to commit to making meaningful changes in your life.

Your sense of self can make you incredibly vulnerable to a sense of aloneness, but it's also the birthplace of your desire for connectedness.



REMEMBER CFT asks you to first consider the version of your 'self' that you want to be. Through a range of practices, you can then work to develop and strengthen this version of yourself. You discover how to move your attention, and to develop your thoughts, feelings, and behaviours. It takes time and effort, but it can have an immeasurable impact on your wellbeing.

THE DIFFERENT VERSIONS OF ME

Imagine if I'd been born to a different family and parented differently. Imagine if I'd grown up in a different country, with different values and views. Would I be the same version of Mary Welford that I am today? Imagine if I'd been accepted to study genetics rather than psychology. Would I be the same or different?

From the moment of our conception, so many things influence us — this version of me is the product of so many different factors. But by the same token we can choose to be different. Committing time and effort to this means that we can change our brain and change our lives.

Acknowledging Human Needs

Your experiences in life can affect your wellbeing and influence whether your needs are met. Following birth, we remain dependent upon others (usually our parents) for longer than any other species. The care we receive allows our basic needs to be met while our brains and bodies grow and mature. The nature of the relationship we have with our primary care-givers, often referred to as our *attachment*, influences the way our brain develops.

The nearby sidebar 'Genotypes, phenotypes, and neuroplasticity' explores the impact experiences have on our minds and bodies.

GENOTYPES, PHENOTYPES, AND NEUROPLASTICITY

The human brain is a social organ and needs input from and connectedness with other brains to develop. What you experience influences how your brain develops and the kind of person that you'll become.

Our *genotype* (or DNA sequence) gives us our potential for factors such as intelligence, speed over 100 meters, and body shape, but our experiences influence which of our potentials are realised. This combination of biology and environment is termed our *phenotype*. For example, we all possess certain genes for height, but if we don't receive adequate nutrition we won't reach our potential. Similarly, we have the potential for feeling soothed and safe in our social group, but if our experiences in such groups haven't been positive we may develop a very watchful and untrusting way of being with others.

Our biology and experiences create a blueprint for how we form and manage future relationships. Our brains become 'wired' in a particular way. We react to things in a way that may make sense based on our past but that may become problematic in the present.

For example, babies who are soothed when distressed develops feelings of safeness and security, an awareness of what helps calm them down and skills needed to seek out others or help themselves. Kindness, warmth, and compassion from our primary care-givers results in the development of confidence and an ability to feel content or 'happy in our own skin'. It even improves our immune system and results in our brain developing in a way that allows the states of wellbeing and trust in others.

In contrast, a lack of kindness, warmth, and compassion, especially in our formative years, and living in threatening environments are associated with increases in stress hormones and a poorer immune response. Anxiety and anger become familiar, preparing us to deal with threats. We become wary and mistrustful of others, have difficulty feeling secure, and find others 'hard to read'. The developing brain, and the brain of the subsequent adult, reflects this.

Of course, all of this can be further complicated when kindness, warmth, and compassion are so alien or associated with difficult memories that they trigger fear or anger.

Thankfully we can change things for the better if we're motivated and have the know-how. CFT relies on our brains' *neuroplasticity*. In other words, our brain can make adaptive changes whatever our age — we can stimulate new pathways and make new neurological connections.

OUR NEED TO CARE

Experiencing warmth, affection, and a connection with others creates an environment for optimal brain development and emotional wellbeing. But what about our human need to *give* care?

The circumstances of our lives and our health (both physical and psychological) can mean that we're unable to help and care for others. As a result, we may then feel that we're not needed or of any use to anyone. If left unchecked, hopelessness, isolation, loneliness, and depression can set in. Such experiences are common in those who are physically less able due to age or ill health.

Therefore, it's helpful to first recognise that the giving of care is a basic human need, instead of feeling shame about it. You may wish to then think about ways in which you can still provide care and therefore feel a sense of purpose.

Recognizing the Frailty of Life

With health and circumstances on our side, we live for approximately 30,000 days. But our bodies, like our brains, have also developed from an earlier evolutionary model. Our skeleton was originally designed for life in the water. Standing upright, on land, means that we're prone to problems with our backs, hips, and knees. It also means that more human mothers and babies die in childbirth, if medical interventions are unavailable, than any other species.

As we age we get more aches, pains, and illnesses. Many of us die young as a result of genetic factors or suffer from life-limiting conditions. Viruses, bacteria, and parasites reproduce in order to survive and use us as hosts. This can result in disease, deformity, and even death. We lose people close to us and see them suffering.

The way that people are with each other can offer wider challenges too. Human beings can inflict horrible pain and suffering on each other and on ourselves due to our capacity for cruelty and violence. The genocide in Rwanda is just one example of how we can turn on each other and commit horrendous acts.

Not wanting to face these realities, we often dissociate ourselves from them. We fall prey to addictions, such as to alcohol and drugs, gambling, and an excessive focus on the attainment of material possessions and wealth. Addictions come at a personal cost, while on a wider scale, factory farming, sweatshops, and industrialisation lead our world to further pain, suffering, and the depletion of the natural environment. And if we don't turn away from these issues, we may instead ruminate and worry about the future challenges that these global problems bring with them.

Until relatively recently (on the scale of human evolution), we had little insight into the impact of such global challenges, but our awareness of tragedies, our impermanence, and the role we play makes living with them all the more difficult.



REMEMBER An awareness of our suffering, and that of others, as well as the associated anger and sadness, can overwhelm us. It can also motivate us to act. This is the birthplace of compassion.

Part 2

Technology & Gadgets

FEATURING CHAPTERS FROM:

The 2nd edition of *Windows 10 For Dummies* (Print ISBN: 978-1-119-31104-1; ePub ISBN: 978-1-119-31106-5; ePdf ISBN: 978-1-119-31105-8), by Andy Rathbone.

Coding For Dummies (Print ISBN: 978-1-119-29332-3; ePub ISBN: 978-1-119-29607-2; ePdf ISBN: 978-1-119-29610-2), by Nikhil Abraham.

The 6th edition of *iPhone For Seniors For Dummies* (Print ISBN: 978-1-119-28018-7; ePub ISBN: 978-1-119-28019-4; ePdf ISBN: 978-1-119-28020-0), by Dwight Spivey.

The 2nd edition of *GoPro Cameras For Dummies* (Print ISBN: 978-1-119-28554-0; ePub ISBN: 978-1-119-28555-7; ePdf ISBN: 978-1-119-28556-4), by John Carucci.

Chapter 5

Playing with Programs, Apps, and Documents

IN THIS CHAPTER

Opening a program, an app, or a document
Changing which program opens which document
Installing, uninstalling, and updating apps
Creating a shortcut
Cutting, copying, and pasting

In Windows, *programs* and *apps* are your tools: Load a program or an app, and you can add numbers, arrange words, and shoot spaceships.

Documents, by contrast, are the things you create with apps and programs, such as tax forms, heartfelt apologies, and lists of high scores.

This chapter explains the basics of opening programs and apps from the new Start menu in Windows. It explains how to find and download a new app from the Start menu's Store app. It also shows you where to find an app's menus (Microsoft mysteriously hid them).

As you flip through this chapter's pages, you figure out how to make your *preferred* program open your files. You also create desktop *shortcuts* — buttons that let you quickly load favorite files, folders, and programs.

The chapter ends with the "<u>Absolutely Essential Guide to Cutting</u>, <u>Copying</u>, and <u>Pasting</u>." Put this one trick under your belt, and you'll know how to manipulate words on a word processor, move files between folders, copy files from your camera to your PC, and send files to and from flash drives.

Starting a Program or an App

Windows 10 returns the Start button and menu to their age-old spot in the desktop's bottom-left corner. A click of the Start button brings you the Start menu's latest incarnation, complete with a band of apps clinging to its right side and a string of unlabeled icons along the left. (On touchscreen computers, the Start menu fills the entire screen.)

You can see the new Start menu in <u>Figure 5-1</u>.

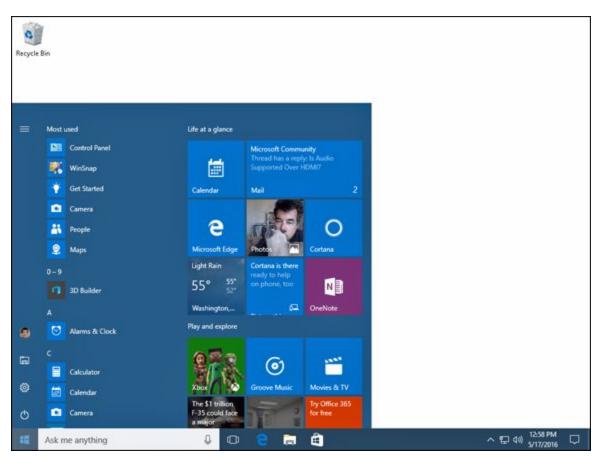


FIGURE 5-1: On the Start menu, click the tile for the program you want to open.

If you just want to launch a program or app, follow these steps:

1. Open the Start menu.

The Start menu appears, as shown earlier in <u>Figure 5-1</u>, bringing a list of your apps and programs. In fact, the Start menu automatically updates itself to keep the names of your most recently used programs or apps visible.

If the Start menu fills the entire screen, your computer is running in Tablet mode. To switch to the traditional, corner-sized Start screen, click the Action Center icon (shown in the margin). When the Action Center pane appears, click the Tablet mode toggle in the pane's lower-left corner.

2. If you spot the tile for your program or app, choose it with a mouse click or, on a touchscreen, a tap of a finger.

Don't see a tile for your sought-after program on the Start menu's list? Move to the next step.

3. Scroll down the screen's right side to see more tiles.

Hidden along the Start menu's far right edge is a scroll bar, similar to scroll bars you see in stocked folders. Sometimes you can't see the scroll bar until your mouse pointer rests directly over it. When you see the scroll bar, drag its scroll box down the screen; then you can see any Start menu tiles that were hiding from view. No scroll bar? Then you're already seeing all that the Start menu has to offer.



On touchscreens, you can view the tiles hidden below the screen's edge by sliding your finger up the screen over the tiles. Still don't see your program or app listed? Head for Step 4.

4. View all your apps.

To keep its list of apps and programs manageable, the Start menu's tile-filled section doesn't list every program or app on your computer.

To reveal them *all*, look at the list of apps along the Start menu's left side. Your most used apps appear along the top; below that appear

newly installed apps. And below those, you see all your apps listed alphabetically by name.

When running in Tablet mode, your computer doesn't show its alphabetized list of apps. To see them, tap the All Apps icon, shown in the margin. All your installed apps and programs suddenly appear, sorted alphabetically.

If you *still* can't find your program on the admittedly crowded Start menu, follow these tips for other ways to open an app or a program:

- Click inside the Cortana Search box next to the Start menu. As you type the first letter, the Search box grows taller to present a list of names beginning with that letter. Type a second or third letter, and the list of matches shrinks accordingly. When you spot the app or program you want, open it with a click (or a tap on a touchscreen). As you type letters, the ever-helpful Cortana also finds matching filenames on your PC, as well as matches from the Internet.
- Open the File Explorer icon (shown in the margin) from the Start menu's left edge. When File Explorer appears, choose Documents, Music, Pictures, or Videos from the Navigation Pane along the window's left edge, and double-click the file you want to open. The correct program automatically opens with that file in tow. (If the wrong program opens it, head to this chapter's "Choosing Which Program Should Open Which File" section.)
- **»** Double-click a shortcut to the program. Shortcuts, which often sit on your desktop, are handy, disposable buttons for launching files and folders. (I explain more about shortcuts in this chapter's "<u>Taking the Lazy Way with a Desktop Shortcut</u>" section.)
- **»** While you're on the desktop, you may spot the program's icon on the taskbar a handy strip of icons lazily lounging along your desktop's bottom edge. If so, click the taskbar icon, and the program leaps into action.

» Right-click on the Windows desktop, choose New, and select the type of document you want to create. Windows loads the correct program for the job. (On a tablet, this trick works only when you turn off Tablet mode, described earlier in this section.)

Windows offers other ways to open a program, but the preceding methods usually get the job done.

Opening a Document

Like Tupperware, the Windows desktop is a big fan of standardization. Almost all Windows programs load their documents — often called *files* — exactly the same way:

1. Click the word File on the program's *menu bar*, that row of staid words along the program's top.

If your program hides its menu bar, pressing the Alt key often reveals it.

Still no menu bar? Then your program might have a *Ribbon*, a thick strip of multicolored icons along the window's top. If you spot the Ribbon, click the tab or button in its leftmost corner to let the File menu tumble down.

2. When the File menu drops down, choose Open.

Windows gives you a sense of déjà vu with the Open window, shown in <u>Figure 5-2</u>. It looks (and works) just like your Documents.

There's one big difference, however: This time, your folder displays only files that your particular program knows how to open — it filters out all the others.

3. Point at your desired document (shown in <u>Figure 5-2</u>), click the mouse button, and click the Open button.



On a touchscreen, tap the document to open it. The program opens the file and displays it on the screen.

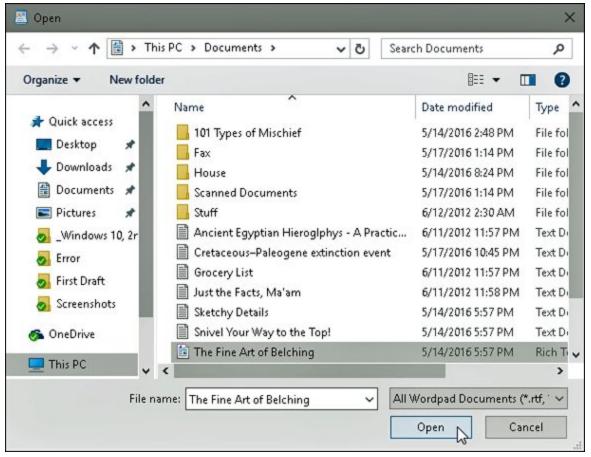


FIGURE 5-2: Double-click the filename you want to open.

Opening a file works this way in most Windows programs, whether written by Microsoft, its corporate partners, or the teenager down the street.



- TIP To speed things up, double-click a desired file's name; that opens it immediately, automatically closing the Open window.
- **>>** Humans store things in the garage, but computers store their files in neatly labeled compartments called folders. (Double-click a folder to see what's stored inside. If you spot your file, open it with a double-click.)
- **»** If your file isn't listed by name, start browsing by clicking the buttons or words shown along the left side of <u>Figure 5-2</u>. Click the

OneDrive or the This PC folder, for example, to search other folders and their files stored inside.

» Whenever you open a file and change it, even by accident, Windows usually assumes that you've changed the file for the better. If you try to close the file, Windows cautiously asks whether you want to save your changes. If you updated the file with masterful wit, click Yes. If you made a mess or opened the wrong file, click No or Cancel.



>> TIP Confused about any icons or commands along the Open window's top or left side? Rest your mouse pointer over the icons, and a little box announces their occupations.



WHEN PROGRAMMERS FIGHT OVER FILE TYPES

When not fighting over fast food, programmers fight over *formats* — ways to pack information into a file. To tiptoe around the format wars, most programs let you open files stored in several different types of formats.

For example, look at the drop-down list box in the bottom-right corner of <u>Figure 5-2</u>. It currently lists all WordPad Documents, the format used by the WordPad text editor built into Windows. To see files stored in *other* formats, click in that box and choose a different format. The Open box quickly updates its list to show files from that new format, instead.

And how can you see a list of *all* your folder's files in that menu, regardless of their format? Select All Documents from the drop-down list box. That switches the view to show all of that particular folder's files. Your program probably can't open them all, though, and it will choke while trying.

For example, WordPad may include some digital photos in its All Documents view. But if you try to open a photo, WordPad dutifully displays the photo as obscure coding symbols. (If you ever mistakenly open a photo in a program and *don't* see the photo, don't try to save what you've opened. If the program is like WordPad, saving the file will ruin the photo. Simply turn tail and exit immediately with a click on the Cancel button.)

Saving a Document

Saving means to send the work you've just created to a hard drive, flash drive, or disc for safekeeping. Unless you specifically save your work, your computer thinks that you've just been fiddling around for the past 4 hours. You must specifically tell the computer to save your work before it will safely store it.

Thanks to Microsoft snapping leather whips, a Save command appears in nearly every Windows program no matter what programmer wrote it. Here are a few ways to save a file:

- » Click File on the top menu and choose Save. (Pressing the Alt key, followed by the F key and the S key, does the same thing.)
- » 🔚 Click the Save icon (shown in the margin).
- **»** Hold down Ctrl and press the S key. (*S* stands for *Save*.)

If you're saving something for the first time, Windows asks you to think up a name for your document. Type something descriptive using only letters, numbers, and spaces between the words.



- **>> REMEMBER** You can save files to any folder, CD, DVD, or even a flash drive. But files are much easier to find down the road when they stay in one of your four main folders: Documents, Music, Pictures, or Videos. (Those folders are listed on the left edge of every folder, making it easy to place files inside them.)
- **»** Choose descriptive filenames for your work. Windows gives you 255 characters to work with. A file named *January 2016 Squeegee Sales* is easier to locate than one named *Stuff*.
- **»** If you want to access your current file from other devices, perhaps your phone or tablet, save it to the Documents folder on OneDrive:

- Choose OneDrive from the Save window's left edge and then choose the OneDrive Documents folder. Then click the Save button.
- **»** Most programs can save files directly to a CD or DVD. Choose Save from the File menu and choose your preferred drive from the right pane's This PC section. Put a disc (preferably one that's not already filled) into your disc-writing drive to start the process.
- **»** A few newer programs spare you the chore of clicking the Save button: They save your work automatically as you type. Microsoft's OneNote note taking program and many Start menu apps save your work automatically, so they lack a Save button.



>> REMEMBER If you're working on something important (and most things are important), click the program's Save command every few minutes. Or use the Ctrl+S keyboard shortcut. (While holding down the Ctrl key, press the S key.) Programs make you choose a name and location for a file when you *first* save it; subsequent saves are much speedier.



Huh? Save as *what?* A chemical compound? Naw, the Save As command just gives you a chance to save your work with a different name and in a different location.

Suppose that you open the *Ode to Tina* file and change a few sentences. You want to save your new changes, but you don't want to lose the original words, either. Preserve *both* versions by selecting Save As and typing the new name, *Tentative Additions to Ode to Tina*.

When you're saving something for the *first* time, the Save and Save As commands are identical: Both make you choose a fresh name and location for your work.

Perhaps more important, the Save As command also lets you save a file in a different *format*. You can save your original copy in your normal format, but you can also save a copy in a different format for a friend clinging to older software that requires a format from yesteryear.

Choosing Which Program Should Open Which File

Most of the time, Windows automatically knows which program should open which file. Open a file, and Windows tells the correct program to jump in and let you view its contents.

But sometimes Windows doesn't choose your preferred program, and that holds especially true for Windows 10. For example, the new apploving Windows tells the Start menu's Groove Music app to play your music. You may prefer that the desktop's Windows Media Player handle the music-playing chores instead.

When the wrong program opens your file, here's how to make the *right* program open it instead:

1. Right-click your problematic file and choose Open With from the pop-up menu.

As shown in <u>Figure 5-3</u>, Windows lists a few capable programs, including ones you've used to open that file in the past.

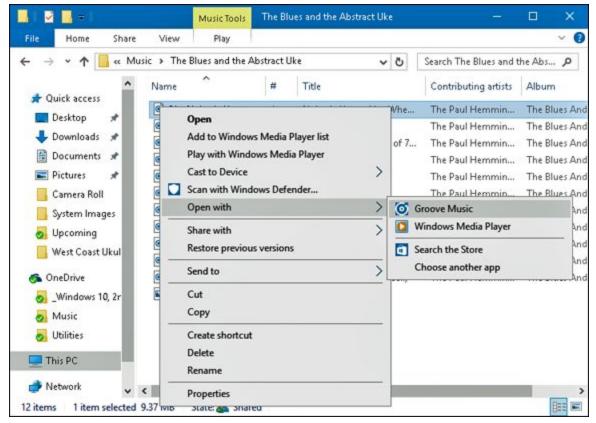
2. Click the Choose Another App option.

The window that appears, as shown in <u>Figure 5-4</u>, lists more programs, and the currently assigned program appears at the list's top. If you spot your favorite program, double-click to tell it to open your file. (Make sure the Always Use This App to Open Files check box is selected so you don't need to repeat these steps.) Then click OK. You're done!

Don't see the program you want or need to open the file? Move to Step 3.

3. Click the words Look for An App in the Store, and click the OK button.

The Store app appears, leaving you at a virtual shelf stocked with apps capable of opening the file.



<u>FIGURE 5-3:</u> Windows lists some programs that opened that type of file in the past.

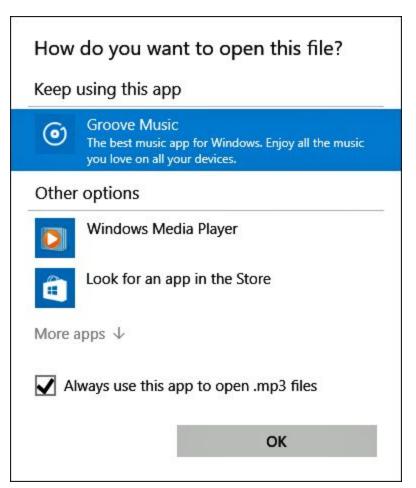


FIGURE 5-4: Choose the program you want and select the check box at the bottom.

If you install a new program or app to open a particular file, the newcomer usually assigns itself the rights to open that type of file in the future. If it doesn't, head back to Step 1. This time, however, your newly installed program or app will appear on the list. Choose it, and you've *finally* finished.



>> REMEMBER In a bit of revisionist history, Windows 10 uses the term *app* when referring to both traditional desktop programs and Start menu apps. Be mindful of the Windows terminology when on the desktop. If Windows says an action will affect your apps, it will also affect your desktop programs.

- windows lets you choose your default programs from the Start menu, as well. From the Start menu, click the Settings icon. When the Windows Setting app appears, click the System icon. From the System window, choose Default Apps from the left pane. On the right, Windows lists the programs currently opening each type of file. Click any program's name, and a list appears for you to hand the reins to a different program.
- **»** Sometimes you'll want to alternate between different apps or programs when working on the same file. To do so, right-click the file, choose Open With, and select the program you need at that time.
- » Occasionally, you can't make your favorite program open a particular file because it simply doesn't know how. For example, Windows 10 can't play DVD movies. Your only solution is to install a DVD playing program or app from the Microsoft Store.
- **»** If somebody says something about "file associations," feel free to browse the technical sidebar "<u>The awkward world of file associations</u>," which explains that awful subject.



THE AWKWARD WORLD OF FILE ASSOCIATIONS

Every Windows program slaps a secret code known as a *file extension* onto the name of every file it creates. The file extension works like a cattle brand: When you double-click the file, Windows eyeballs the extension and automatically summons the proper program to open the file. Notepad, for example, tacks on the three-letter extension .txt to every file it creates. So, Windows associates the .txt extension with the Notepad program.

Windows normally doesn't display these extensions, isolating users from such inner mechanisms for safety reasons. If somebody accidentally changes or removes an extension, Windows won't know how to open that file.

If you're curious about what an extension looks like, sneak a peek by following these steps:

1. Click the View tab from atop any folder.

The menu quickly changes across the folder's top, showing different ways to view that folder's contents.

2. Select the File Name Extensions check box.

The files inside the folder immediately change to show their extensions — a handy thing to know in technical emergencies.

Now that you've peeked, hide the extensions again by repeating the steps but deselect the File Name Extensions check box.

Warning: Don't change a file's extension unless you know exactly what you're doing. Windows will forget what program to use for opening the file, leaving you holding an empty bag.

Navigating the Windows Store

Apps, which are mini-programs specialized for single tasks, come from the world of *smartphones* (computerized cellphones). And, like the apps from smartphones, apps come only from an App store. In Windows, they come from the Windows Store, available with a click on the taskbar's Windows Store icon (shown in the margin).

Apps differ from traditional desktop programs in several ways:

- Windows 10 allows apps to run within desktop windows rather than consuming the entire screen as they did in earlier Windows versions. When running in Tablet mode, though, apps return to their fullscreen antics.
- **»** Apps are tied to your Microsoft account. That means you need a Microsoft account to download a free or paid app from the Store app.
- **»** When you download an app from the Windows Store app, you can usually run it on up to ten PCs or devices as long as you're signed in to those PCs or devices with your Windows account. (Some apps may raise or lower that number.)
- » Newly installed apps consume just one Start menu tile. Newly installed programs, by contrast, often sprinkle several tiles onto your Start menu.

Apps and programs can be created and sold both by large companies and basement-dwelling hobbyists working in their spare time. It's hard to tell beforehand which one will give you the most support when things go wrong.

Although desktop programs and Start menu apps look and behave differently, Microsoft unfortunately refers to both as *apps*. You might run across this terminology quirk when dealing with older programs, as well as newer programs created by companies not hip to Microsoft's new lingo.

Adding new apps from the Store app

When you're tired of the apps bundled with Windows or you need a new app to fill a special need, follow these steps to bring one into your computer.

1. Click the Start button and open the Store app from the Start menu.

The Store app jumps to the screen, as shown in <u>Figure 5-5</u>. You can also click the Store app (shown in the margin) from the taskbar that always runs along the bottom of your screen.

Although the Store changes its layout frequently, it usually opens to show its Spotlight category along the top edge, where Microsoft highlights a few chosen apps. Beneath that, you may find links to popular apps. The Store usually offers a Picks For You section which suggests apps you may be interested in, based on your past downloads.

To see more, point near the Store app's top edge to see the top few apps in each category: Apps, Games, and Music & TV. (You can also buy or rent movies from the Store app.)

2. To narrow your search, choose a category by clicking its name.

The Store lists its offerings based on your chosen category.



Save some time by clicking the "Top" button, if you spot one. (The mouse points to it in <u>Figure 5-5</u>.) If you spot an interesting free app, click it. When the Install button appears, click the button to install the app and get the hang of the process. (Similarly, to buy a paid app, click the button that lists its price.)

Didn't find the right app? Head to the next step.

3. Search for a particular app by typing a keyword into the Search box in the upper-right corner and pressing Enter.

The Search box lives in the store's upper-right corner. Shown in <u>Figure 5-6</u>, the Search box narrows down the apps by a keyword.



REMEMBER Like the Store app, almost all searchable apps include a built-in Search box, which appears in their upper-right corner.

When you press Enter, the Store app lists all matching apps, games, artists, albums, songs, movies, and TV shows.

4. Sort the listed apps.

The Refine pane, listed to the left of your matching apps, lets you fine-tune your app search. Click Apps, for example, to further sort your search by types of apps: games, education, entertainment, utilities, and other categories. Or, if you searched for a musical artist's name, the Refine pane lets you sort that artist's music by genre.

5. Click any app to read a more detailed description.

A page opens to show more detailed information, including its price tag, pictures, reviews left by previous customers, and more technical information.

6. Click the Free or Price button.

When you find a free app that you can't live without, click the Free button. To buy a paid app, click the button bearing its price tag. The price will be charged to the credit card linked to your Microsoft account. If you haven't yet entered a card, Microsoft walks you through the process.

The Store may ask you to choose which drive to use for installing your app. Most people choose their C: drive; owners of small tablets may prefer to choose their memory card instead. (Tiny tablets traditionally come with tiny C: drives.)

No matter what you download from the Windows Store, the new item appears on your Start menu's alphabetical All Apps list as quickly as your Internet connection speed allows.

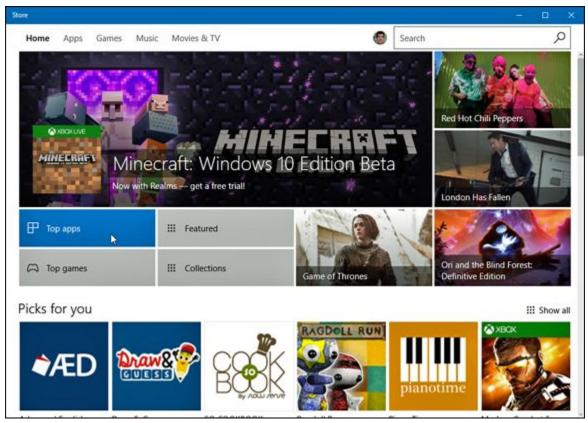


FIGURE 5-5: The Store app lets you download free, trial, or paid apps to launch from your Start menu.

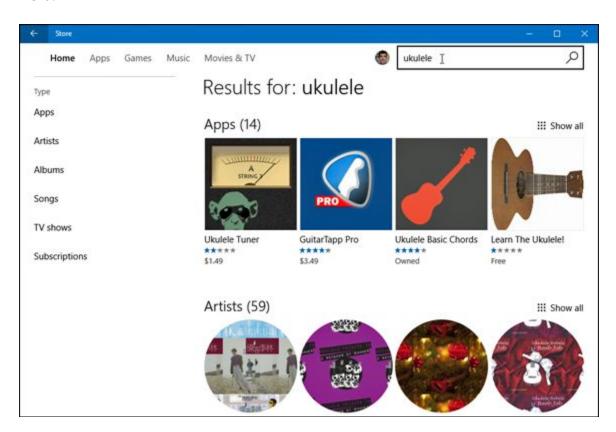


FIGURE 5-6: Type a keyword in the Search box and press Enter to see relevant apps.

To copy an app from the All Apps list to a front-page Start menu tile, right-click the app's name and choose Pin to Start.

Uninstalling apps

Downloaded a dud app? To uninstall any app from the Start menu, rightclick its tile. When the pop-up menu appears, click Uninstall.

Uninstalling an app removes that app only from *your* account's Start menu. Your action won't affect other account holders who may have installed the app.



Programmers constantly tweak their apps, smoothing over rough spots, adding new features, and plugging security holes. Whenever you connect with the Internet, Windows examines your installed apps. If any are out of date, Windows automatically downloads any waiting updates and applies the updates.

If you're using a cellular connection, don't worry: Apps don't update when you're using a metered Internet connection like those found on cellphones. Windows resumes updating the apps as soon as you connect to a Wi-Fi or wired Internet connection.

Don't want automatic updates for some reason? You can turn off automatic updating by following these steps:

1. From the Store app, click your account icon and choose Settings from the drop-down menu.

Your account icon is your user account photo, located in the Store app's upper-right corner next to the Search box.

2. When the Settings screen appears, click to make sure the Update Apps Automatically slider is set to Off.

Your changes take place immediately. To make sure your apps update automatically, by contrast, set the slider to On.

When the App Updates control is on, *all* your apps update. You can't keep individual apps from updating, unfortunately. That's why I recommend that you keep your apps set to update automatically. If you try to stop one from updating, you could miss out on security patches as well as improvements to all your other apps.

Taking the Lazy Way with a Desktop Shortcut

As you work, you'll constantly find yourself traveling between the desktop and the Start menu. When you grow tired of meandering through the woods to find a program, folder, disc drive, document, or even a website, create a desktop *shortcut* — an icon that takes you directly to the object of your desires.

Because a shortcut is a mere icon that launches something else, shortcuts are safe, convenient, and disposable. And they're easy to tell apart from the original because they have a little arrow lodged in their bottom-left corner, as you can see on the folder shortcut shown in the margin.

To skip the Start menu, follow these instructions to create desktop shortcuts to your oft-used items:

- **» Folders or Documents:** From the desktop's File Explorer, right-click a favorite folder or document, choose Send To, and select the Desktop (Create Shortcut) option. The shortcut appears on your desktop.
- **» Websites:** On Internet Explorer, see the little icon in front of the website's address in Internet Explorer's Address bar? Drag and drop that little icon to your desktop for quick access later. (Windows 10's replacement Microsoft Edge browser doesn't let you create desktop shortcuts.)
- **» Control Panel:** The desktop's Control Panel contains eight sections, each with links beneath it. Every icon and link in Control Panel can be dragged onto your desktop to create a shortcut. (An easy way to access the Control Panel from the desktop is to right-click in the

screen's bottom-left corner and choose Control Panel from the popup menu.)

Storage areas: Open File Explorer with a click of its icon on the desktop's taskbar. From the Navigation Pane along File Explorer's left side, drag and drop any storage area you want to the desktop. Windows immediately places a shortcut to that drive on your desktop. (This works for your main OneDrive folder, This PC, flash drives, disc drives, and even network locations.)

Here are some more tips for desktop shortcuts:

- >> For quick CD or DVD burning, put a shortcut to your disc drive on your desktop. Burning files to disc becomes as simple as dragging and dropping them onto the disc drive's new shortcut. (Insert a blank disc into the disc drive's tray, confirm the settings, and begin burning your disc.)
- **»** Want to send a desktop shortcut to the Start menu? Right-click the desktop shortcut and choose Pin to Start; the item appears as a tile on the Start menu, as well as in the Start menu's All Apps list.



- **WARNING** Feel free to move shortcuts from place to place, but *don't* move the items they launch. If you do, the shortcut won't be able to find the item, causing Windows to panic and search (usually in vain) for the relocated goods.
- **>>** Want to see what program a shortcut will launch? Right-click the shortcut and click Open File Location (if available). The shortcut quickly takes you to its leader.

Absolutely Essential Guide to Cutting, Copying, and Pasting

Windows took a tip from the kindergartners and made *cut* and *paste* an integral part of computing life. You can electronically *cut* or *copy* just about anything and then *paste* it just about anyplace else with little fuss and even less mess.

For example, you can copy a photo and paste it onto your party invitation fliers. You can move files by cutting them from one folder and pasting them into another. You can cut and paste your digital camera's photos into a folder inside your Pictures folder. And you can easily cut and paste paragraphs to different locations within a word processor.

The beauty of the Windows desktop is that, with all those windows onscreen at the same time, you can easily grab bits and pieces from any of them and paste all the parts into a brand-new window.



Don't overlook copying and pasting for the small stuff. Copying a name and an address is much faster and more accurate than typing them into your letter by hand. Or, when somebody emails you a web address, copy and paste it directly into your browser's Address bar. It's easy to copy most items displayed on websites, too (much to the dismay of many professional photographers).

The quick 'n' dirty guide to cut 'n' paste



REMEMBER In compliance with the Don't Bore Me with Details Department, here's a quick guide to the three basic steps used for cutting, copying, and pasting:

- 1. Select the item to cut or copy: a few words, a file, a web address, or any other item.
- 2. Right-click your selection and choose Cut or Copy from the menu, depending on your needs.

Use *Cut* when you want to *move* something. Use *Copy* when you want to *duplicate* something, leaving the original intact.

Keyboard shortcut: Hold down Ctrl and press X to cut or C to copy.

3. Right-click the item's destination and choose Paste.

You can right-click inside a document, folder, or nearly any other place.

Keyboard shortcut: Hold down Ctrl and press V to paste.

The next three sections explain each of these three steps in more detail.

Selecting things to cut or copy

Before you can shuttle pieces of information to new places, you have to tell Windows exactly what you want to grab. The easiest way to tell it is to *select* the information with a mouse. In most cases, selecting involves one swift trick with the mouse, which then highlights whatever you've selected.

» To select text in a document, website, or spreadsheet: Put the mouse arrow or cursor at the beginning of the information you want and hold down the mouse button. Then move the mouse to the end of the information and release the button. That's it! That action selects all the stuff lying between where you clicked and released, as shown in <u>Figure 5-7</u>.



On a touchscreen, double-tap one word to select it. To extend your selection, touch the highlighted word again, keeping your finger pressed on the glass. Slide your finger along the glass until you've reached the area where the highlighting should stop. Done? Remove your finger to select that portion of text.



warning Be careful after you highlight a bunch of text. If you accidentally press the K key, for example, the program replaces your highlighted text with the letter *k*. To reverse that calamity, choose Undo from the program's Edit menu (or press Ctrl+Z, which is the keyboard shortcut for Undo).

- **» To select any files or folders:** Simply click a file or folder to select it. To select *several* items, try these tricks:
 - If all the files are in a row: Click the first item in the bunch, hold down the Shift key, and then select the last item. Windows highlights the first and last items as well as everything in between.
 - **If the files** *aren't* **in a row:** Hold down the Ctrl key while clicking each file or folder you want to select.

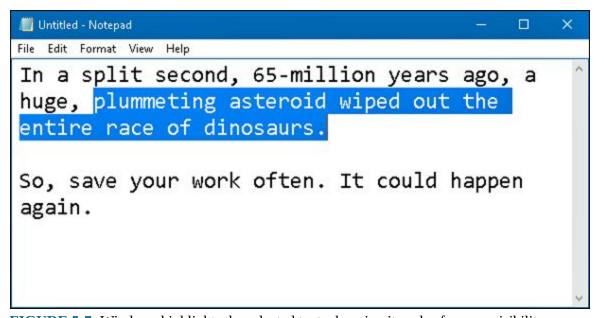


FIGURE 5-7: Windows highlights the selected text, changing its color for easy visibility.

Now that you've selected the item, the next section explains how to cut or copy it.



- **>>> REMEMBER** After you've selected something, cut it or copy it *immediately*. If you absentmindedly click the mouse someplace else, your highlighted text or file reverts to its boring self, and you're forced to start over.
- **»** To delete any selected item, be it a file, paragraph, or picture, press the Delete key. Alternatively, right-click the item and choose Delete from the pop-up menu.

SELECTING INDIVIDUAL LETTERS, WORDS, PARAGRAPHS, AND MORE

When dealing with words in Windows, these shortcuts help you quickly select information:

- To select an individual *letter or character*, click in front of the character. Then while holding down the Shift key, press the right-arrow key. Keep holding down these two keys to keep selecting text in a line.
- To select a single *word*, point at it with the mouse and double-click. The word changes color, meaning it's highlighted. (In most word processors, you can hold down the button on its second click, and then by moving the mouse around you can quickly highlight additional text word by word.)
- To select a single *line* of text, simply click next to it in the left margin. To highlight additional text line by line, keep holding down the mouse button and move the mouse up or down. You can also keep selecting additional lines by holding down the Shift key and pressing the left-arrow key or the right-arrow key.
- To select a *paragraph*, just double-click next to it in the left margin. To highlight additional text paragraph by paragraph, keep holding down the mouse button on the second click and move the mouse.
- To select an entire *document*, hold down Ctrl and press A. (Or choose Select All from the program's Edit menu.)

Cutting or copying your selected goods

After you select some information (which I describe in the preceding section, in case you just arrived), you're ready to start playing with it. You can cut it or copy it. (Or just press Delete to delete it.)



(On a touchscreen, touch it and hold down your finger to fetch the pop-up menu.) When the menu appears, choose Cut or Copy, depending on your needs, as shown in Figure 5-8. Then right-click your destination and choose Paste.



FIGURE 5-8: To copy information into another window, right-click your selection and choose Copy.

The Cut and Copy options differ drastically. How do you know which one to choose?

» Choose Cut to *move* **information.** Cutting wipes the selected information off the screen, but you haven't lost anything: Windows stores the cut information in a hidden Windows storage tank called the *Clipboard*, waiting for you to paste it.



Feel free to cut and paste entire files to different folders. When you cut a file from a folder, the icon dims until you paste it. (Making the icon disappear would be too scary.) Changed your mind in mid-cut? Press Esc to cancel the cut, and the icon reverts to normal.

» Choose Copy to make a copy of the information. Compared with cutting, *copying* information is quite anticlimactic. Whereas cutting removes the item from view, copying the selected item leaves it in

the window, seemingly untouched. Copied information also goes to the Clipboard until you paste it.

To save a picture of your entire screen, press +PrtScr. (Some keyboards call that key *Print Screen* or *PrintScr.*) Windows quickly saves the image in a file called Screenshot inside your Pictures folder. Do it again, and the screenshot is named Screenshot (2). (You get the idea.)

Pasting information to another place

After you cut or copy information to the Windows Clipboard, it's checked in and ready for travel. You can *paste* that information nearly anyplace else.

Pasting is relatively straightforward:

- 1. Open the destination window and move the mouse pointer or cursor to the spot where you want the stuff to appear.
- 2. **Right-click the mouse and choose Paste from the pop-up menu.**Presto! The item you just cut or copied immediately leaps into its new spot.

Or, if you want to paste a file onto the desktop, right-click on the desktop and choose Paste. The cut or copied file appears where you've right-clicked.

» The Paste command inserts a *copy* of the information that's sitting on the Clipboard. The information stays on the Clipboard, so you can keep pasting the same thing into other places if you want.



- >> TIP To paste on a touchscreen, hold down your finger where you'd like to paste the information. When the menu pops up, tap Paste.
- » Some programs, including File Explorer, have toolbars along their tops, offering one-click access to the versatile Cut, Copy, and Paste

buttons, as shown in <u>Figure 5-9</u>. (Hint: Look on File Explorer's Home tab.)

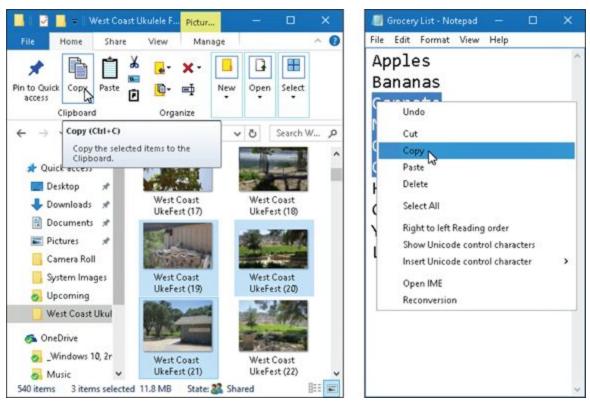


FIGURE 5-9: The Cut, Copy, and Paste commands on the Ribbon (left) and traditional menu (right).



UNDOING WHAT YOU'VE JUST DONE

Windows offers a way for you to undo your last action, which quickly pours the spilled milk back into the carton:

Hold down the Ctrl key and press the Z key. The last mistake you made is reversed, sparing you from further shame. (Pressing a program's Undo button, if you can find one, does the same thing.)

And, should you mistakenly undo something that really should have stayed in place, press Ctrl+Y. That undoes your last undo, putting it back in place.

Chapter 6

Programming for the Web

IN THIS CHAPTER

Seeing the code powering websites you use every day
Understanding the languages used to make websites
Learning how applications are created for mobile devices

To think you can start something in your college dorm room ... and build something a billion people use is crazy to think about. It's amazing.

-MARK ZUCKERBERG

Programming for the web allows you to reach massive audiences around the world faster than ever before. Four years after its 2004 launch, Facebook had 100 million users, and by 2012 it had over a billion. By contrast, it took desktop software years to reach even 1 million people. These days, mobile phones are increasing the reach of web applications. Although roughly 300 million desktop computers are sold every year, almost 2 billion mobile phones are sold in that time — and the number is steadily increasing.

In this chapter, you learn how websites are displayed on your computer or mobile device. I introduce the languages used to program websites, and show you how mobile-device applications are made.

Displaying Web Pages on Your Desktop and Mobile Device

On desktop computers and mobile devices, web pages are displayed by applications called *browsers*. The most popular web browsers include Google Chrome, Mozilla Firefox (formerly Netscape Navigator), Microsoft Internet Explorer, and Apple Safari. Until now, you have likely interacted with websites you visit as an obedient user, and followed the rules the website has created by pointing and clicking when allowed. The first step to becoming a producer and programmer of websites is to peel back the web page, and see and play with the code underneath it all.

Hacking your favorite news website

What's your favorite news website? By following a few steps, you can see and even modify the code used to create that website. (No need to worry, you won't be breaking any rules by following these instructions.)



Although you can use almost any modern browser to inspect a website's code, these instructions assume you're using the Google Chrome browser. Install the latest version by going to www.google.com/chrome/browser.

To "hack" your favorite news website, follow these steps:

- 1. Open your favorite news website using the Chrome browser. (In this example, I use www.huffingtonpost.com.)
- 2. Place your mouse cursor over any static fixed headline and rightclick once, which opens a contextual menu. Then, left-click once on the Inspect Element menu choice. (See Figure 6-1.)



If using a Macintosh computer, you can right-click by holding down the Control key and clicking once.

The Developer Tools panel opens at the bottom of your browser. This panel shows you the code used to create this web page! Highlighted in blue is the specific code used to create the headline where you originally put your mouse cursor. (See Figure 6-2.)



Look at the left edge of the highlighted code. If you see a right arrow, left-click once on the arrow to expand the code.

3. Scan the highlighted code carefully for the text of your headline. When you find it, double-click on the headline text. This allows you to edit the headline. (See <u>Figure 6-3</u>.)

Be careful not to click on anything that begins with http, which is the headline link. Clicking on a headline link will open a new window or tab and load the link.

4. Insert your name in the headline and press Enter.

Your name now appears on the actual web page. (See <u>Figure 6-4</u>.) Enjoy your newfound fame!



If you were unable to edit the headline after following these steps, visit http://goggles.webmaker.org for an easier, more guided tutorial. It's a foolproof guided version to edit code on a page. It's a teaching aid that shows that any code on the Internet can be modified. On that page, click the yellow Activate X-Ray Goggles to see and edit the code on the webmaker.org web page. Try again to hack your favorite news website by following the "Remix Any Webpage" instructions.



FIGURE 6-1: Right-click on a headline and select Inspect Element from the menu.

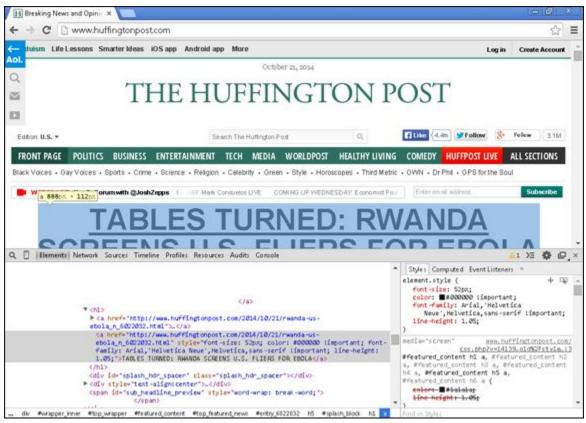


FIGURE 6-2: The blue highlighted code is used to create the web page headline.



FIGURE 6-3: Double-click the headline text to edit it with your own headline.



FIGURE 6-4: You successfully changed the headline of a major news website.

If you successfully completed the steps above and changed the original headline, it's time for your 15 minutes of fame to come to an end. Reload the web page and the original headline reappears. What just happened? Did your changes appear to everyone visiting the web page? And why did your edited headline disappear?

To answer these questions, you first need to understand how the Internet delivers web pages to your computer.

Understanding how the World Wide Web works

After you type a URL, such as huffingtonpost.com, into your browser, the following steps happen behind the scenes in the seconds before your page loads (see <u>Figure 6-5</u>):

- 1. Your computer sends your request for the web page to a router. The router distributes Internet access throughout your home or workplace.
- 2. The router passes your request onto your Internet service provider (ISP). In the United States, your ISP is a company like Comcast, Time Warner, AT&T, or Verizon.
- 3. Your ISP then converts the words and characters in your URL "huffingtonpost.com," in my example into a numerical address called the *Internet protocol address* (or, more commonly, *IP address*). An IP address is a set of four numbers separated by periods (such as, for example, 192.168.1.1). Just like your physical address, this number is unique, and every computer has one. Your ISP has a digital phone book, similar to a physical phonebook, called a *domain name server* that's used to convert text URLs into IP addresses.
- 4. With the IP address located, your ISP knows which server on the Internet to forward your request to, and your personal IP address is included in this request.
- 5. The website server receives your request, and sends a copy of the web page code to your computer for your browser to display.
- 6. Your web browser renders the code onto the screen.

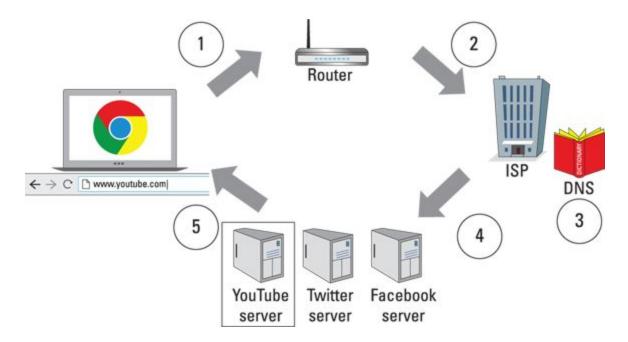


FIGURE 6-5: Steps followed to deliver a website to your browser.

When you edited the website code using the Developer Tools, you modified only the copy of the website code that exists on your computer, so only you could see the change. When you reloaded the page, you started Steps 1 through 6 again, and retrieved a fresh copy of the code from the server, overwriting any changes you made on your computer.



You may have heard of a software tool called an *ad blocker*. Ad blockers work by editing the local copy of website code, just as you did above, to remove website advertisements. Ad blockers are controversial because websites use advertising revenue to pay for operating costs. If ad blockers continue rising in popularity, ad revenue could dry up, and websites would have to demand that readers pay to see their content.

Watching out for your front end and back end

Now that you know how your browser accesses websites, let us dive deeper into the way the actual website is constructed. As shown in <u>Figure 6-6</u>, the code for websites, and for programs in general, can be divided into four categories, according to the code's function:

- **Appearance:** Appearance is the visible part of the website, including content layout and any applied styling, such font size, font typeface, and image size. This category is called the *front end* and is created using languages like HTML, CSS, and JavaScript.
- **Description Logic** Logic determines what content to show and when. For example, a New Yorker accessing a news website should see New York weather, whereas Chicagoans accessing the same site should see Chicago weather. This category is part of the group called the *back end* and is created using languages like Ruby, Python, and PHP.

These back end languages can modify the HTML, CSS, and JavaScript that is displayed to the user.

- **>> Storage:** Storage saves any data generated by the site and its users. User-generated content, preferences, and profile data must be stored for retrieval later. This category is part of the back end and is stored in databases like MongoDB and MySQL.
- **» Infrastructure:** Infrastructure delivers the website from the server to you, the client machine. When the infrastructure is properly configured, no one notices it, but it can *become* noticeable when a website becomes unavailable due to high traffic from events like presidential elections, the Super Bowl, and natural disasters.

LOGIC APPEARANCE HTML Ruby on Rails CSS Python **JavaScript** PHP INFRASTRUCTURE STORAGE MySQL Apache MongoDB Nginx Front end Back end

FIGURE 6-6: Every website is made up of four different parts.

Usually, website developers specialize in one or at most two of these categories. For example, an engineer might really understand the front end and logic languages, or specialize in only databases. Website developers have strengths and specializations, and outside of these areas their expertise is limited, much in the same way that Jerry Seinfeld, a terrific comedy writer, would likely make a terrible romance novelist.

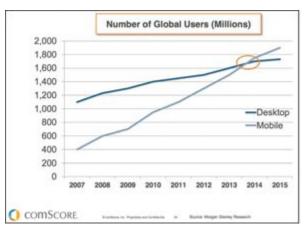


categories is referred to as a *full stack developer*. Usually, smaller companies hire full stack developers, whereas larger companies require the expertise that comes with specialization.

Defining web and mobile applications

Web applications are websites you visit using a web browser on any device. Websites optimized for use on a mobile device, like a phone or tablet, are called *mobile web applications*. By contrast, *native mobile applications* cannot be viewed using a web browser. Instead, native mobile applications are downloaded from an app store like the Apple App Store or Google Play, and designed to run on a specific device such as an iPhone or an Android tablet. Historically, desktop computers outnumbered and outsold mobile devices, but recently two major trends in mobile usage have occurred:

- **»** In 2014, people with mobile devices outnumbered people with desktop computers. This gap is projected to continue increasing, as shown in <u>Figure 6-7</u>.
- Mobile-device users spend 80 percent of their time using native mobile applications, and 20 percent of their time browsing mobile websites.



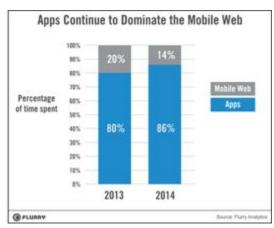


FIGURE 6-7: Mobile devices have increased at a faster pace than desktops.

The increase in mobile devices has happened so quickly over the last 10 years that many companies are becoming "mobile first," designing and developing the mobile version of their applications before the desktop version. WhatsApp and Instagram, two popular mobile applications, first built mobile applications, which continue to have more functionality than their regular websites.

Coding Web Applications

Web applications are easier to build than mobile applications, require little to no additional software to develop and test, and run on all devices, including desktop, laptops, and mobile. Although mobile applications can perform many common web-application tasks, such as email, some tasks are still easier to perform using web applications. For example, booking travel is easier using web applications, especially since the steps necessary — reviewing flights, hotels, and rental cars, and then purchasing all three — are best achieved with multiple windows, access to a calendar, and the entry of substantial personal and payment information.

The programming languages used to code basic web applications, further defined in the following sections, include HTML (Hypertext Markup Language), CSS (Cascading Style Sheets), and JavaScript. Additional features can be added to these websites using languages like Python, Ruby, or PHP.

Starting with HTML, CSS, and JavaScript

Simple websites, such as the one shown in <u>Figure 6-8</u>, are coded using HTML, CSS, and JavaScript. HTML is used to place text on the page, CSS is used to style that text, and JavaScript is used to add interactive effects like the Twitter or Facebook Share button that allows you to share content on social networks and updates the number of other people who have also shared the same content. Websites conveying mainly static, unchanging information are often coded only in these three languages.



FIGURE 6-8: The lindaliukas.fi website, built using HTML, CSS, and JavaScript.

Adding logic with Python, Ruby, or PHP

Websites with more advanced functionality, such as user accounts, file uploads, and e-commerce, typically require a programming language to implement these features. Although Python, Ruby, and PHP are not the only programming languages these sites can use, they are among the most popular. This popularity means there are large online communities of developers who program in these languages, freely post code that you can copy to build common features, and host public online discussions that you can read for solutions to common issues.

Each of these languages also has popular and well documented frameworks. A *framework* is a collection of generic components, such as user accounts and authentication schemes that are reused frequently, allowing developers to build, test, and launch websites more quickly. You can think of a framework as similar to the collection of templates that comes with a word processor. You can design your resume, greeting card, or calendar from scratch, but using the built-in template for each of

these document types helps you create your document faster and with greater consistency. Popular frameworks for these languages include

- » Django and Flask for Python
- » Rails and Sinatra for Ruby
- » Zend and Laravel for PHP

Coding Mobile Applications

Mobile applications are hot topics today, in part because mobile apps such as WhatsApp and Instagram were acquired for billions of dollars, and mobile app companies like Rovio, makers of Angry Birds, and King Digital, makers of Candy Crush, generate annual revenues of hundreds of millions to billions of dollars.

When coding mobile applications, developers can either build

- » Mobile web applications, using HTML, CSS, and JavaScript.
- **»** Native mobile applications using a specific language. For example, Apple devices are programmed using Objective-C or Swift, and Android devices are programmed using Java.

The choice between these two options may seem simple, but there are a few factors at play. Consider the following:

- Companies developing mobile web applications must make sure the mobile version works across different browsers, different screen sizes, and even different manufacturers, such as Apple, Samsung, RIM, and Microsoft. This results in thousands of possible phone combinations, which can greatly increase the complexity of testing needed before launch. Native mobile apps run only on one phone platform, so there is less variation to account for.
- **»** Despite running on only one platform, native mobile apps are more expensive and take longer to build than mobile web apps.
- **»** Some developers have reported that mobile web applications have more performance issues and load more slowly than native mobile applications.
- As mentioned before, users are spending more time using native mobile applications and less time using browser-based mobile web apps.
- » Native mobile apps are distributed through an app store, which may require approval from the app store owner, whereas mobile web apps

are accessible from any web browser. For example, Apple has a strict approval policy and takes up to six days to approve an app for inclusion in the Apple App Store, while Google has a more relaxed approval policy and takes 2 hours to approve an app.

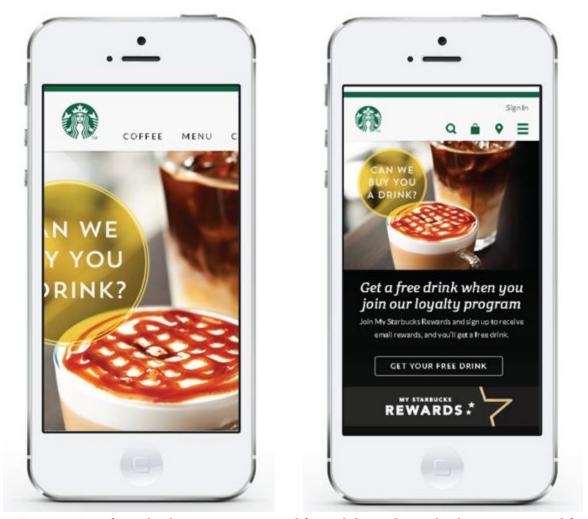


Apple blocked Google from launching the Google Voice app in the Apple App Store because it overlapped with Apple's own phone functionality. Google responded by creating a mobile web app accessible from any browser, and Apple could do nothing to block it.

If you're making this choice, consider the complexity of your application. Simple applications, like schedules or menus, can likely be cheaply developed with a mobile web app, whereas more complex applications, like messaging and social networking, may benefit from having a native mobile app. Even well-established technology companies struggle with this choice. Initially, Facebook and LinkedIn created mobile web applications, but both have since shifted to primarily promoting and supporting native mobile apps. The companies cited better speed, memory management, and developer tools as some of the reasons for making the switch.

Building mobile web apps

Although any website can be viewed with a mobile browser, those websites not optimized for mobile devices look a little weird, as if the regular website font size and image dimensions were decreased to fit on a mobile screen. (See <u>Figure 6-9</u>.) By contrast, websites optimized for mobile devices have fonts that are readable, images that scale to the mobile device screen, and a vertical layout suitable for a mobile phone.



<u>FIGURE 6-9:</u> Left: starbucks.com not optimized for mobile. Right: starbucks.com optimized for mobile.

Building mobile web apps is done using HTML, CSS, and JavaScript. CSS controls the website appearance across devices based on the screen width. Screens with a small width, such as those on phones, are assigned one vertically based layout, whereas screens with a larger width, like those on tablets, are assigned another, horizontally based layout. Because mobile web apps are accessed from the browser, and are not installed on the user's device, these web apps can't send push notifications (alerts) to your phone, run in the background while the browser is minimized, or communicate with other apps.

Although you can write the HTML, CSS, and JavaScript for your mobile web app from scratch, mobile web frameworks allow you to develop from a base of pre-written code, much like the frameworks for

programming languages I mention earlier. These mobile web frameworks include a collection of generic components that are reused frequently, and allow developers to build, test, and launch websites more quickly. Twitter Bootstrap is one such mobile web framework.

Building native mobile apps

Native mobile apps can be faster, more reliable, and look more polished than mobile web apps, as shown in Figure 6-10. Built using Java for use on Android devices, and Objective-C or Swift for use on Apple devices (iOS), native mobile apps must be uploaded to an app store, which may require approvals. The main benefit of an app store is its centralized distribution, and the app may be featured in parts of the app store that can drive downloads. Also, since native mobile applications are programs that are installed on the mobile device, they can be used in more situations without an Internet connection. Finally, and most importantly, users appear to prefer native mobile apps to mobile web apps by a wide margin, one that continues to increase.





FIGURE 6-10: Left: facebook.com native mobile app. Right: facebook.com mobile web app.

Native mobile apps can take advantage of features that run in the background while the app is minimized, such as push notifications, and communicate with other apps, and these features are not available when creating a mobile web app. Additionally, native mobile apps perform better when handling graphics-intensive applications, such as games. To be clear, native mobile apps offer better performance and a greater number of features, but they require longer development times and are more expensive to build than mobile web apps.

There is an alternative way to build a native mobile app — a hybrid approach that involves building an app using HTML, CSS, and JavaScript, packaging that code using a "wrapper," and then running the code inside a native mobile app container. The most popular "wrapper"

is a product called PhoneGap, and it recognizes specific JavaScript commands that allow access to device-level functionality that's normally inaccessible to mobile web applications. After one version of the app is built, native mobile app containers can be launched for up to nine platforms, including Apple, Android, BlackBerry, and Windows Phone. The major advantage to using this hybrid approach is building your app once, and then releasing it to so many platforms simultaneously.



Imagine you knew how to play the piano, but you wanted to also learn how to play the violin. One way you could do this is to buy a violin and start learning how to play. Another option is to buy a synthesizer keyboard, set the tone to violin, and play the keyboard to sound like a violin. This is similar to the hybrid approach, except, in this example, the piano is HTML, CSS, and JavaScript, the violin is a native iOS app, and the synthesizer keyboard is a wrapper like PhoneGap. Just like the synthesizer keyboard can be set to violin, cello, or guitar, so too can PhoneGap create native apps for Apple, Android, and other platforms.

WHAT ABOUT ALL THOSE OTHER PROGRAMMING LANGUAGES? (C, JAVA, AND SO ON)

You may wonder why so many languages exist, and what they all do. Programming languages are created when a developer sees a need not addressed by the current languages. For example, Apple recently created the Swift programming language to make developing iPhone and iPad apps easier than Objective-C, the current programming language used. After they're created, programming languages are very similar to spoken languages, like English or Latin. If developers code using the new language, then it thrives and grows in popularity, like English has over the last six centuries; otherwise, the programming language suffers the same fate as Latin, and becomes a dead language.

You may remember languages like C++, Java, and FORTRAN. These languages still exist today, and they're used in more places than you might think. C++ is preferred when speed and performance is extremely important, and is used to program web browsers, such as Chrome, Firefox, and Safari, along with games like Call of Duty, and Counter Strike. Java is preferred by many large-scale business, and is also the language used to program apps for the Android phone. Finally, FORTRAN is not as widespread or popular as it once was, but it is popular within the scientific community, and it powers some functionality in the financial sector, especially at some of the largest banks in the world, many of which continue to have old code.

As long as programmers think of faster and better ways to program, new programming languages will continue to be created, while older languages fall out of favor.

Chapter 7

Socializing with Facebook and Twitter

IN THIS CHAPTER

- » Finding and installing Facebook and Twitter
- » Creating a Facebook account
- » Adding Your Facebook account to Settings
- » Customizing Facebook settings for your iPhone
- » Creating a Twitter account
- » Adding your Twitter account to Settings

Social media apps keep us in close digital contact with friends and family, and have become as important a digital staple as email, if not more so for some folks. Facebook and Twitter are two of the most popular social media apps, and therefore we focus on obtaining and setting up these apps for use with your iPhone in this chapter.

Facebook is a platform for sharing posts about your life, with or without photos and video, and allows you to be as detailed as please in your posts. Twitter, on the other hand, is meant to share information in quick bursts, allowing users on 140 characters in which to alert you to their latest comings and goings.

Finding and Installing Facebook and Twitter

There are a couple of ways to install Facebook and Twitter on your iPhone:

- **»** You can install the apps from within the Settings app.
- **>>** You can find the apps in the App Store and download them from there.

To install from within the Settings app:

- 1. Open the Settings app.
- 2. Scroll down to either Twitter or Facebook (shown in <u>Figure 7-1</u>), and tap the app you want to install.
- 3. Tap the Install button, shown in <u>Figure 7-2</u>.
- 4. Enter your Apple ID and password when prompted.
- 5. The app will install on your Home screen (whichever one has the room for it).

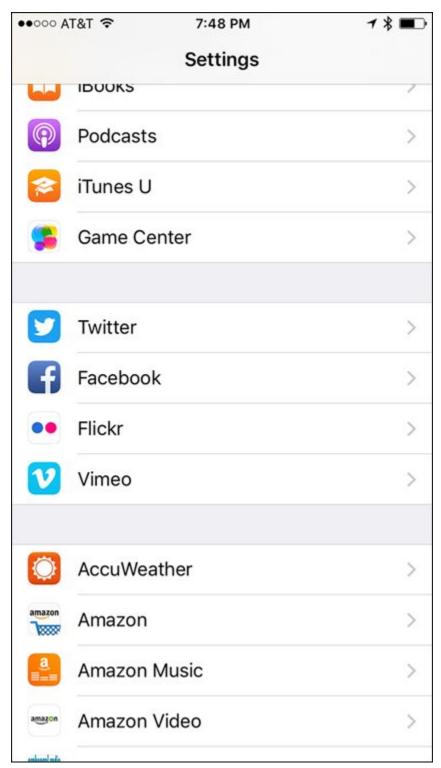
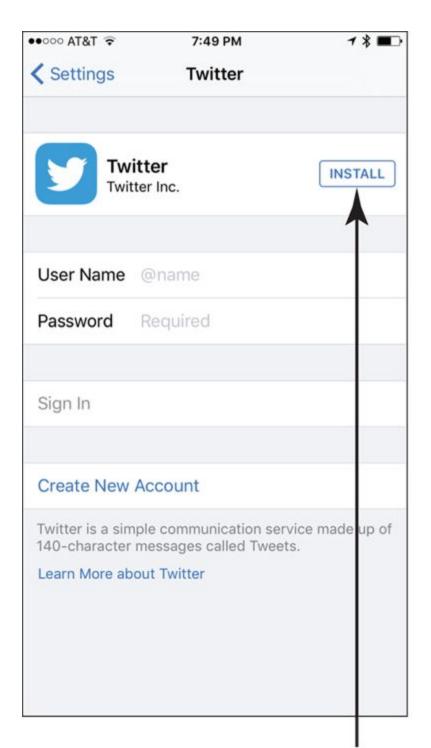


FIGURE 7-1



Tap Install



You can also install Flickr and Vimeo apps in the same manner as described for Facebook and Twitter. Both are available in the Settings app.

To install the app using the App Store, follow these steps:

- 1. Open the App Store.
- 2. Tap the Search tab at the bottom of the screen.
- 3. Tap the Search field and enter either Facebook or Twitter.
- 4. Tap the Install button, and enter your Apple ID and password when asked for them.



it, you will instead see a cloud with downward-pointing arrow (as seen in <u>Figure 7-3</u>); tap that to begin the download.

The app will download and install on one of your Home screens.

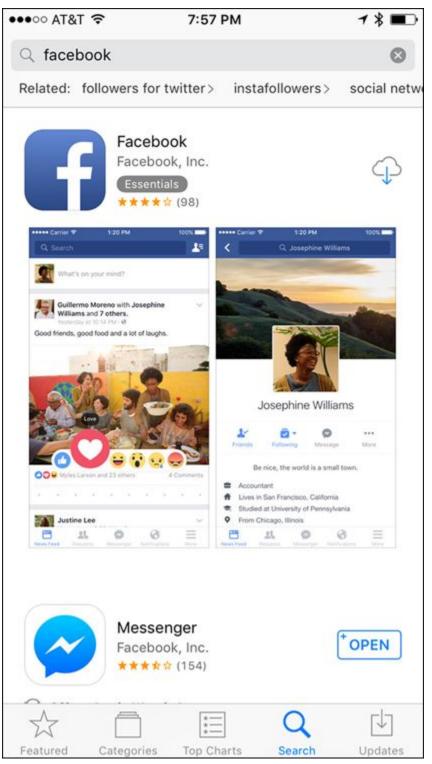


FIGURE 7-3

Creating a Facebook Account

You can create a Facebook account in more than one way: You can do so through the Facebook app you've downloaded, or you can go through the Settings app.

To create an account in the Facebook app, follow these steps:

- 1. Launch the newly downloaded Facebook app.
- 2. Tap the Sign Up for Facebook option near the bottom of the screen, as seen in <u>Figure 7-4</u> (you almost need binoculars to see it).
- 3. Tap Get Started and walk through the steps to complete the registration of your account.
- 4. When finished, you'll be logged into your account in the Facebook app.

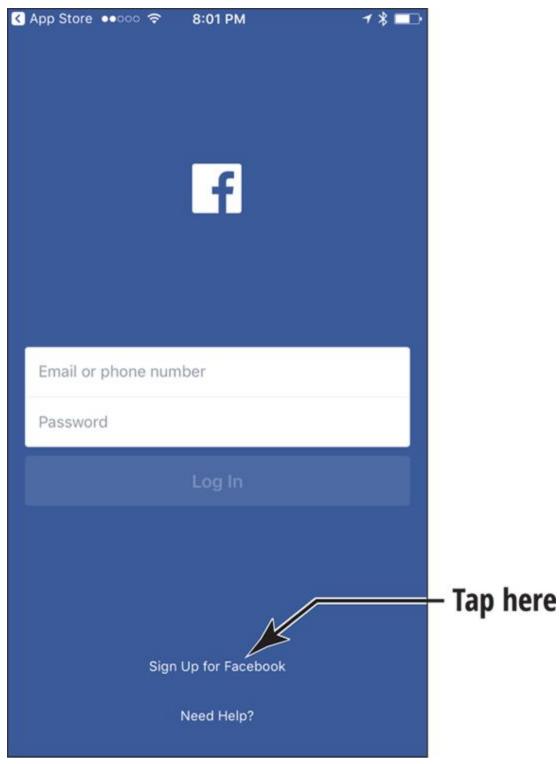


FIGURE 7-4

To create a Facebook account from the Settings app, follow these steps:

1. Open the Settings app and tap Facebook.

- 2. Tap the Create New Account option, shown in <u>Figure 7-5</u>.
- 3. Enter the information required in each of the prompts and create your new account.

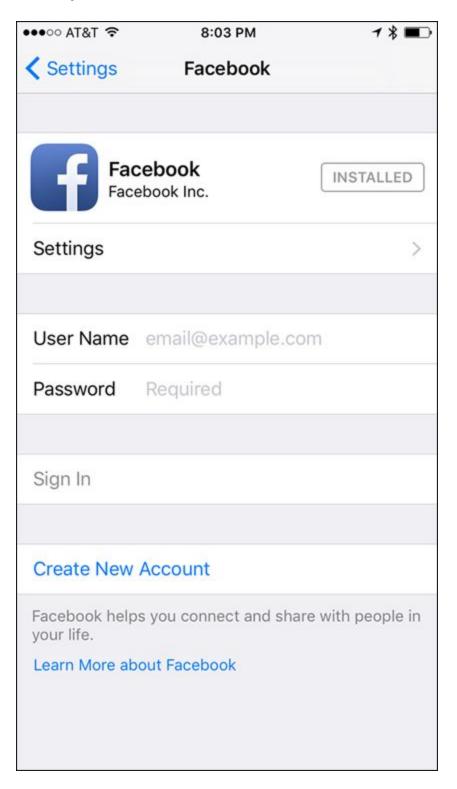


FIGURE 7-5



You may also create a Facebook account by visiting its website at www.facebook.com.

Adding Your Facebook Account to Settings

If you already have a Facebook account, you'll want to enter its information on your iPhone so you can use Facebook throughout multiple apps to share your life events. For example, you can share photos straight from the Photos app instead of loading the pictures in the Facebook app. It just streamlines the process of sharing items to add your account information in Settings.

- 1. Open the Settings app.
- 2. Find and tap Facebook.
- 3. Tap the User Name field and enter your Facebook account username (see <u>Figure 7-6</u>).
- 4. Tap the Password field and enter your Facebook account password.
- 5. Tap Sign In to add the account to your iPhone.

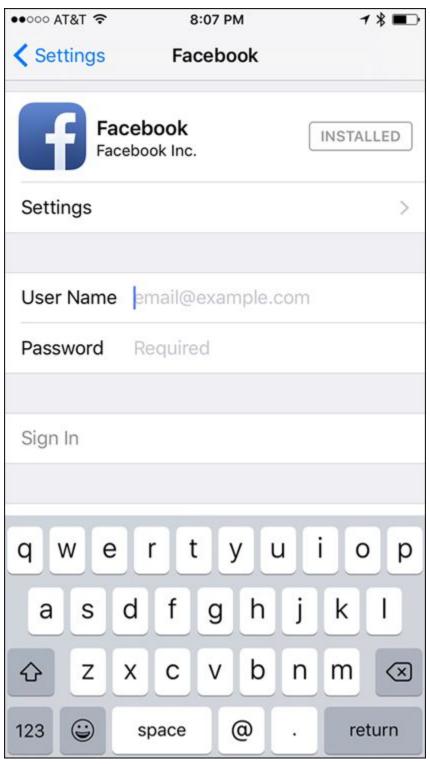


FIGURE 7-6

Customize Facebook Settings for Your iPhone

Facebook has a few settings that you'll want to configure when entering your account information into the Settings app.

- 1. Open the Settings app and tap Facebook.
- 2. Tap Settings.
- 3. Toggle the switches, seen in <u>Figure 7-7</u>, On (green) or Off for the following options:
 - **Background App Refresh:** This allows Facebook to refresh its content in the background, or put another way, when you aren't actually using it.
 - **Cellular Data:** Turning this On allows Facebook to refresh itself and allows you to post updates when you aren't connected to a Wi-Fi network.
 - **Upload HD:** If you record HD video on your iPhone, this setting allows you to upload that high-quality video to Facebook. Keep in mind that HD video files are very large files and will therefore consume vast quantities of your cellular data allotment, as well as take much longer to upload.



FIGURE 7-7



a bit of photos and videos, consider toggling the Cellular Data switch to Off. If you have an account with a cellular provider that provides a limited amount of data, you could be in danger of exceeding your data allotment if you're a heavy Facebook user.

Creating a Twitter Account

Create a Twitter account in the same ways you create a Facebook account: through the Twitter app or through the Settings app.

To create an account in the Twitter app, follow these steps:

- 1. Open the Twitter app by tapping its icon.
- 2. Tap the Sign Up button near the bottom of the screen, as illustrated in <u>Figure 7-8</u>.
- 3. The app will ask you a series of friendly questions to help you create your account.
- 4. When you're done finished, the app will log you into your new account.

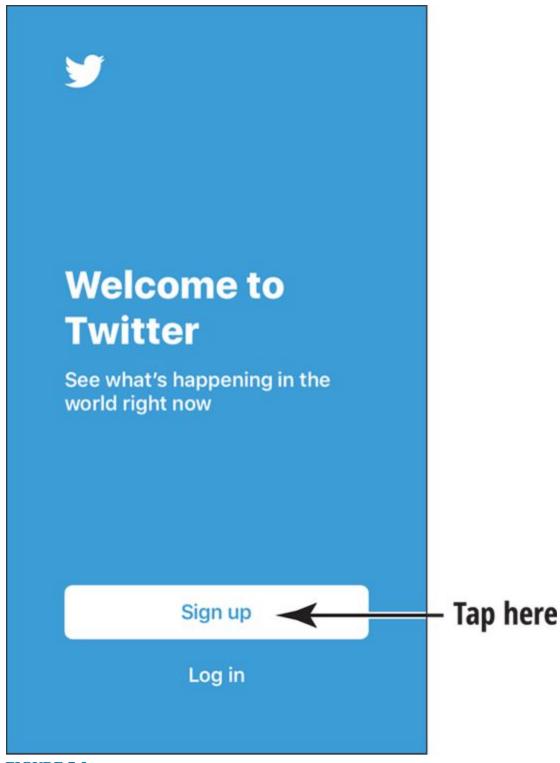


FIGURE 7-8

To create a Twitter account from the Settings app, follow these steps:

1. Open the Settings app and tap Twitter.

- 2. Tap Create New Account, shown in <u>Figure 7-9</u>.
- 3. Enter the required information to create your new account.

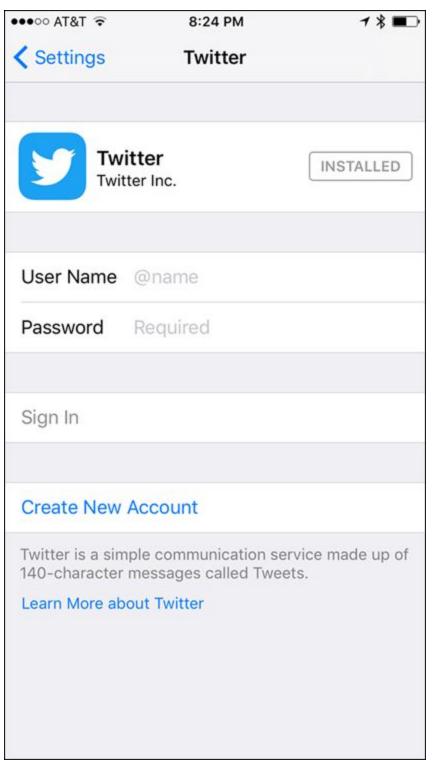


FIGURE 7-9



Just like Facebook, you can create an account on the Twitter website at www.twitter.com.

Adding Your Twitter Account to Settings

Should you already have a Twitter account, it's easy to add your user name and password in the Settings app. Exactly like Facebook, this just allows you to quickly send Tweets from within other apps, such as Photos or Notes.

- 1. Open the Settings app.
- 2. Find and tap Twitter.
- 3. Tap the User Name field and enter your Twitter account username, as seen in <u>Figure 7-10</u>. Note how the @ symbol is automatically placed for you.
- 4. Tap the Password field and enter your Twitter account password.
- 5. Tap Sign In and you're ready to tweet from your iPhone's apps.

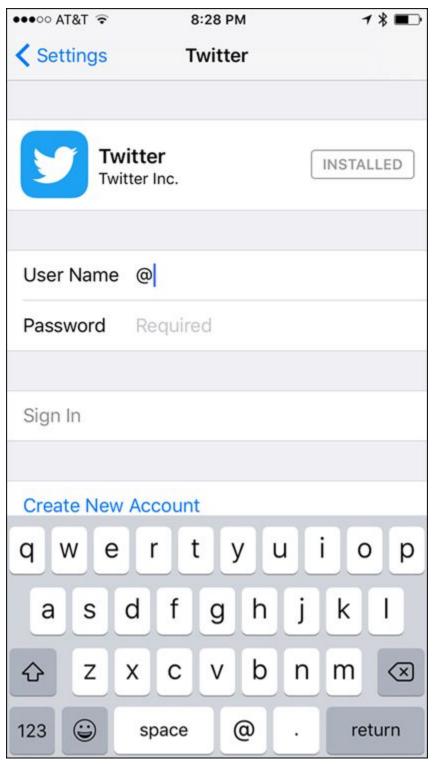


FIGURE 7-10

Chapter 8

Shooting Fun Stuff with Your GoPro

IN THIS CHAPTER

- » Wearing your GoPro well
- » Capturing thrills at the amusement park
- » Shooting action of your favorite sports
- » Making your own action
- » Flying a drone

Once upon a time, those edge-of-your seat extreme action scenes were best left to the professionals. Compelling, yet risky situations like base jumping, extreme biking, or shooting from a high-speed roller coaster required a certain skillset for capture — with a good part of that skillset being the ability to keep yourself out of a body cast. Even slightly less intense action like mountain biking or skateboarding posed a potential threat to your physical safety, not to mention the equipment. Adventurous shooters often left behind a trail of smashed cameras, shattered lenses, and broken dreams.

GoPro changed the game, allowing you to capture thrilling situations while keeping you and the camera safer. With the right flair, you can introduce excitement to your movies and photos, without necessarily putting yourself in harm's way. By no means does that give you license for recklessness, especially where your life is concerned. It's just that some situations look daring, yet are no longer as dangerous to shoot because you're not attached to the camera as much. Simply put, mounting the camera and controlling it from a distance can keep you and the camera safe. Other situations are bit more docile, so you can hold or wear the camera, while still providing a thrill for the audience.

Considering the Camera a Fashion Accessory

Wearing a GoPro is latest rage in fashion, said no one, ever. But what these wearable mounting options lack in fashion sense, they make up for in practicality. While you can handhold your GoPro, it's simply better to mount it when shooting movies or taking pictures. Handholding your GoPro isn't much different than walking your cat on a leash. Yeah, it's possible, but there's something unnatural about it. Instead, cats do better when untethered from your hand, and so does a GoPro. This mighty little camera was meant for mounting, and one of the best way to do it is by wearing it.

Is that a camera on your head?

It's highly unlikely that wearing the head strap lands you on the cover of GQ or Vogue, yet it does provide the ultimate perspective for a point-of-view (POV) shot. Thanks to the camera being so close to your eye-line every time you turn, pivot, or tilt the viewer can feel what you feel and see what you see. So, while resembling something between a spelunker and a walking bipod, you can capture each situation with a compelling perspective, as shown in <u>Figure 8-1</u>.



FIGURE 8-1: This nothing-but-net shot was made possible by wearing a GoPro on a head strap under the basket and just looking up at the action.

Here are few tips for doing it as gracefully as possible:

- **>> Walk at a steady pace:** Even, level strides lead to smooth, professional looking capture, while the not-so-even ones scream to the viewer that you have a camera stuck to your head.
- **» Fit it comfortably:** The head strap is adjustable, so the better it fits, the better your chances for stable video, not to mention to also keeping it from falling off your head. (Taking the time necessary to fit the attachment comfortably is of particular importance if it is to be worn over extended periods of time.)
- **» Limit jarring moves:** While we're used to moving our heads rapidly, at times, it doesn't always translate to video, unless of course the goal was to make people queasy. Instead, pretend you're in slow motion and make slow, deliberate motions as you change camera perspective.

Wearing the camera in a crowd

When it comes to using a camera in close quarters, GoPro seems perfect for shooting in a New York City apartment. Because it offers the perfect combination of diminutive size, ultra-wide-angle lens, and fashionable wear-ability — all right, maybe *fashionable* is a stretch — makes GoPro the perfect camera for capturing subjective perspective on the move as you navigate through a sea of humans. Standing in lines, meandering through a crowd, or taking a walk on a busy city street can all produce impressive imagery when wearing your GoPro camera on the head strap, Chesty, or using The Strap.

Here's some advice when wearing the camera around a lot of people:

- **>> Use the app to monitor:** While personal perspective is charming, accurate composition is sublime. That comes from using the screen as an aid to effectively navigate the shoot, control settings, and adjust the angle of view.
- **>> Watch your step:** Since it's unlikely you'd want to trip over a curb, bump into someone, or have a pedestrian collision, it's important to be careful when you're capturing a scene in the middle of a crowd. So, walk carefully, and keep an eye on where you're going when watching the monitor.
- **>> Keep a safe distance:** Not just because you want to avoid contact with other humans, but also because being too close to the subject can affect focus, and not in a good way.
- **» Chest or head:** Sometimes you get the orchestra, and other times, you get the balcony. You know, top and bottom. Wearing a GoPro on your head or chest is the same way. Each has its own charm with a specific purpose. Wearing the camera on your head lends itself nicely to those point-of-view shots with twists, turns, and peeking inside places. Wearing a GoPro on your chest is more stable and better for linear walks through a crowd. One problem, though, is that it points slightly downward.

Capturing life behind the scenes

Sometimes working the crowd relies less on walking the line and more about making the viewer feel privy to something that seemed off-limits. Take them on a walk-through of a house you're looking to sell,

backstage at a rock concert, or on the field for the festivities of a sporting event (see <u>Figure 8-2</u>). All these situations come to life when you depict them from your point-of-view. It makes the audience feel like they're walking through the scene.



FIGURE 8-2: Wearing the camera on a Chesty provides this intimate view of the field during a firework display.

Consider the following:

- **Be deliberate:** Move slowly through the scene so that the viewer can absorb the action. If you're shooting a real estate video, walk slowly so that the viewer can see the key features of the dwelling.
- **>> Get up close and personal:** Walk closer to the more interesting parts of the scene, and stay on them to help the viewer know those parts are important. For example, if you're backstage at a concert, meandering through the circus atmosphere before the show can make an interesting scene. Watching the guitarist tune up, the band playing before an empty venue at a sound check, or recording the drummer gorging at craft services.

Not everyone has access to all situations, yet there's always something that you can shoot. Here are a few places you can try:

- » Construction sites
- » Real estate viewings
- » Sporting events
- » Amusement parks
- >> Museums and galleries
- » Family picnics

Strapping the camera on a limb

The Strap is the newest wearable mounting accessory that fits over any of your appendages. Wear it on an arm or leg so that you can capture uniquely immersive POV footage, capturing the scene, literally *hands free*. This comes in handy, no pun intended, for situations that demand the attention of your hands, like riding a horse, swimming underwater, snowboarding, and other activities. The mount is fully adjustable with a 360° rotation and tilt for maximum control.

Shooting on Amusement Park Rides

Taking your GoPro to the theme park lets you relive the thrill of screaming your head off without any of the motion sickness that sometimes goes with it. It sounds like a win-win when you're out there recording the energy of a roller coaster, the exhilaration of a water ride, the simple aesthetic of a carousel ride, or the freedom of the chaired swing ride, as shown in Figure 8-3. Each situation provides different levels of adventure, albeit one being more dulcet than the others. It's the last one if you weren't sure, and one of the most interesting.



FIGURE 8-3: By securing the camera with the Head Strap and setting the camera on Burst, it was possible to enjoy the ride and capture this still image.

Consider the following when recreating the magic of your day at the amusement park:

- **Putting safety first:** While each attraction offers its type of thrill, you should always err on the side of caution by abiding by the rules of the ride. Keep your hands and feet inside, and don't wear the camera in a way that affects any restraints.
- **>> Loving the POV shot:** Effectively capturing your point of view lets you re-create the excitement of the ride as your eyes saw it. Both the head strap and Chesty let you subjectively capture this view. Both mounts are effective. Wearing the camera on your head better matches your eye line, creating a more natural perspective. Wearing it on your chest produces a lower angle, as it naturally sits downward.
- **» Capture your expression:** Turn the camera around and record the look on your face as you negotiate the ride, or more appropriately, capturing the most fun kind of selfie. All right, it doesn't have to be you. Regardless of whose expression you capture, you must be careful where you mount the camera in the name of safety. Common sense dictates not mounting the camera on the ride itself.
- **» Shoot photos on Burst:** When shooting movies, you can start recording before the ride takes off, but still photography is more challenging. So instead of trying to shoot single frames, it's best to set the camera on Burst. It can capture up to 30 pictures per second.

Exaggerate the ride experience

Like the fresh taste of a piece of bubble gum, the average roller coaster ride lasts around two minutes. And while you always wish both lasted longer, it's doubtful your audience feels the same way about your footage. Perhaps, the axiom, *less is more*, acts more like the rule when it comes to how much you show the viewer. Shoot the entire experience, but just show a sliver of the action in the movie.

Here are some suggestions:

Time-Lapse: Even the most moderate interval setting for a time-lapse can make the action appear 15 times faster than normal. That

- 40-mph ride can appear as if it's moving at 600 miles per hour, rendering it like hyper-drive.
- **Slow Motion:** What is more ironic than reducing the super-fast activity of a ride moving 40 miles per hour to one that creeps at a snail's pace. When using this mode, you want to shoot at the highest possible frame rate. And if you shoot at 720p, you can use a frame rate of 240 fps.
- **Play in reverse:** While you can't do it while shooting, it's certainly possible during playback. It makes for a fun viewing experience when you capture someone diving into the pool head first to coming out of the water feet first to the diving board. Or a busy street scene filled with pedestrians walking backward.

Mastering each attraction with the right panache

Common sense dictates that your approach to capturing the thrill of a heart-stopping ride is not the same as shooting something more graceful. Roller coasters and carousels are as distinctly different as oil and vinegar, and so are the techniques for effectively capturing them. Both collectively make your movie interesting, yet are completely different in every way, so each requires a different approach for capture.

Having fun on the roller coaster

When it comes to shooting a roller coaster, GoPro lets you relive the oohs and ahs of the deep drops, sharp turns, and your own falsetto screams. Capturing those brief moments is as simple as wearing the camera on the ride and pressing record to re-create a subjective perspective of the thrill. Sitting in the front of the ride provides an unobstructed view, as seen in Figure 8-4, but that's not to say you can't get great footage from the middle or even the rear.



FIGURE 8-4: The head strap provides a clear perspective at the top of this roller coaster.

Let's look at the different kinds of shots.

- **POV:** Showing the ride as you see it by wearing the camera on your chest or mount it close to your own perspective using a head strap, Chesty, or The Strap (use it on your arm, wrist, or leg). You can show a subjective view, people raising arms in front of you, or looking upward.
- **» Selfie:** Turn the camera around and allow the viewer to read the action from your expression, including the shrieks and screams.
- **» Working the angles:** Just because you're not on the ride doesn't mean you should put the camera away. Capturing the ride as a bystander lets you create an objective wide shot that works out for editing. The wide, medium, close-up approach for shot sequence works well, especially when the goal is editing a cohesive package.

When on the rides, there are some other issues to consider:

- **» Being careful:** Unfortunately, it's not always safe to bring your camera on a roller coaster or even always allowed by officials, so you must proceed with caution. If you can bring the camera on the ride, be sure it's firmly mounted and does not fly away. You can lose it, break, or worse, hurt someone.
- **>> Abrupt movement:** The rides move very fast and something comes to a screeching halt. Literally, you've heard that sound before. So, make sure the camera is secure or the abrupt stop can knock the camera out of your hand, and losing it is not the worst thing that can happen you can hurt someone.
- **» Privacy issues:** I'm going to go out on a limb here, but most people don't like being part of a movie they were not asked to be in. That goes double when they're at their most visually vulnerable, replete with bad hair and angry scowl. It's better to record people whom you know friends and family to avoid any issues. Of course, you can always ask for contact information and get permission too.
- **» Shoot at a higher frame rate:** Shooting in 1080p with a frame rate of at least 60 fps will help assure the action is crisp.

Shooting water rides

Whether sliding down on a raft, a loglike Flintstones car, or with your own body, water rides are like roller coasters under really wet conditions. Capture your point-of-view as you're screaming joyfully — or panicky — all the way down. It's pretty much the same idea as shooting on a roller coaster, with one caveat: the water part. Electronics are allergic to H2O and that makes it challenging at times to see what you're seeing since you can't use your app or have access to the camera, even if there's a screen. But these problems are easily fixed when you take heed of the following.

» Secure the camera: Holding the camera under normal circumstances is a tricky endeavor. Moving makes it harder, and

- doing it under wet circumstances makes it even trickier. Try to wear the camera, and if you can't, hold it tight.
- **>> Keep the lens clean:** Water droplets on the lens are an occupational hazard, and can rob the image of sharpness or image quality. So, give it a wipe every so often.
- **>> Have faith:** You can't use the app (unless you want to short-circuit your smartphone), so just point the camera in the right direction and hope for the best.

MAKING LONG LINES WORK FOR YOU

Theme park attractions and long lines go together like hot dogs and a stomachache. Both go hand in hand, and oddly enough, waiting in line is something that we secretly admire. Say what? Yes, it's true, numerous studies have shown the longer we wait for something, the more we appreciate the outcome. Anyway, that makes the waiting in line a big part of the thrill, so why not capture it as part of the movie.

Capturing the carousel experience

The carousel does not provide quite the same thrill as a roller coaster — unless you find individually painted ponies thrilling — but it's still one of the most photographed places in an amusement park (see <u>Figure 8-5</u>). Due partially to the timeless elegance of each carousel, not to mention being the perfect vehicle to capture small children and everyone else who doesn't like big rides.



FIGURE 8-5: Thanks to its ultra-wide view, you can capture some great shots on a carousel with your GoPro.

Here are few aspects to consider:

- **>> Wear the camera:** Wearing your GoPro as the ride goes round and round and up and down makes for an interesting movie. And you're doing nothing more than wearing the camera as an accessory.
- **» Move with the ride:** The nature of a carousel means that you're always on the horse in back and the horse in front. You will never catch up to the horse in front or lose your lead to the horse behind you. But the action outside of the ride, as well as the up-and-down nature of the ponies, does change, allowing you to capture action without leaving your seat, er saddle. If you're standing and walking, then all bets are off.
- >> Focus on the horse: That's meant both figuratively and literally. It's not always a horse; sometimes it's a tiger or another exotic animal. While you can shoot other aspects, the painted horse, for this discussion, is the main attraction. Their unique colors and adornments make each one visually unique, so when you add a little motion ... voilà!

Round and round on the Ferris wheel

Colorful, circular, and colossal (at times), the Ferris wheel is one of the most iconic symbols of an amusement park. Maybe it's not as thrilling as other action rides — unless, of course, if you're afraid of heights — but it does make for visually interesting movies and pictures (see <u>Figure 8-6</u>).



FIGURE 8-6: View from the Ferris wheel.

Consider the following:

- **» Long exposure still image:** All it takes is a two-second exposure while the ride is in motion to produce beautiful streaks of color. Try to make sure you fill the frame with the entire ride, but that should be no problem with your GoPro.
- **Time-Lapse:** Position the camera nearby and set an interval of a half-second or more to record the ride's rotation as colorful streaks. Don't be shy capturing the ride from afar.
- **» Movie:** Capture the ride from a distance or shoot from your perspective on the ride itself.

Recording Sporting Events

Shooting sports takes on a different life when capturing action scenes with your GoPro. Unlike shooting from a distance with a dSLR and a long lens, the GoPro requires far more intimacy with subjects; in other words, you need to be very close. That means sitting in Section 5 Row 20 of an arena or stadium will more than likely yield better shots of people's heads than any sort of decipherable action. That means with few exceptions, it's not very good for capturing organized sporting events. Conversely, it can work beautifully with the not so organized variety. Activities like a pick-up basketball game, volleyball at the beach, or whiffle ball at a family picnic can produce content for your own version of Sports Center, or something viral on YouTube.

Bringing your camera to a baseball or football game can have a lot of restrictions, yet there are no rules prohibiting you from wearing a camera at a pick-up game with your friends to get some cool footage. You don't even have to concentrate on the game as you can just shoot random action that makes for impressive movie clips, or just horse around (see Figure 8-7).



FIGURE 8-7: Sometimes it's as much fun to capture things like taking the ball for a spin.

Here are some examples of capturing sporting events with your GoPro:

- **whiffle ball:** That entry-level game with the plastic yellow bat and tricky vented ball can make for pretty cool movies and pictures, especially since the ball curves like no other and a hard-hit ball doesn't travel very far. Wear the camera with a Chesty or on a head strap while pitching, fielding, or hitting. And speaking of the latter, you can mount the camera on the bat using a handlebar mount to capture the bat and ball making contact from inches away.
- **» Basketball:** It's a pretty rough sport to wear the camera, but that doesn't mean cool action shots are off the table. Everybody loves ball tricks (see <u>Figure 8-7</u>). Maybe you want to mount the camera on the backboard, or stand underneath it to capture that "nothing but net" feeling, as shown previously in <u>Figure 8-1</u>.

- **» Football:** It's strongly advised not to wear a camera during the game, unless you want to be flagged for unnecessary roughness to the camera. But that doesn't stop you from capturing action from the sidelines. Whether it's a friendly game of two-hand touch or hard-hitting game of smashmouth football, mount the camera on a goal post or position it inches from the field to get up close and personal. For practice situations, you can use the helmet mount or The Strap on your arm or wrist to follow the action or put it on your leg to capture a kick.
- **Bowling:** Despite the stellar physique of bowlers, league bowling can be an exhilarating sport. All kidding aside, it's still a fun activity to capture in a variety of ways. You can wear the Chesty and capture the release of the ball on the lane or The Strap on your arm to show that perspective.
- **Solf:** Watching golf on television rarely lives up to the excitement of actually playing. Regardless of the emotional toll it takes on you, or more accurately the clubs, you can capture some pretty cool stuff with your GoPro in a variety of ways, including wearing the camera in some way, mounting it directly the club, or positioning it nearby to capture teeing off or making a putt (see Figure 8-8).
- **>> Volleyball:** Create exciting imagery playing volleyball the next time you're at the beach or a family picnic. Mount the camera to the post, position it high above the game, or wear it (at your own risk) to capture some fun action, especially if you're playing on the beach.



GoPro, Inc.

FIGURE 8-8: Shooting through the basket makes an otherwise boring composition look more interesting.

GoPro and the Water

Since a powerful waterproof camera sounds like something out of a fairytale, let's begin by saying once upon a time most cameras were deathly allergic to water. And while you could also use an expensive waterproof housing on your video camera or dSLR, all it took was a little moisture for your equipment. But GoPro with its waterproof housing doesn't shriek or melt. In fact, GoPro and water go together better than movie theater popcorn and imitation butter.

Using GoPro at the pool

The endless possibilities for capturing great movies and pictures around the backyard watering hole could make Forest Gump's mouth spit out a litany of similes. Whether it's as serious as capturing junior's practice for an upcoming swim meet, the spontaneity of a bonkers pool party, or the serenity of an underwater portrait, GoPro should be in demand around the pool.

Here's what you can do:

- **» Capture action in the pool:** Not that long ago bringing a camera to the pool could be misconstrued as a sign that there was a new camera in your future. But with GoPro you can easily record the frolicking and splashing, in and around the pool area.
- **» Mount it to yourself:** Wear the camera on your head, your chest, or hold it while walking around the pool, swim under the water, or hold the camera for practical control. If you choose the latter, make sure that the camera can float, either by mounting to The Handler or having a Floaty on it.
- **» Shoot the subject hitting the surface:** Capture people breaking the plane of the water as they jump or dive in. Position yourself near the point of entry, even under the water.
- **» Capture underwater activity:** Whether it's a surrealistic portrait of your significant other, your daughter holding her nose under the water for the first time, children swimming underwater (see <u>Figure</u>

<u>8-9</u>), or a unique portrait, you can create beautiful images beneath the surface.



FIGURE 8-9: Kids having fun beneath the surface of the water are no problem for GoPro.

Shooting water sports

Marco Polo takes on new meaning when GoPro is in the pool showing the chase. The counting, swimming, and the calling out of the name of the game all make for a fun movie at the end of the day. The same holds true for other exhilarating water sports, such as volleyball, basketball, or underwater races. Basically, anything you can play in the water that's competitive is a good match for GoPro.

While many of these activities are distinctly different, here's what you should consider:

» Visualize what you want: There's an old saying that goes "You can't get what you want, until you know what you want." That applies to many situations you will capture with your GoPro,

- especially here. Think about how you want the audience to see your movie, and capture it with that intent.
- **» Make sure the camera can float:** Seems like a no-brainer, but you would be surprised. All it takes is a Floaty or the Floating Hand Grip to keep your runaway camera on the surface.
- **» Don't be afraid to get under the water:** Some of the coolest scenes are captured below the surface. Just make sure your housing is watertight.

Take GoPro to the beach

GoPro cozies up as nicely at the beach as a blanket and an umbrella. It's small, lightweight, and fits anywhere, so it's not a burden to lug around. And the housing protects the camera by keeping out water, sand, and other debris, making it easily accessible to capture movies and stills at a place you always had to be more careful.

Here are some things to keep in mind when you bring your GoPro camera to the beach:

- **>> Fun on the sand:** Throwing a Frisbee around, running in surf, making sandcastles, playing volleyball, and anything else you do at the beach are perfect situations to capture, without fear of sand or water damage.
- **>> Wave jumping:** Wear the camera as you negotiate each wave with awkward precision. Just be careful you don't drop the camera or it doesn't break free; otherwise it will end up in Davey Jones's locker.
- **» Underwater scenes:** Going underwater to make movies or photographs of the seascape is easy with your GoPro. Just make sure you have something that allows the camera to float, or it will be gone forever.
- **Surfing:** There's a special mount designed specifically for your board, shown in <u>Figure 8-10</u>, so that you can hang ten while yelling "cowabunga," or screaming at a wave, or sometimes for your life.

» Body surfing: Wear it while riding the board or mount the camera to the board so you can capture the experience.



GoPro, Inc.

FIGURE 8-10: You can easily mount your GoPro with the surfboard mount.

Using GoPro on a personal watercraft

The personal watercraft resembles the offspring of a motorcycle and a powerboat. Known more familiarly by a bunch of brand names like Sea-Doo, Wave Runner, or Jet Ski, these water scooters are thrilling to ride and just as exciting to capture with your GoPro.

Here's what you can do:

» Mount on the vessel: Depending on the model, you can use the appropriate mount to provide a subjective view of breaking waves. Just use common sense and place it where it doesn't interfere with your safety or anyone else's.

>> Wear it: Probably the best way to capture those special moments on the water is to wear the camera. Put on the Chesty for a subjective view for commandeering the vessel. It does have a slightly downward view, acceptable under certain conditions. You can also use the head strap, though there's a chance it can fly off your head, leaving you strapped for a camera. And if it happens there, it's even more of a risk while handholding — unless your goal is losing the camera rather than capturing thrilling footage.

Movies on a boat, movies in the moat

Whether you're navigating a kayak through marshlands, capturing the thrill of an outrigger canoe hitting that massive wave, or zipping around the bay in a motorboat, your GoPro is up for the challenge, transforming nautical time into compelling movies and photographs (see <u>Figure 8-11</u>).



©istockphoto.com/piola666 Image #37074252

FIGURE 8-11: Point-of-view shot.

Here are some ideas for positioning the camera:

- **Mount it:** Depending on the boat, there are numerous places you can mount the camera. These include any smooth (and clean) surface for the suction cup, various bar mounts, or the more permanent adhesive mounts.
- **Whold it:** It's a bit risky, especially when hanging the camera over the edge of the boat, but you can control the composition more precisely than stationary mounts. Make sure you're using some flotation accessories to be on the safe side. And the safe side for a camera that falls in the water is the side above the surface. Tethering the camera to the vessel, or even yourself, can also help.
- **>> Wear it:** Channel your inner Leonardo DiCaprio as you stand on the bow screaming "Kink of the oiled," or something like it with the camera on your body, preferably with the Chesty.

Making fishing interesting

Regardless of your reason — you know, food or sport — angling over a watering hole takes on new meaning when attaching your GoPro to your fishing pole. Using the Sportsman mount lets you capture those great moments on the water from a pole's-eye view (see <u>Figure 8-12</u>). Now you can finally record that moment when you reel in the big one. The only problem is that you can't exaggerate the size of the one that got away, unless you got it on video.



GoPro, Inc.

FIGURE 8-12: GoPro lets you get up close and personal on the high seas.

Consider the following when capturing your day on the water.

- **» Mount the camera:** Put GoPro on your fishing pole using the Sportsman mount, so you can capture the pole at work.
- **>> Wear the camera on your head:** Record the experience like your eyes would see. You know, stuff like casting, reeling, or reeling in the big one.
- **>> Use an extension pole:** It's the fish's version of the selfie stick. Hold the camera over the action, almost like you would a net for a unique view.

All Kinds of Bicycling

When it comes to one of the most accessible places for capturing action, it's hard to imagine a better combination than a GoPro and a bicycle, other than sunscreen and a scorching hot day at the beach. Whether you're navigating a mountain trail, going on a scenic tour, or riding one of those city rentals, bicycling is one of the more popular activities you can capture with your GoPro, and that's meant in both the literal and figurative sense. And unlike vanilla ice cream, none of this has to be too bland. There's a bunch of situations to capture with various mounts and techniques that can pepper the imagery. Don't worry if the bike isn't powered by you because you can substitute many of these shots on a motorcycle or ATV.

Let's consider some of the cool ways to use your GoPro while peddling around:

- **» Mount it on handlebars:** Several choices are possible exist, including the standard handlebar mount, or the new Pro Handlebar mount. That one allows you to rotate the camera 360° for unlimited capture options; facing forward, it provides a subjective perspective. Or you could turn it around, and show the viewer your expression and all that you pass. (See <u>Figure 8-13</u>.)
- **» Point it downward:** Regardless if you wear the camera on your chest or have it mounted on a frame, you can show the ride from the perspective of the front wheel turning, pedals cranking, or terrain the bike has passed.
- **>> Use the helmet mount:** Allows the viewer to experience the ride at an angle of view much closer to your perspective, and it's also safer than using the head strap for both you and the camera. (See <u>Figure 8-13</u>.)
- **>> Hang it:** The new Pro Seat Rail mount clamps to the back of your seat, allowing you to capture a low profile, rear-facing camera position. This perspective captures everything and everyone travelling behind the bike.



GoPro, Inc.

FIGURE 8-13: Share the rider's perspective with the helmet mount.

Taking Flight with Your Karma Drone

Aboard the Karma drone, your GoPro can soar over whatever corner of the world you call your own, allowing you to capture a rarely seen perspective for your movies and still photos. It's like giving Peter Pan a camera and asking him to capture the rooftops of your town, only you're doing it with a remote control and don't have to deal with his boyish tantrums. The Karma — or any other drone that holds a GoPro — lets you see places you may not venture toward, and from a perspective you're not accustomed, without ever putting you in harm's way. But it's important to understand how to operate it and the local ordinances to keep Karma, yourself, and others safe.

Practice makes perfect

While your Karma drone can capture impressive video from extreme heights without putting you at risk, the same cannot be said for your Karma. Simply put, the physical reality of what goes up must come down applies and works here, unless, of course, it comes down too quickly or perhaps veers off course into a wall. It's such a downer when you have to take your drone home in pieces. That's why practice is so important.

Consider the following:

- **» Read the instructions:** When you take your drone out of the box, resist the urge to start flying until you understand how to use it. Instead, charge the vessel and remote and read the instructions.
- **» Find a flat, spacious place:** The best way to get comfortable with taking off and landing is to practice. Choose a park or open field for those early missions.
- **Stay away from trees:** Trees are the drone's natural enemy. Flying too close to a tree never puts you on the winning end, as your drone

- can get stuck on a branch, or lose a rotor. That's why you should look for an open area when you're first getting started.
- **>> Fly on a calm day:** All it takes is a wind gust to take your drone off course and slam it into something hard (resulting in damage) or send it far, far away (and lose it).
- **>> Start off slow:** Practice take-offs and landings, gradually going higher and farther. Afterwards you can practice how to move and control the camera.
- >> Stay on top of industry education: Visit the Academy of Model Aeronautics: http://www.modelaircraft.org/

Fun places for your Karma missions

Once you're feeling confident to fly, you can have fun with your Karma drone. Here are some ideas for missions you can try:

- **>> Take it to the beach:** The shoreline usually provides a great place for flying your Karma drone for several reasons. The wide-open space means you can fly in an unobstructed airspace, free of trees and buildings. But more important, the shore is a beautiful place to shoot the sea, surf, and sunbathers. Just be aware, some people may find a GoPro flying overhead to be intrusive.
- **» Shoot a real estate scene:** Whether you're a real estate agent capturing that unique view for your next sale, a homeowner looking to add interesting visuals to your home listing, or simply want to create a visual record of a piece of property, flying the Karma drone overhead will help you show an impressive view.
- **>> Capture action sports:** Have fun at your next company softball game, beach volleyball match, or surfing competition. These are just a few of the events you can capture from overhead. Just be careful to not fly too close to the action.
- **» Record something you can't normally see:** For all those times you were curious of what was on the other side of a wall, the scene

- beyond a ridge, or over a bridge, you can now satisfy your curiosity with your drone.
- **» Shoot a firework display:** Flying your Karma above the bursts provides a perspective that was rarely possible a few years ago. Just be aware of any ordinances before you take off.

Part 3

Business Boosters

FEATURING CHAPTERS FROM:

The 5th edition of *Business Plans Kit For Dummies* (Print ISBN: 978-1-119-24549-0; ePub ISBN: 978-1-119-24571-1; ePdf ISBN: 978-1-119-24569-8), by Steven D. Peterson, Peter E. Jaret and Barbara Findlay Schenck.

Office 2016 For Dummies (Print ISBN: 978-1-119-29347-7; ePub ISBN: 978-1-119-29730-7; ePdf ISBN: 978-1-119-29729-1), by Wallace Wang.

Small Business Marketing Strategies All-in-One For Dummies (Print ISBN: 978-1-119-23691-7; ePub ISBN: 978-1-119-23693-1; ePdf ISBN: 978-1-119-23692-4), by U.S. Chamber of Commerce.

The 7th edition of *Investing For Dummies* (Print ISBN: 978-1-119-29334-7; ePub ISBN: 978-1-119-29619-5; ePdf ISBN: 978-1-119-29620-1), by Eric Tyson.

Chapter 9

Finding Your Funding

IN THIS CHAPTER

Estimating how much money you'll need and for how long
Understanding the realities and benefits of self-funding your business
Knowing when and how to approach funding sources

A great idea sparks most business start-ups, but money is the fuel that turns that idea into reality and gets a start-up off the ground. Most entrepreneurs and even many established businesses need to raise the funds to carry them from business launch to sales lift-off.

Even if you're launching a one-person freelance business, more than likely you need cash to underwrite your early days of operation. If you're starting a bigger company, and especially if you're founding a high-tech or manufacturing enterprise, chances are good that you need *lots* of cash. If your business is humming along but you're planning for growth or major change, you probably also need funds to put that plan into action and to operate until revenue begins rolling in.

This chapter explores how to forecast the amount of money you need in order to provide your business with funding until the momentous day when revenues exceed costs and cash flows freely. It explains the funding sources most entrepreneurs turn to and what it takes to unlock the money you need. It also flags cautions to keep in mind as you seek funding to turn your business idea into a business success.

Forecasting Your Funding Requirements

Most businesses, especially when they're starting up or planning for expansion, face periods when they need to rely on outside resources to stay afloat. Whether the funds come from the owner's pocket, accumulated business profits, or outside funding sources, they provide the lifeline that keeps the business going when expenses exceed revenue for a prolonged period. Use this section to forecast how much money you need — and for how long.



warning Even if you're launching a one-person business located for the time being at the kitchen table, you still need to project the time it takes to sign the first client and cash the first check — and then the next one. While you're waiting for revenue to take off, you'll be burning through cash reserves to fund business expenses.

To estimate the funding requirement your business faces, take these steps:

1. Create a realistic forecast of your financial situation.

Follow the steps for preparing a *pro forma* or estimated statement of income, expenses, and profit, along with an estimated balance sheet and cash flow statement.

2. Estimate your funding need.

Use your financial forecasts, and especially your cash flow projection, to determine how long you anticipate expenses to exceed revenue and by how much. Doing so helps you get a handle on when you expect expenses to be incurred, when you expect revenues to roll in, and the amount of funding you need in order to cover the gap.

3. Create a funding time frame.

After you establish how much funding you need, create a schedule for how long you need the funding to last before your business needs to become self-sufficient. This schedule, called your *time frame*, should include dates by which you plan to meet revenue-generating *milestones* — for example, first customer, first major contract, first \$10,000 in sales, and so on — that you can monitor as indicators that your business is on track to achieve profitability before funding runs out.



REMEMBER As you forecast how long your funding needs to last, be aware of these terms:

- **» Runway:** The amount of time funding needs to last before your business becomes profitable and self-sufficient or until additional funding will be required
- **» Burn rate:** The speed with which you expect to spend the funding you've raised in practical terms, the amount of cash required each month to cover the costs of staying in business

Searching for Money in All the Right Places

When your business needs more cash than it's generating, you can turn to a long and growing list of business funding resources. Some are easy to tap. Others require high levels of patience and diligence. Some don't have a lot of strings attached. Others do, in the form of fees, interest, or shares of ownership in your business, for example. The following sections lead you through funding options and considerations to weigh.

Funding your business with close-to-home resources

Terms like *venture capital* and *commercial loans* have long dominated talk about business start-up and expansion funding, but business growth is more likely to be funded by sources far closer to home or headquarters. Your savings, your credit card, your friends and family, and your own business cash reserves, accumulated during profitable times, are the go-to resources most likely to tide your business over both during its early days and again during high-expense, low-income growth or turnaround periods.

Funding your business needs with your own money or resources from friends or family makes sense for practical and strategic reasons.

- **The practical:** Your business will have a hard time attracting outside funding if you don't have assets that can serve as loan collateral or if you can't yet demonstrate growing revenues and a strong financial position, an impressive operation and management team, a growing customer list, or a business idea so promising that investors are rushing to get behind it.
- **The strategic:** Even if you have business attributes that are likely to impress investors or lenders, you may choose not to turn to outside funding because of the concessions that come with it, which include the following:

- Time and money spent to approach and court investors or lenders, which is time and money diverted from your business
- Reduced personal control of your business, either because investors will want to have input or because they'll want to own an equity position in your business in return for their investment — or both
- Reduced personal accountability for the success of your business, both because outsiders are affecting business decisions and because the funding cushion may reduce the pressure you feel to sink-or-swim

By providing your own early-stage funding, you'll own all your business after it becomes profitable, at which time you'll be in a better position to negotiate funding commitments to your business advantage.

Realize, though, that if you decide to steer clear of lenders and investors, your funding will likely come from the person you see in the mirror — or from people the person in the mirror can reach out to for help.

Your own pocket

The most obvious sources for cash for your business are your own savings, your credit cards, or personal debt that you incur. A third of all start-ups are self-funded or *bootstrapped*, the longstanding term for ventures that succeed using their own rather than outside resources. Here are the pros and cons:

- **Pluses:** Bootstrapping lets you remain the boss and sole owner of your business. Plus, it forces you to be disciplined about quickly getting your venture off the ground and into profitability, because you'll be growing your business primarily with money it brings in through sales.
- **» Minuses:** Bootstrapped businesses often trim all but essential costs and remain closely focused on profit-generating activities. The result is they sometimes miss opportunities seized by well-funded businesses that have the financial flexibility to pursue innovations, new directions, or pivots into all-new business models. Owners of

bootstrapped businesses also run the risk of tunnel vision because they don't have outside investors to bring different points of view that can contribute to stronger business plans and decisions.



that either way you're going to reach into your own pocket, savings, or credit sources, because putting some skin in the game is a prerequisite of most lenders or investors.



- **WARNING If you link arms with investors,** you'll still tap your own resources, because investors almost certainly expect you to personally invest. That means you'll share the risk but also the rewards with others.
- **» If you seek loans,** financial institutions require you to pledge personal assets as collateral to secure the debt.
- **» If you go the venture capital route,** most investors insist that you ante up some of your own cash, largely as proof of your commitment, before they'll add their own.

The primary benefit of self-funding is that you maintain 100 percent ownership and 100 percent control. The caveat is that you also take on all the risk: If the company goes under, your money goes with it.

Friends and family

Turning to friends or family members is a time-honored tradition in starting a small business. Some people borrow money in return for a simple IOU to be paid back in full when the company starts making a profit. Others set up a more formal loan along with an agreement for paying back money with interest on a specific schedule.



warning Whatever arrangement you reach, make sure that everyone involved understands the terms and knows what to expect and when to expect it. Don't assume that a handshake agreement is enough. Put the terms in writing and ask all parties to sign. Disagreements over money can spoil even the closest relationships. Circumstances like divorce or death can bring others into the agreement and raise lots of questions, unless you have everything in writing.

Turning customers and prospective customers into investors

Customers also can become investors who can help your company get off the ground. For example:

- **»** Community-supported agriculture (CSA) programs pair local farmers with consumers who pay a set fee in advance in return for a weekly load of produce during the summer growing season.
- **»** Condominium projects sell units to prospective owners before the builder ever breaks ground.
- >> Local businesses reach out to community members, called *locavestors*, who invest in new neighborhood businesses both to earn a return on their investments and to help build stronger local communities.



When considering customers as potential funding sources, think of people who use and benefit from your company's offerings. They may be willing to provide funding through prepurchases or investments, especially if you provide a clear reason and reasonable incentive or rate of return on their money. Sharing your business idea with prospective customer-investors early in the planning process also offers a useful reality check to test whether they'll actually pay for your proposed products and services.

Navigating the routes to bank funding

A Harvard Business School report, *The State of Small Business Lending*, confirms what most small businesses in need of funding already surmised. Since the 2008 financial crisis, traditional lending — usually through small and community banks — has declined dramatically. The reasons are many, including:

- **»** Banks loan to businesses with a good credit history, which most small businesses in need of funding haven't yet established and, even if they have, small business creditworthiness is often more difficult for banks to assess.
- **»** Banks require valuable assets, called *collateral*, to secure loans, and many early-stage businesses don't yet have the cash accounts, real estate, vehicles, equipment, or inventory to pledge as loan security.
- **»** Most owners seeking small business loans, especially if they don't have collateral to pledge, are asked to sign a *personal guarantee* saying that they are personally responsible for repayment. If the bank requests a personal guarantee instead of loan collateral, many small business owners don't have sufficient assets to pledge.
- **»** Small business loans typically come through community banks, which have declined in number due to bank failures and mergers.
- **»** Small business loans are less profitable to banks because banks incur similar costs whether loans are large or small.

Banks, especially community banks and local branches of smaller banks, are still willing to consider loan requests from local businesses, though only a small percentage of applications get funded. The factors that influence a banker's decision include your business financial track record, your personal credit history, your education, your expertise and business experience, and the likelihood that your business start-up or expansion will succeed.

The upcoming sections describe the kinds of bank loans most small business owners consider as they seek funding for their business plans.

Commercial loans

The simplest bank-loan arrangement is a standard commercial loan. The bank loans the money, and you pay it back, usually in monthly installments and with interest. But you can find all sorts of loan variations, from real estate loans on commercial property to loans secured by your inventory or accounts receivable.

The big advantages of bank loans include the following:

- **»** You gain business funding while maintaining all the equity in your company, which is rarely the case when receiving investor funding.
- **»** Bank loans usually come with lower interest and longer repayment terms than many other sources of capital.



WARNING Bank loans also come with a few drawbacks, beginning with the fact that payments are due on schedule even if your business runs into hard times. If a payment is late or missed, the loan becomes *delinquent*. If a loan remains delinquent for a prolonged period, it's considered *in default*, which can trigger seizure of assets pledged as loan security, a drop in your credit score, and higher interest rates in the future.



REMEMBER Before approaching a banker, be prepared to make your case by presenting your written business plan along with a loan request that defines how much you want to borrow, how you plan to use the funds, and when you'll repay the money. Most banks won't lend unless a business can pledge collateral to secure the loan. In many cases, especially for businesses that haven't acquired equipment, inventory, accounts receivable, or other assets, the loan security comes in the form of the owner's personal guarantee, often backed by a second-mortgage on the owner's home.

Commercial lines of credit

If you need access to money that you don't intend to use all at once, consider applying for a *commercial line of credit*, which is an agreement from a financial institution to extend a specified amount of credit that your company can draw upon, as necessary, to finance inventory purchases or to provide working capital or funds for other cash needs.

With a commercial line of credit, you pay interest only on the funds you actually borrow and only over the period between when you draw on the funds and when you pay them back. Banks may require that you secure a line of credit with business accounts receivable, inventory, machinery and equipment, or real estate.

Equipment leasing

Another way to borrow money from banks is an *equipment lease*, which you can use to buy anything from computers to copiers to manufacturing equipment, tractors, and trucks. Financial arrangements include lease-to-buy options, equipment upgrade options, and master leases, which cover a variety of equipment under one agreement.

The loan length for these options is usually tied to the lease term.

SBA loans

Bravo to the Small Business Administration (SBA), the government agency with a variety of loan programs for small businesses that may

otherwise have a tough time securing financing from commercial banks. Keep in mind: The SBA is more likely to fund business expansions than acquisitions or start-ups. And the money isn't free. What's commonly called an SBA loan is actually a bank loan guaranteed in part (usually in large part) by the SBA, which essentially plays the role of a co-signer. Expect to pay fees and interest and be ready for paperwork, oversight, and the responsibility of personally guaranteeing loan repayment. But because the SBA provides the backup guarantee, loans that banks may otherwise turn down get extra attention.

Considering alternative lending sources

With traditional loans harder for small businesses to get than ever before, new alternatives for funding, available online, are making headlines and filling the void.



warning Many of the new online lending options provide faster and easier application processes and far more immediate lending decisions than those of traditional lenders. The downside is that most alternative sources serve only established businesses with annual revenues that meet stipulated minimum standards. When they approve loans, funding is usually for shorter terms, and it almost always comes with higher — often considerably higher — fees and interest rates than those of traditional lenders.

Alternative lending sites

Alternative online lenders, including Kabbage.com, OnDeck.com, and others, raise a pool of funding from investors that they then lend to businesses with funding gaps not likely to be addressed by commercial bank loans. They take greater risks, which, no surprise, are accompanied by higher fees.

The lending process begins with an online application during which you upload your business banking and transaction records. Automated programs then analyze your financial history against risk-scoring models

that assess creditworthiness within minutes. The result is a quick-turn lending decision, followed by funding and payback through processes unique to each site.

The sites aren't for new businesses or for those seeking long-term funding. For example, Kabbage.com accepts applications from those who have been in business at least a year with annual revenues of at least \$50,000. Loan amounts range from \$2,000 to \$100,000 and work like a six-month line of credit that can be tapped as needed, with interest and fees accruing as funds are used.



warning Fees, rates, and penalties can add up fast, so take time to study all the terms — and then have an adviser look them over as well.

Peer-to-peer loan sites

Sites such as Lending Club (www.lendingclub/com) and Funding Circle (www.fundingcircle.com/uk), as two examples, are called peer-to-peer or P2P lenders. They connect those seeking business funding with those willing to lend it, sometimes pairing loan applicants with several lenders who each provide a portion of the requested loan amount. Loans come with interest rates that are often higher (significantly higher for higher-risk loans) than those offered by traditional banks. Expect to pay loan origination fees and penalties for late or missed payments.



warning Consider P2P sites only if your business is located in a state that's open to P2P lending and only if your company has been established for several years. You must have revenues that meet stipulated minimum requirements, you must back your application with a strong personal credit rating, and you must be prepared for the steep fees you'll pay for the money you get.

Microfinancing

Also called *microcredit*, microfinancing brings financial services to small business owners who lack access to financial services or lending opportunities. The website www.microfinanceinfo.com defines microfinance as "banking the unbankables," explaining that "banks are for people with money, not for people without money."



REMEMBER Microfinancing unlocks entrepreneurial opportunity in developing and developed markets alike:

» Microfinance aids entrepreneurs in the developing world with small loans of the size and type that earned Muhummad Yunus, founder of Grameen Bank in Bangladesh, the Nobel Peace Prize in 2006.

Loans for amounts as low as \$25 help create small business opportunity in poor communities around the world. Nonprofit microfinance sites like Kiva (www.kiva.org), Grameen Foundation (www.grameenfoundation.org), and Global Giving (www.globalgiving.org), among others, raise funds for distribution as loans to those who are working to create better lives for themselves and their families.

» Microfinance helps small-scale entrepreneurs in developed market areas by lending amounts smaller than the loan requests considered by most major financial institutions. Most small business bank loans are for amounts around \$140,000. Most SBA-guaranteed loans are even higher. Yet the funding needs of many small-scale entrepreneurs are usually for loan amounts of \$50,000 or less. The Small Business Administration (SBA) Microloan program

addresses this smaller-scale need with small short-term loans, averaging \$13,000, available through intermediary lenders. For information, check out www.sba.gov/content/microloan-program.

Also look into the offerings of the nonprofit microfinance provider AccionUSA at <u>us.accion.org/</u>.

Merchant cash advances

Merchant cash advances require no collateral. They don't even require a strong business history or high credit rating. If you're thinking, *there has to be a catch*, here it is: Merchant cash advances are expensive.

A merchant cash advance allows a business that has high credit card sales volume to receive a lump sum of funding, based on monthly sales volume. In return for the up-front funding, the business agrees to allow the funding business to keep a portion of all future credit card sales, often deducted daily, for as long as it takes to pay off the cash advance and the fees that come with it. Be aware because those fees often mount up to 30 percent or more of the amount originally advanced.



warning Businesses that conduct a large amount of sales volume through credit card transactions — and that have no access to lower-price funding — need to weigh a few cautions before committing to accept a cash advance.

- **»** The cost of funding through merchant cash advances is higher than nearly any lending option.
- **»** Changing credit card providers during a cash advance agreement is difficult.
- **»** The agreed-upon deduction from credit card receipts reduces the revenue you receive from each sale and the cash flow you usually count on.

Merchant cash advances have been around for a decade or so, but more recently players like PayPal (www.paypal.com) and Square (https://squareup.com/capital) have gotten involved and cash advances have become a more frequently used route to quick and often last-resort funding.

FACT CHECK: WHERE BUSINESS FUNDING COMES FROM

Especially if your business is in the tech arena, you can easily think everyone who is anyone has caught the eye and captured the partnership of a venture firm or angel investor. Think again. Following are findings, based on a Kauffman Foundation survey, of where businesses on the *Inc. Magazine* roster of fastest-growing US companies got their funding.

• Personal savings: 67.2 percent

• Bank loans: 51.8 percent

• Credit card: 34.0 percent

• Family: 20.9 percent

• Business acquaintances: 11.9 percent

• Angel investors: 7.7 percent

• Close friends: 7.5 percent

• Venture capitalists: 6.5 percent

• Government grants: 3.8 percent

It's worth noting that 13.6 percent of the fastest-growing businesses reported that they had never used financing, while the vast majority relied on their own savings or funds from friends and family to launch their businesses.

Reaching into deep pockets

It sounds like a match made in heaven — entrepreneur with great business idea but no money finds like-minded entrepreneur with money in search of a great idea. In fact, such partnerships can live happily ever after. Realize, though, that businesses that form successful investor partnerships represent a microscopically small percentage of start-ups and that nearly all share a lineup of similar traits.

» They have a business idea that fills a unique marketplace void, that's proven to be capable of attracting paying customers, that's able to *scale up* or grow profitably into a large enterprise, and that isn't likely to be easily replicated or disrupted.

- >> They establish an up-front agreement that defines how much control the investment partner or partners will exercise over the business strategy, planning, and day-to-day operations.
- **»** Above all, the parties all get along. It may sound obvious, but a good working relationship with an investment partner can help smooth the inevitable bumps on the road to success.

When it comes to forming investor partnerships, the odds are low, but the rewards are high. The next sections explain the options.

Venture capital

Venture capitalists are individuals or, more often, professional asset managers (in other words, investor groups) who seek a high rate of return for capital invested in businesses, whether at start-up, called *seed capital*, or during growth phases, called *early-stage* and *expansion-stage financing*. Venture capitalists scrutinize hundreds of plans, pursuing only those they believe will reward funds invested with fast-growing, significant returns and a successful *investor exit* or cash-out by a designated date.



warning When venture capitalists are impressed by a business concept and confident that the management team has what it takes to make the business succeed, they fork over sizeable sums. The catch is that they want something in return, and usually that something is a big role in controlling your business, a major chunk of the ownership, and a clear way to recoup and realize a substantial return on their investment.

Venture capital tends to flow when the economy is booming and slow to a trickle when it hits hard times. Check out Gust (www.gust.com) for free online tools and information from an investor network endorsed by the world's leading business angel and venture capital associations.

Angel investors

Angels are successful and wealthy entrepreneurs who buy into up-and-coming companies, offering not only money but also expertise and guidance. Angels make funding decisions more rapidly than venture capitalists, largely because they operate independently rather than on behalf of a group of investors. Additionally, angels take greater risks than venture capitalists, funding businesses at earlier stages of their life cycles and entertaining smaller financing requests. However, like venture capitalists, angels usually want a piece of the equity pie.



warning Don't approach angels if your business isn't up and running and if it isn't likely to grow at a double-digit rate and deliver a high return on the funds you seek. Also, steer clear of angel funding if you don't want investor involvement and the scrutiny that comes with it.

Before approaching angel investors, be ready to present your business plan, your business model, and proof that it works to generate revenue, has established an impressive early track record, and that five-year financial projections indicate your business will grow quickly and will deliver profits to both you and the angel by a specified investor-exit date.

Your most likely source for angel investment is either through a high net-worth individual you know or an accredited investor you reach through networks such as Gust.com (previously called AngelSoft) and www.angellist.com.

Getting wise about crowdfunding approaches

Crowdfunding raises small amounts of money from a great number of people, usually through an Internet campaign, to fund anything from disaster relief to music or film productions to, most recently, business start-ups.

For entrepreneurs, crowdfunding takes two forms: Reward-based campaigns and equity-based campaigns.

Reward-based crowdfunding

Reward-based campaigns are the ones that have been around the longest. For years, they've been providing a financial lift-off for businesses that can't qualify for bank loans and whose owners can't call on deeppocketed family and friends to fill the start-up coffers until product sales can cover business costs. Instead, popular crowdfunding platforms like Kickstarter (www.kickstarter.com) and Indigogo (www.indiegogo.com) enable businesses to make a broad-reaching appeal for funds, rewarding those who pledge money with perks, rewards, products, or services.

The sites require you to make a concise and engaging funding request accompanied by an offer of interest to those being solicited (a record or concert tickets from an entertainer, for example). Plus, you have to follow the model of the funding platform you choose to use. Some platforms are *all-or-nothing*, meaning no contributions are accepted unless a minimum pledge level is reached.



their hosting and processing fee, and nearly every successful effort begins with strong momentum from an impressive groundswell of first-day contributions, usually from friends, family, customers, and Facebook followers. For example, the Nikola Tesla museum project raised more than a million dollars in the first 9 days before going on to meet its full 45-day campaign goal.

Among the most successful reward-based crowdfunded campaigns are a number of names you likely know:

- **»** The space simulation game Star Citizen broke the world record for crowd-funded games by raising \$4.2 million. Contributors were rewarded with game currency.
- **»** The virtual reality headset by Oculus Rift exceeded a \$250,000 crowdfunding goal by raising a whopping \$2.4 million before being purchased by Facebook for \$2 billion. (Contributors are still posting

- that they wish they'd received stock instead of the thank-you notes, T-shirts, and headsets they received as contribution rewards.)
- **»** *Reading Rainbow*, a TV show which encourages kids to read, raised more than \$5 million in 35 days. Contributors received gifts ranging from bumper stickers to a private dinner with *Reading Rainbow* host LeVar Burton.

Exciting as these examples are, realize they're indicative of what's possible but not of what most crowdfunded campaigns can expect. More typical is the success story of a documentary about medical aid in Haiti, which surpassed a \$1,500 crowdfunding goal by raising \$3,500 from friends and friends of friends, who form the profile of most small-scale crowdfunding contributors.

Before you start making your list of rewards and planning your crowdfunding appeal and video, here are some statistics from the 2015 Crowdfunding Industry Report to help you base your funding expectations in reality:

- **»** Kickstarter reports that fewer than 40 percent of campaigns reach their funding goal, and for tech-based campaigns the success rate is even lower.
- **»** The campaigns with huge goals make headlines, but campaigns with a goal closer to \$10,000 have the highest success rate.
- **»** The average successful campaign receives approximately \$7,000.
- **»** The average failed project brings in less than \$1,000.

Crowdfunding for equity investments

In 2016, under rules approved by the US Securities and Exchange Commission (SEC), private start-ups and small businesses can offer a share of their financial returns or profits to US citizens (called *non-accredited investors* in government jargon) who invest through crowdfunding campaigns.

In other words, instead of receiving rewards of logo-emblazoned items or early-release products, equity crowdfunding participants will receive shares of private businesses.

The rules for so-called equity crowdfunding fall under the US Jumpstart Our Business Startups (JOBS) Act. The act allows entrepreneurs to raise up to \$1 million over a 12-month period from individuals, who can invest up to \$2,000 or 5 percent of annual income or net worth, whichever is greater, or up to 10 percent, if annual income and net worth are equal to more than \$100,000. No investor can invest more than \$100,000 in one year.

As with traditional crowdfunding campaigns, businesses need to reach their full funding goal before accepting any of the investment commitments. Plus, businesses need to meet disclosure and financial reporting requirements that vary depending on equity-raising goals.



warning Equity crowdfunding is still in its shake-out stage. Which sites will become the Kickstarters and Indiegogos of equity crowdfunding is still to be determined. Search for "equity crowdfunding portals" to find out about emerging players. Turn to sites like www.crowdfunder.com for checklists to use when planning an equity crowdfunding campaign. Above all, get advice from your business attorney before venturing into this new funding opportunity.

Chapter 10

Introducing Microsoft Office 2016

IN THIS CHAPTER

Starting an Office 2016 program
Learning the Ribbon
Customizing an Office 2016 program
Exiting from Office 2016

Microsoft Office 2016 consists of five core programs: Word, Excel, PowerPoint, Access, and Outlook, where each program specializes in manipulating different data. Word manipulates text; Excel manipulates numbers; PowerPoint manipulates text and pictures to create a slide show; Access manipulates organized, repetitive data such as inventories; and Outlook manipulates personal information such as email addresses and phone numbers.

Although each Office 2016 program stores and manipulates different types of data, they all work in similar ways. First, you have to enter data into an Office 2016 program by typing on the keyboard or loading data from an existing file. Second, you have to tell Office 2016 how to manipulate your data, such as underlining, sorting, arranging it on the screen, or deleting it. Third, you have to save your data as a file.

To help you understand this three-step process of entering, manipulating, and saving data, all Office 2016 programs offer similar commands so you can quickly jump from Word to PowerPoint to Excel without having to learn entirely new commands for each program. Even better, Office 2016 organizes commands in tabs to make finding the command you need faster and easier than ever before.



If you're already familiar with computers and previous editions of Microsoft Office, you may want to browse through this chapter

just to get acquainted with the appearance and organization of Office 2016. If you've never used a computer before or just don't feel comfortable using Microsoft Office, read this chapter from start to finish.

Starting an Office 2016 Program

Microsoft Office 2016 runs on Windows 10, Windows 8, or Windows 7.



TECHNICAL If you're using an older version of Windows (such as Vista or XP), you can't install, let alone run and use, Microsoft Office 2016.

The process to start an Office 2016 application depends on your Windows version. The following sections show how to use each compatible Windows version.

Windows 10

To start Office 2016 on Windows 10, you must click the Office 2016 tile that represents the program you want to run. Follow these steps:

1. Click the Start button on the Windows taskbar.

A pop-up menu appears.

2. Select the program you want to start.

You can either

- Click the tile that represents the Office 2016 program you want to run, such as Microsoft Word 2016 or Microsoft PowerPoint 2016.
- Click All apps to view a list of all programs installed on your computer.
- 3. Click the Office 2016 program you want to run, such as Microsoft Word 2016 or Microsoft PowerPoint 2016.

Your chosen program appears on the screen. At this point, you can open an existing file.

Windows 8

To start Office 2016 on Windows 8, you must click the Office 2016 tile that represents the program you want to run. Follow these steps:

1. Open the Windows 8 tiles by either pressing the Windows key on your keyboard or moving the mouse pointer to the bottom-left corner of the screen and clicking when the Start preview window appears.

The Windows 8 tile interface appears.

- 2. Scroll sideways until you see the Office 2016 tiles that represent the program you want to start.
- 3. Click the tile that represents the Office 2016 program you want to use, such as Microsoft Word 2016 or Microsoft PowerPoint 2016.

Your chosen program appears on the screen. At this point, you can open an existing file.

Windows 7

To start Office 2016 on Windows 7, go through the Start menu. Follow these steps:

1. Click the Start button on the Windows taskbar.

A pop-up menu appears.

2. Choose All Programs.

Another pop-up menu appears.

3. Choose Microsoft Office.

A list of programs appears on the Start menu.

4. Choose the Office 2016 program you want to use, such as Microsoft Word 2016 or Microsoft PowerPoint 2016.

Your chosen program appears on the screen. At this point, you can open an existing file.

Introducing the Microsoft Office Ribbon

The basic idea behind the Ribbon interface in Microsoft Office is to store commonly used commands under separate tabs. Clicking each tab displays icons that represent related commands; you can see groups of related commands at a glance.



CHANGING TO THE RIBBON

In older Windows programs, such as Microsoft Office 2003, the program displays pull-down menus at the top of the screen. To find a command, you had to click a pull-down menu, then search for a command buried in the menu. This made finding commands tedious and confusing. That's why newer versions of Microsoft Office introduced the Ribbon interface.

Although every Office 2016 program displays different tabs, the three most common tabs are the File tab, the Home tab, and the Insert tab.

The File tab lets you open, save, and print your files. In addition, the File tab also lets you close a document or customize an Office 2016 program, as shown in <u>Figure 10-1</u>.

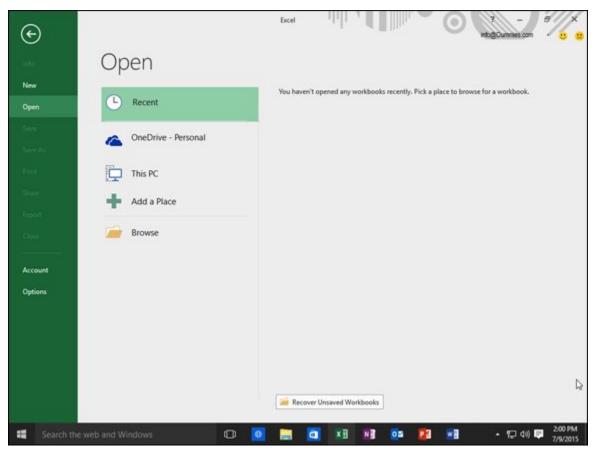


FIGURE 10-1: The types of commands available through the File tab.

The Home tab displays icons that represent the most common commands for that particular Office 2016 program, such as formatting commands, as shown in <u>Figure 10-2</u>.

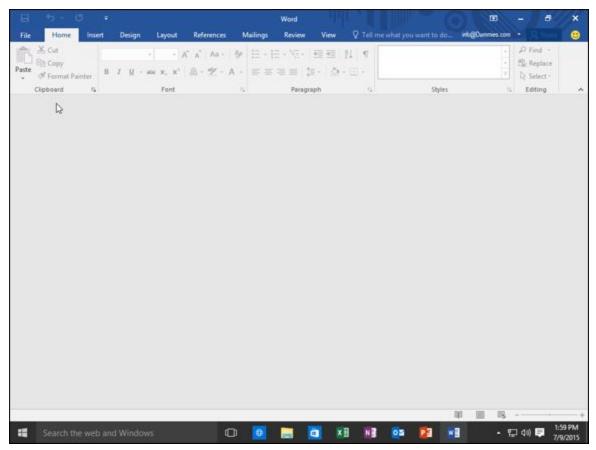


FIGURE 10-2: The Home tab displays common formatting commands.

The Insert tab displays icons that represent common commands for adding items to a file, such as pictures and tables, as shown in <u>Figure 10-3</u>.

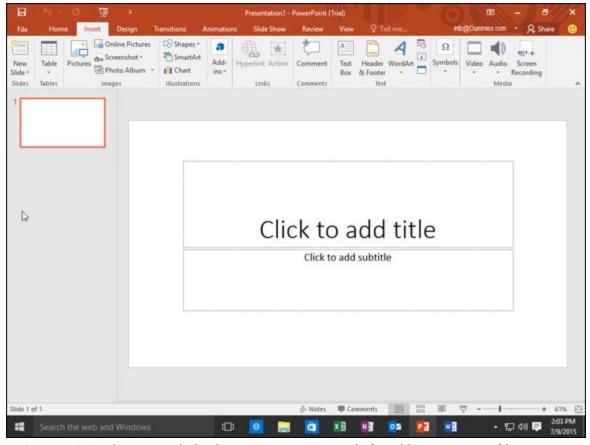


FIGURE 10-3: The Insert tab displays common commands for adding items to a file.

In addition to the File, Home, and Insert tabs, every Office 2016 program also includes tabs that contain commands specific to that particular program. For example, Excel contains a Formulas tab that contains commands for creating a formula in a spreadsheet while PowerPoint contains a Transitions tab for adding transitions to your presentation slide shows.



REMEMBER Some tabs only appear when you click a certain item, such as a table, picture, or text box. These tabs provide specific commands for manipulating the currently selected item (such as letting you modify a picture). The moment you select a different item, these tabs disappear.

The File tab

The various commands available on the File tab include

- **» Info:** Protects your file from changes, inspects a file for compatibility issues with older programs, and manages different versions of your file. The Info command also lets you view the details of your file such as the file's size and the date you created it, as shown in Figure 10-4.
- **» New:** Creates a new file.
- **» Open:** Loads an existing file.
- **Save:** Saves your file. If you haven't named your file yet, the Save command is equivalent to the Save As command.
- **» Save As:** Saves the current file under a new name and/or in a different location such as a different folder or computer.
- **» Print:** Prints the current file.
- **» Share:** Sends a file as an email attachment or posts it online.
- **Export:** Saves the current file in a different file format.
- **» Close:** Closes an open file but keeps the Office 2016 program running.
- **» Account:** Displays information about your OneDrive account.



REMEMBER OneDrive is Microsoft's cloud computing service that lets you store files online so you can access them from other types of devices such as a smartphone, a tablet, or another computer.

» Options: Displays various options for customizing the way each Office 2016 program behaves.

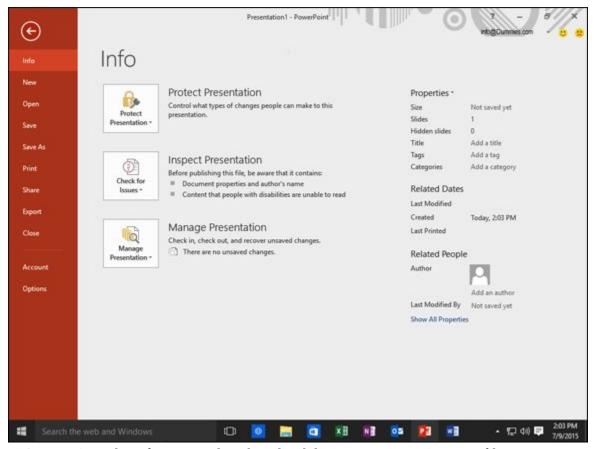


FIGURE 10-4: The Info command on the File tab lets you protect or inspect a file.



REMEMBER In Word, a file is called a *document*. In Excel, a file is called a *workbook*. In PowerPoint, a file is called a *presentation*. In Access, a file is called a *database*.

Creating a new file

Each time you create a new file, you have the option of choosing different types of templates that are already formatted and designed for specific purposes, such as a calendar, newsletter, sales report, or corporate slide show presentation, as shown in <u>Figure 10-5</u>.

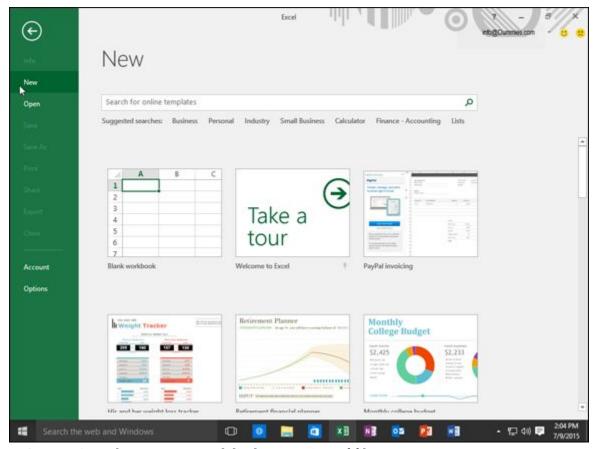


FIGURE 10-5: The New command displays a variety of files you can create.

To create a new file, follow these steps:

- 1. Click the File tab.
- 2. Click New.

A list of templates appears (see <u>Figure 10-5</u>).

3. Double-click the template you want to use.

Office 2016 creates a new file based on your chosen template. For some templates, you may need access to the Internet to download the templates from Microsoft's website.



Pressing Ctrl+N is a keystroke shortcut for creating a new file.

Opening an existing file

When you load an Office 2016 program, you may want to edit a file that you created and modified earlier. To open an existing file, you need to tell Office 2016 the location and name of the file you want to open.

The five options for finding an existing file include

- **» Recent Documents/Workbooks/Presentations:** Displays a list of files you recently opened.
- **» OneDrive:** Displays a list of files stored on your OneDrive account. (You need Internet access to open and retrieve a file stored on OneDrive.)
- **This PC:** Lets you browse through the folders stored on your computer to find a file.
- **Add a place:** Lets you define a new location for storing files in the cloud such as your OneDrive account.
- **» Browse:** Lets you search through all the folders/directories on any storage device connected to your computer.

To open a file, follow these steps:

- 1. Click the File tab.
- 2. Click Open.

An Open pane appears, as shown in <u>Figure 10-6</u>.

3. Choose an option such as Recent or This PC.

You may need to click the Browse button to access different folders.

4. Click the file you want to open.

Your chosen file appears.

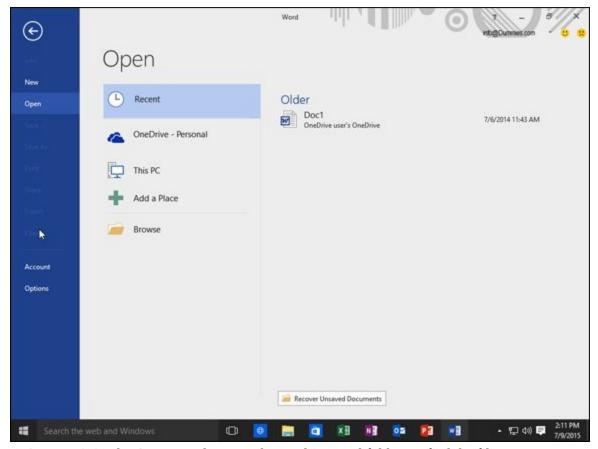


FIGURE 10-6: The Open pane lets you change drives and folders to find the file you want to use.



Pressing Ctrl+O is a keystroke shortcut for displaying the Open pane.



REMEMBER If you delete or move a file, Office 2016 may still list that filename under the Recent category even if that file no longer exists or has been moved.

Saving files

Saving a file stores all your data on a hard drive or other storage device (such as a USB flash drive). You can also save your files to a OneDrive account so you can access that file anywhere you have Internet access. The first time you save a file, you need to specify three items:

- >> The location in which to store your file
- >> The name of your file
- >> The format in which to save your file

The location can be any folder on your hard drive or in your OneDrive account. It's a good idea to store similar files in a folder with a descriptive name, such as *Tax Information for 2017* or *Letters to Grandma*. If you save your files to your computer, Office 2016 stores all your files in the Documents folder unless you specify otherwise.

You can give a file any name you want, but it's also a good idea to give your file a descriptive name, such as *Latest Resume 2017* or *Global Trade Presentation for Meeting on October 29, 2018.*

The format of your file defines how Office 2016 stores your data. The default file format is simply called Word Document, Excel Workbook, PowerPoint Presentation, or Access Database. Anyone using Office 2013, 2010, or Office 2007 can open these files.



For a quick way to save a file, click the Save icon that appears above the File tab or press Ctrl+S.

SAVING A FILE IN OTHER FILE FORMATS

If you need to share files with people using older versions of Microsoft Office or other word processors, spreadsheets, or database programs, you need to save your files in a different file format. To share files with people using older versions of Microsoft Office, you need to save your files in a format known as *97-2003*, such as *Word 97-2003 Document* or *PowerPoint 97-2003 Presentation*.

This special 97-2003 file format saves Office 2016 files so that previous versions of Microsoft Office 97/2000/XP/2003 can open and edit your files.



When you save files in the 97-2003 format, Microsoft Office 2016 saves your files with a three-letter file extension, like .doc or .xls. When you save files in the Office 2016 format, Microsoft Office 2016 saves your files with a four- or five-letter file extension, such as .docx or .pptx, as shown in Table 10-1.

TABLE 10-1 File Extension Names Used by Different Versions of Microsoft Office

Program	Microsoft Office 2016 File Extension	Microsoft Office 97-2003 File Extension
Microsoft Word	.docx	.doc
Microsoft Excel	.xlsx	.xls
Microsoft PowerPoint	.pptx	.ppt
Microsoft Access	.accdb	.mdb

To save your Office 2016 files in the 97-2003 format, follow these steps:

- 1. Click the File tab.
- 2. Click Export.

The middle pane displays different options.

3. Click Change File Type.

A list of different formats appears, as shown in <u>Figure 10-7</u>.

- 4. Click the 97-2003 format option, such as Word 97-2003 Document or Excel 97-2003 Workbook.
- 5. Click the Save As button.

The Save As dialog box appears.



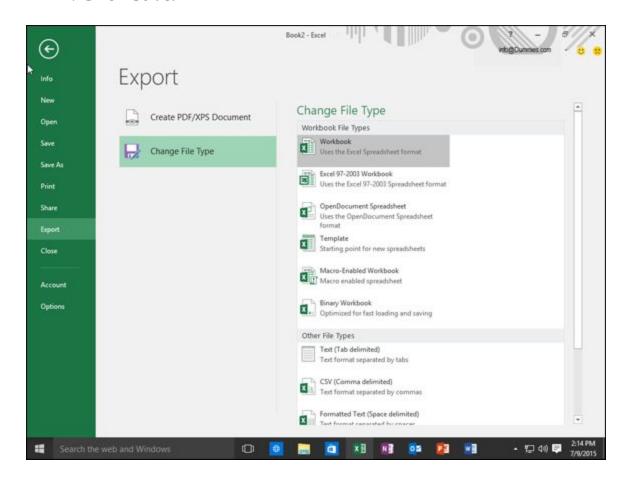
programs, you may need to choose a different file format, such as Rich Text Format or Text.

6. (Optional) Click in the File Name text box and type a descriptive name for your file.



When you save a file in a different file format, give that file a descriptive name that's different from your original file. That way, you won't confuse the two and send the wrong file format to someone by mistake.

7. Click Save.



Closing a file

When you're done editing a file, you need to close it. Closing a file simply removes the file from your screen but keeps your Office 2016 program running so you can edit or open another file. If you haven't saved your file, closing a file will prompt you to save your changes.

To close a file, follow these steps:

- 1. Click the File tab.
- 2. Click Close.

If you haven't saved your file, a dialog box appears asking whether you want to save your changes.



For a faster way to choose the Close command, press Ctrl+F4.

3. Click Save to save your changes, Don't Save to discard any changes, or Cancel to keep your file open.

If you click either Save or Don't Save, Office 2016 closes your file.

Using the Ribbon

The Ribbon interface displays tabs that contain groups of related commands. For example, the Layout tab displays only those commands related to designing a page, and the Insert tab displays only those commands related to inserting items into a file, such as a page break or a picture.

Using the Ribbon is a two-step process. First, you must click the tab that contains the command you want. Second, you click the actual command.



REMEMBER Tabs act exactly like traditional pull-down menus. Whereas a pull-down menu simply displays a list of commands, tabs display a list of icons that represent different commands.

Deciphering Ribbon icons

Each Ribbon tab displays commands as buttons or icons, organized into groups. There are four types of icons displayed on the Ribbon:

- **» One-click icons:** These icons do something with a single click.
- **Menu icons:** These icons display a pull-down menu of options you can choose.
- **» Split-menu icons:** These icons consist of two halves. The left or top half lets you choose a command like a one-click icon, and the right or bottom half displays a downward-pointing arrow, which displays additional options.
- Combo boxes: These display a text box where you can type a value in or click a downward-pointing arrow to choose from a menu of options.

Using one-click icons

One-click icons often appear as just an icon or as an icon with a descriptive label (such as the Format Painter and the Bold and Italics

icons), as shown in Figure 10-8.

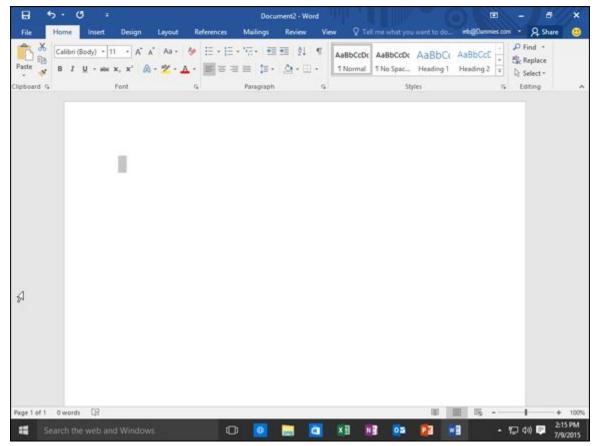


FIGURE 10-8: The two types of one-click icons.



REMEMBER One-click icons typically represent commonly used commands, such as the Cut and Copy commands, which appear on the Home tab of every Office 2016 program.

Using menu icons

A one-click icon represents a single command. However, there isn't enough room on the Ribbon to display every possible command as a single icon. As a result, menu icons display a pull-down menu that stores multiple options within a single icon, as shown in <u>Figure 10-9</u>.

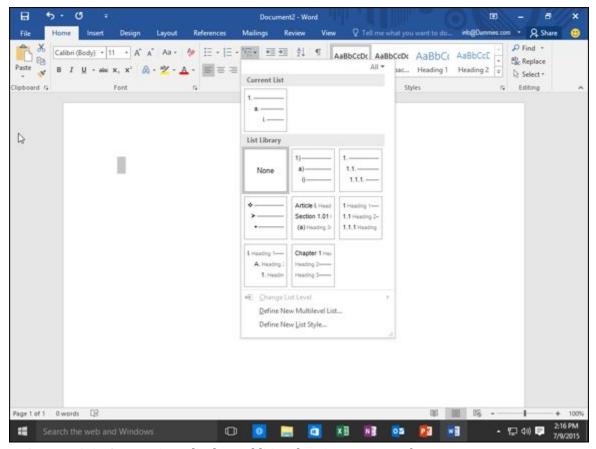


FIGURE 10-9: A menu icon displays additional options you can choose.

Selecting an option in the pull-down menu immediately manipulates your selected data.

Using split-menu icons

Split-menu icons give you two choices:

- **»** If you click the top or left half of a split-menu icon, you choose a default value. For example, the left half of the Font Color icon lets you choose the currently displayed color.
- **»** If you click the bottom or right half of a split-menu icon, a pull-down menu appears, letting you choose a new default option, as shown in <u>Figure 10-10</u>.

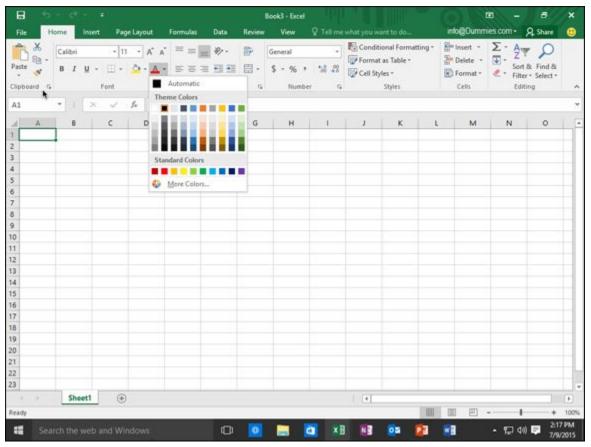


FIGURE 10-10: A split-menu icon gives you a choice between either a menu or the currently displayed option.

The Paste and Font Color icons, found on the Home tab of Word, Excel, and PowerPoint, are typical split-menu icons.



REMEMBER You can identify split-menu icons because only half of the icon appears highlighted when you move the mouse pointer over that half.

Using combo boxes

A combo box gives you two ways to choose an option:

- **»** Type directly into the combo box.
- **»** Click the downward-pointing arrow to display a list of options, as shown in <u>Figure 10-11</u>.

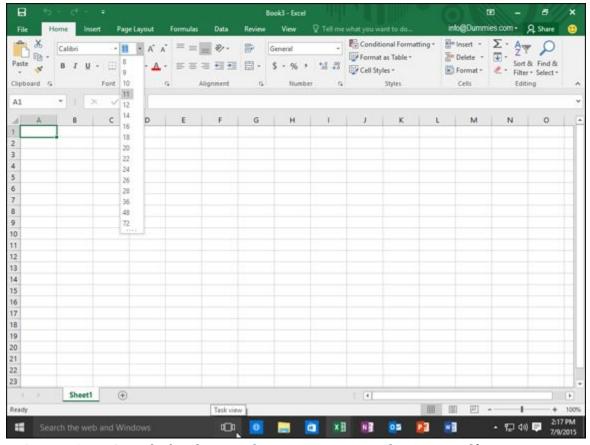


FIGURE 10-11: A combo box lets you choose a menu or type data in yourself.

The Font and Font Size combo boxes, found on the Home tab of Word, Excel and PowerPoint, are typical combo boxes:

- **»** If you click the left side of the Font Size combo box, you can type your own value in for a font size.
- If you click the downward-pointing arrow on the right side of the Font Size combo box, you can choose a value from a pull-down menu.

Identifying Ribbon icons

While some icons include descriptive text (such as Format Painter or Paste), most icons simply look like cryptic symbols from an alien language. To get additional help deciphering icons on the Ribbon, just point the mouse pointer over an icon, and a short explanation appears, called a ScreenTip, as shown in Figure 10-12.

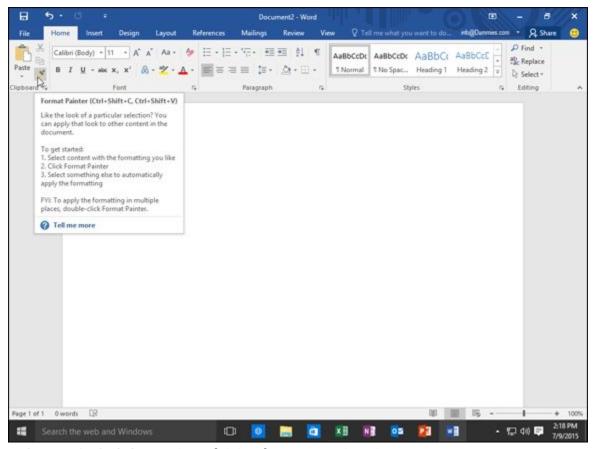


FIGURE 10-12: A ScreenTip explaining the Format Painter icon.

ScreenTips provide the following information:

- **»** The official name of the command (which is Format Painter in Figure 10-12)
- >> The equivalent keystroke shortcut you can use to run the command (which is Ctrl+Shift+C in the figure)
- » A short explanation of what the command does

To view the ScreenTip for any icon on the Ribbon, move the mouse pointer over that icon and wait a few seconds for the ScreenTip to appear.



Shortcut keystrokes let you choose a command from the keyboard without the hassle of clicking a tab and then clicking the icon buried inside that tab. Most shortcut keystrokes consist of two or three keys, such as Ctrl+P or Ctrl+Shift+C.

Displaying dialog boxes

On each tab, the Ribbon displays related commands in a group. For example, the Home tab groups the Cut, Copy, and Paste commands within the Clipboard group and the text alignment and line-spacing commands within the Paragraph group.

Although you can choose the most commonly used commands directly from the Ribbon, Word often contains dozens of additional commands that don't appear on the Ribbon. To access these more obscure commands, you need to open a dialog box.

In the bottom-right corner of a group of icons on the Ribbon, you'll see the Show Dialog Box icon, which looks like an arrow pointing diagonally downward, as shown in <u>Figure 10-13</u>.

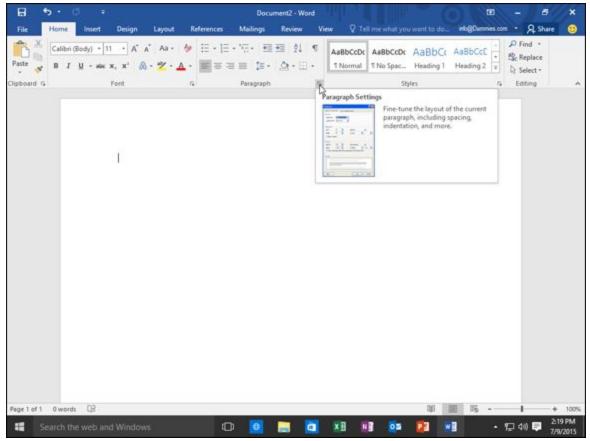


FIGURE 10-13: The Show Dialog Box icon appears in the bottom-right corner of many groups on the Ribbon.



REMEMBER Not every group of icons on the Ribbon displays the Show Dialog Box icon.

To open a dialog box that contains additional options, follow these steps:

- 1. Click a tab on the Ribbon, such as the Home or Page Layout tab.
- 2. Click the Show Dialog Box icon in the bottom-right corner of a group such as the Font or Paragraph group found on the Home tab.
 - Office 2016 displays a dialog box, as shown in <u>Figure 10-14</u>.
- 3. Choose any options in the dialog box, and then click OK or Cancel when you're done.

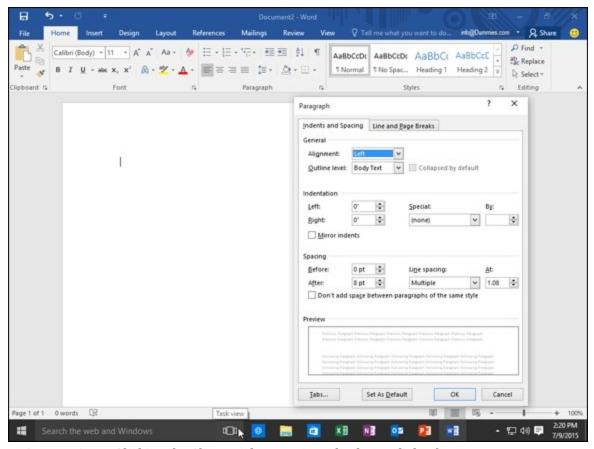


FIGURE 10-14: Clicking the Show Dialog Box icon displays a dialog box.

Minimizing the Ribbon

Some people like the Ribbon displaying various icons at all times, but others find that it makes the screen appear too cluttered. In case you want to tuck the Ribbon out of sight (or display a Ribbon that is already tucked out of sight) so icons only appear when you click a tab, choose one of the following methods:

- **»** Double-click the current tab.
- >>> Press Ctrl+F1.
- **»** Click the Ribbon Display Options icon that appears to the left of the minimize icon.

When you choose either of the first two methods, the Ribbon displays its tabs but hides any icons that normally appear underneath. When you

click the Ribbon Display Options icon, a menu appears (as shown in <u>Figure 10-15</u>) and gives you three options:

- **» Auto-hide Ribbon:** Completely hides the Ribbon, including tabs and icons
- » Show Tabs: Displays the Ribbon tabs but hides the icons on each tab
- **» Show Tabs and Commands:** Displays the Ribbon tabs and icons on each tab

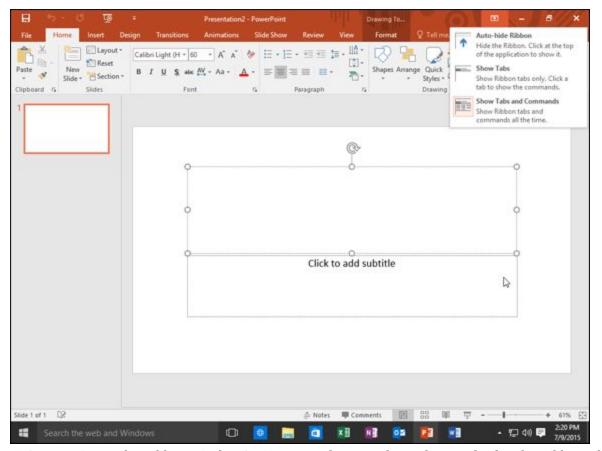


FIGURE 10-15: The Ribbon Display Options menu lets you choose how to display the Ribbon tabs.

Using the Quick Access Toolbar

The Quick Access toolbar appears in the upper-left corner of the screen, directly above the File and Home tabs. The Quick Access toolbar displays icons that represent commonly used commands such as Save and Undo, as shown in <u>Figure 10-16</u>.

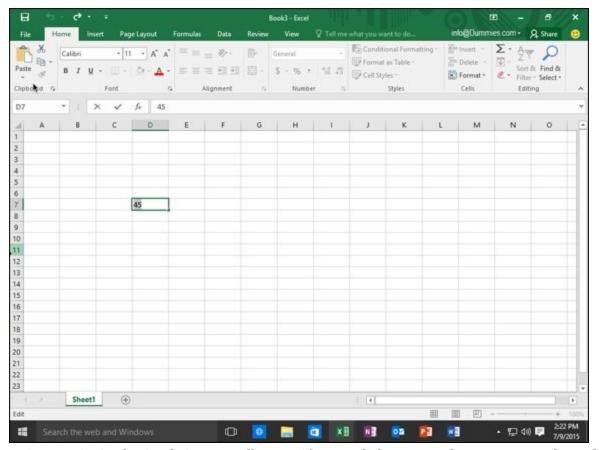


FIGURE 10-16: The Quick Access toolbar provides one-click access to the most commonly used commands.

Using the Quick Access icons

If you click the Save icon in the Quick Access toolbar, Office 2016 saves your current file. If you're saving a new file, a dialog box pops up, asking you to choose a name for your file.

The Undo icon is unique in that it offers two ways to use it. First, you can click the Undo icon to undo the last action you chose. Second, you can click the downward-pointing arrow that appears to the right of the

Undo icon to display a list of one or more of your previous actions, as shown in <u>Figure 10-17</u>.

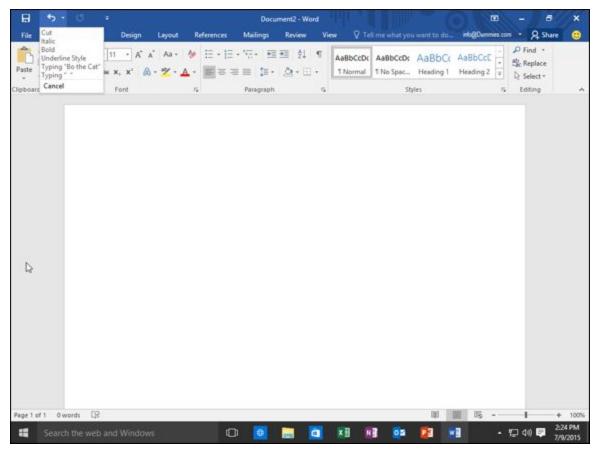


FIGURE 10-17: The Undo icon displays a list of actions you can undo.

The most recent action you chose appears at the top of this list, the second most recent action appears second, and so on. To undo multiple commands, follow these steps:

- 1. Click the downward-pointing arrow that appears to the right of the Undo icon in the Quick Access toolbar.
- 2. Move the mouse pointer to highlight one or more actions you want to undo.
- 3. **Click the left mouse button.**Office 2016 undoes all the multiple actions you selected.

Adding icons

The Quick Access toolbar is designed to put your most commonly used commands (such as the Save and Undo commands) where you can find them quickly. To add other icons to the Quick Access toolbar, follow these steps:

- 1. Click the Customize Quick Access Toolbar arrow.
- 2. A pull-down menu appears, as shown in <u>Figure 10-18</u>.
- 3. Click a command that you want to add to the Quick Access toolbar, such as Open or Quick Print.

A check mark appears next to each command that currently appears on the Quick Access toolbar. If you want to add more commands that aren't displayed on the Quick Access toolbar menu, continue with the rest of Steps 3 through 7.

4. Click More Commands.

An Options window appears, as shown in <u>Figure 10-19</u>. The panel on the right shows all the current icons on the Quick Access toolbar. The panel on the left shows all the other icons you can add.

5. Click in the Choose commands from list box and choose a title, such as Popular Commands or Insert Tab.

The left panel displays a list of icons and commands.

- 6. Click an icon and then click the Add button.
- 7. (Optional) Repeat Steps 4 and 5 for each icon you want to add to the Quick Access toolbar.
- 8. Click OK.

Your chosen icon (or icons) now appears on the Quick Access toolbar.

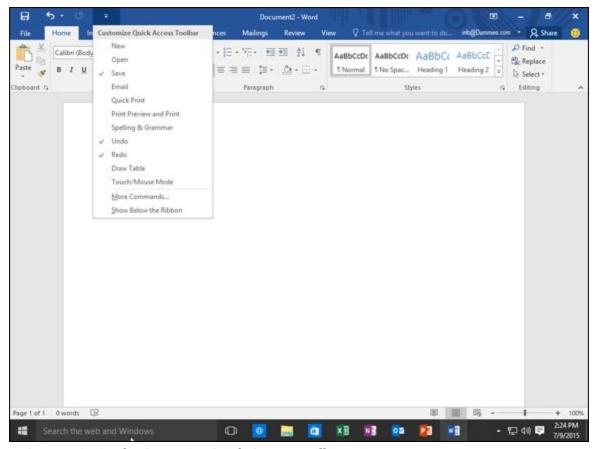


FIGURE 10-18: The Customize Quick Access Toolbar menu.

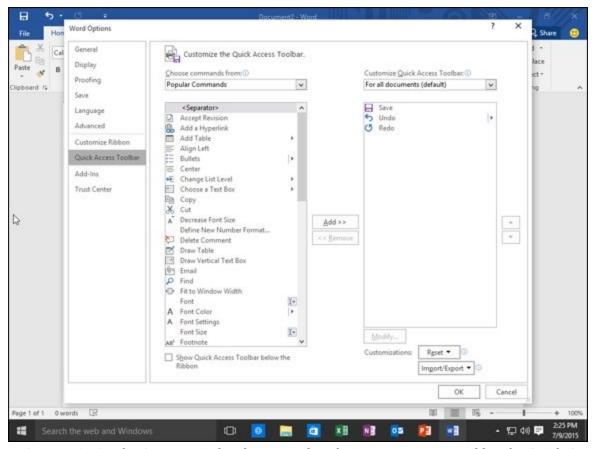


FIGURE 10-19: The Options window lets you select the icons you want to add to the Quick Access toolbar.

Removing icons

You can remove icons from the Quick Access toolbar at any time. To remove an icon, follow these steps:

1. Right-click an icon on the Quick Access toolbar.

A pull-down menu appears.

2. Click Remove from Quick Access Toolbar.

Office 2016 removes your selected icon from the Quick Access toolbar.

Moving the Quick Access toolbar

The Quick Access toolbar can appear in one of two places:

- » Above the Ribbon (its default location)
- **»** Below the Ribbon

To move the Quick Access toolbar, follow these steps:

1. Click the Customize Quick Access Toolbar arrow.

A pull-down menu appears.

2. Choose Show Below/Above the Ribbon.

If the Quick Access toolbar currently appears *over* the Ribbon, you'll see the Show Below the Ribbon command.

If the Quick Access toolbar appears *under* the Ribbon, you'll see the Show Above the Ribbon command.

Customizing an Office 2016 **Program**

If you don't like the default settings of your favorite Office 2016 program, you can modify them. Some common ways to modify an Office 2016 program include

- » Changing the file format and location to save files
- >> Customizing the icons that appear on the Ribbon

Changing the file format and default location

Every Office 2016 program is designed to share files easily with anyone who uses Office 2016, 2013, 2010, or 2007. However, if you need to share files with people who use earlier versions of Office or other programs altogether, you may need to save your files in a different format.

To choose a default file format that each Office 2016 program will use every time you choose the Save command, follow these steps:

- 1. Load an Office 2016 program.
- 2. Click the File tab.
- 3. Click the Options button in the left pane.

An Options dialog box appears.

4. Click Save.

The Options dialog box displays multiple options, including Save files in this format and Default local file location, as shown in <u>Figure</u> 10-20.

- 5. Choose a different file format and location.
- 6. Click OK when you're done choosing different options.

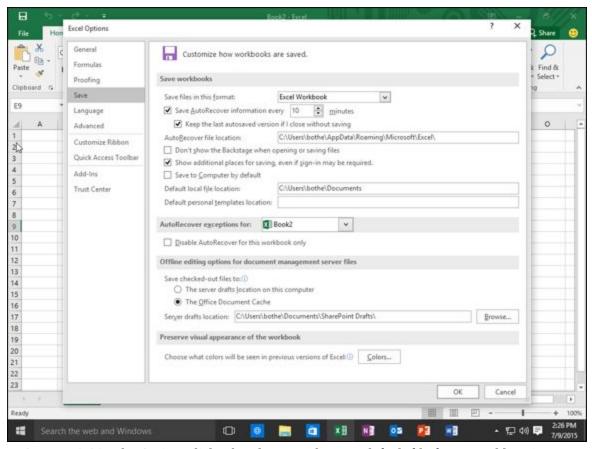


FIGURE 10-20: The Options dialog box lets you choose a default file format and location.

Customizing the Ribbon icons

If you don't use certain Ribbon icons, you can remove them and replace them with icons that represent the commands you do use most often. To customize the Ribbon icons, follow these steps:

- 1. Load an Office 2016 program.
- 2. Click the File tab.
- 3. Click the Options button in the left pane.

An Options dialog box appears.

4. Click Customize Ribbon.

The Options dialog box displays multiple options for you to customize, as shown in Figure 10-21.

5. Click different icons and click the Add or Remove buttons.

6. Click OK when you're done choosing different options.

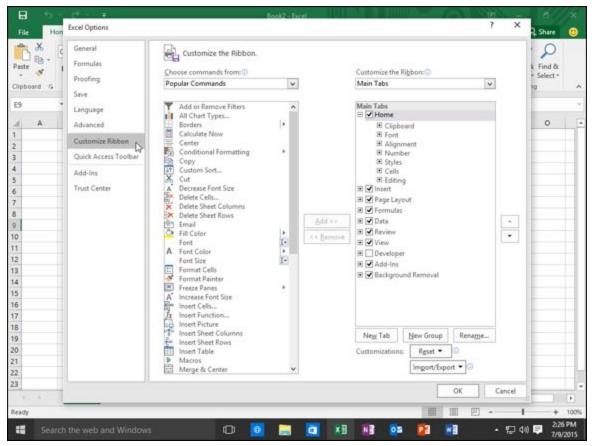


FIGURE 10-21: The Options dialog box lets you change the icons that appear on the Ribbon.

Exiting Office 2016

No matter how much you may love using Office 2016, eventually there will come a time when you need to exit an Office 2016 program and do something else with your life. To exit from any Office 2016 program, choose one of the following:

- **»** Click the Close box in the upper-right corner of the Office 2016 window.
- **»** Click the program icon in the upper-left corner and when a menu appears, click Close.
- » Press Alt+F4.



REMEMBER If you try to close an Office 2016 program before saving your file, a dialog box pops up to give you a chance to save your file. If you don't save your file before exiting, you'll lose any changes you made to that file.

Chapter 11

Sizing Up the Market

IN THIS CHAPTER

Getting a handle on the competition
Growing your slice of the market pie
Figuring out your market share
Making improvements to boost your market share

No matter how unique your offering, no matter how much you think you play on a "field of one," and even if you're the only hitching post in a one-horse town, you have competition.

When Alexander Graham Bell called Mr. Watson through his newfangled invention in 1876, he had competition already. He held in his hand the one and only such device in the whole world, yet from its moment of inception, the telephone had to fight for market share. It had to compete with all the existing and more familiar means of message delivery, and it was certain to spawn a crop of copycat products to vie for message delivery in the future.

Competition may not be obvious or direct, but it's always present. The sooner you face it and plan for it, the better. Use the information in this chapter to gauge and grow your share of business.

Playing the Competitive Field

Competition is the contest among businesses to attract customers and sales. The opposite of competition is a *monopoly*, where a single company has complete control of an industry or service offering.

Competition occurs whenever winning attention is necessary for selection and survival. In nature, the peacock's tail, the rose's scent, and the apple's sweetness are the marketing tools. In business, the battle is fought and won with product innovations and marketing programs designed to attract customers to one business over another.

Thanks to the forces of competition, the free enterprise system is undergoing constant improvement. Here are a few examples of what competition does:

- » It prompts product upgrades and innovations.
- » It leads to higher quality and lower prices.
- >> It enhances selection.
- » It inspires business efficiencies.

These sections take a closer look at the ins and outs of competition and what you need to know about remaining competitive.

Speaking the language of competition

Your sales figures provide your first indication of how you're doing in your competitive arena. If they're strong and growing, your business is on the right track. If they're sliding downhill, you have your work cut out for you. This section defines the terms to know in order to evaluate and improve your position in the competitive field.

Market share

Market share is your slice of the market pie — or your portion of all the sales of products like yours that are taking place in your market area. For example, suppose that you manage a movie theater in a market with a dozen other movie theaters within a reasonable driving distance. Your

market share is the percentage that your theater captures of all the movie tickets sold by all 13 movie theaters. See the "<u>Calculating Your Market Share</u>" section later in this chapter for tips on how to determine and grow your market share.

Share of customer

Share of customer is the percentage that you capture of all the purchases that each individual customer *could* make at your business. Continuing with the movie theater example, in addition to tickets, the theater sells popcorn, soda, candy, movie posters, gift certificates, and so on. Every customer who purchases a movie ticket — nothing else — represents an opportunity to seize a greater share of customer, also known as *share of billfold*.

Share of opportunity

Share of opportunity measures all those people who could but don't buy products like the ones you sell.



EXAMPLE Years ago, Coca-Cola released research documenting that nearly 6 billion people in the world were consuming, on average, 64 ounces of fluid a day. Of that total intake, only 2 ounces of the liquid consumed was Coca-Cola. Coca-Cola officials used this information as the basis of an effort to increase what the company termed its *share of stomach*.

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EXAMPLE An insurance brokerage sells life insurance, which provides a solution for peace of mind. Its competition comes from competing insurers and all the other ways people address their desire for financial security, including everything from investing in stocks to stashing money under the mattress to buying lottery tickets. The insurance brokerage may want to think in terms of how to increase its *nest egg share*.

Find a "stomach share" analogy for your business. What satisfaction does your product address? What solution does your business provide? It's not likely that you'll be able to arrive at a firm calculation of the total size of the opportunity your business addresses, but simply by thinking in terms of why people buy your offering and how they participate with your business, you may land on new promotional ideas that lead to a greater share of business.

Knowing what you're up against

Your business faces three kinds of competition:

» Direct competitors that eat into your market share: They offer the same kinds of products or services that you do and appeal to customers in the same markets that you do business.



REMEMBER Your market share increases when you lure business from direct competitors to your business.

» Indirect competitors that erode your share of customer: For instance, if you sell paint but your customer buys a paintbrush somewhere else, that paintbrush seller is an indirect competitor because it's capturing your customer's secondary sale. Similarly, if you own a marketing company and your client also uses a sales coach to build business, the sales coach is your indirect competitor.



To increase your share of customer, find a way to serve as a one-stop solution by offering your primary product and also the secondary, complementary, or add-on products that customers currently obtain elsewhere.

» Phantom competitors that block your share of opportunity: One of the biggest obstacles to a purchase — and therefore the biggest *phantom competition* — is your customer's inclination to buy nothing or to find some alternative or do-it-yourself solution instead

of buying what you're selling. Taking the paint store example a step further, if you offer a choice between enamel and latex paint but your customers opt for vinyl siding (which never needs paint), a siding outlet is a phantom competitor capable of blocking your business. For that matter, if customers decide that their houses can go another year without a paint job, the option to do nothing is your phantom competitor.



To increase your share of opportunity, discover your phantom competitors and then make your product an easier, more satisfying, and more valuable alternative.

Understanding how to compete

All else being equal, most customers opt for the product with the lowest price. If you want to charge more, make sure that everything else *isn't* equal between you and your lower-priced competitor. Most competitors fall into one of the following two categories:

- **Price competitors** emphasize price as their competitive advantage. To succeed as a price competitor, a business must be prepared to offset lower profit margins with higher sales volume. It also must be prepared to lose its only competitive edge if another business offers a lower price.
- >> Nonprice competitors gain business through a distinction other than low price. They win business based on superior quality, prestige, service, location, reputation, uniqueness of offering, or customer convenience. They must offer an overall value that customers perceive to be worth a higher price tag. They also need to be able to clearly communicate their quality distinction for instance: Zero defects, Phone calls returned in four hours, or Delivery in 30 minutes or it's free.

Winning Your Share of the Market

You win market share by taking business from your direct competitors, thereby reducing their slice of the market pie while increasing your own. Here's what you must do:

- 1. **Get to know your direct competition.**If prospects don't buy from your business, where do they go instead?
- 2. Find out why your customers buy from competing businesses over yours.
- 3. Determine how to win business from direct competitors by enhancing or communicating the value of your offerings in a way that makes them more attractive than the competing alternatives.

The following sections go into more detail on how to accomplish these steps.

Defining your direct competition

The first step toward gaining market share is to acknowledge that you have competition and to get real about which businesses are winning the sales that you're working to capture. On an annual or regular basis, ask yourself the questions outlined in this section.

With which businesses does your business directly compete?

When people consider buying your product or service, which other businesses do they think of at the same time?

Be realistic as you name your direct competitors. Just because a retailer sells jewelry in New York City, it doesn't necessarily compete with Tiffany's. Your direct competitors are businesses that provide your customers a similar offering and a reasonable alternative to your product or service.



REMEMBER If you have a service business, your direct competitors are those companies that you regularly go up against as you try to win contracts or jobs. If you're a retailer, your direct competitors are the businesses whose shopping bags your customers carry as they walk by your store or the business names you overhear while customers deliberate whether to buy your product or some alternative. Investigate by conducting customer research.

How does your business stack up against its direct competitors?

Invest some time discovering the strengths and weaknesses of your competitors. Shop their stores, call their offices, visit their websites, or take any other steps to approach them in the manner your customers approach your business. Compare how their offerings, their presentations, their brand images, and the experience of dealing with their businesses compares with the offerings of your business.

Evaluate each competitor:

- **»** What are this competitor's strengths?
- **»** What are this competitor's weaknesses?
- **»** What could your business do differently to draw this competitor's customers over to your business?

Among your direct competitors, how does your business rank?

Are you the top-tier player in your competitive arena or are you on the low end of the spectrum trying to become a more dominant player? Here are approaches for pegging your place in your competitive field:

» Compare how your business ranks with competitors based on number of employees, sales volume, or any other indicator you can ballpark.

» Compare your market share with the share of each competitor. (See the section "<u>Calculating Your Market Share</u>" later in this chapter.)



Evaluate your top of mind ranking — sometimes called your mind share. When prospects are asked to name three to five businesses in your field, does your name consistently make the list? You can easily find new competitor lists using the free search tool from www.semrush.com by searching your service name. For example: Miami Auto Repair.

If so, you can be pretty sure that your business has top-tier mind share in its competitive arena. Keep listening and you'll discover the names of the businesses your customer thinks are your direct competitors. And if you don't hear your business name, listen anyway, because when you know which businesses *are* in the top-of-mind category, you can begin to analyze what they do differently to achieve the prominence you seek.

Moving up the competitive ladder

Most businesses misdirect their time and energy by tackling the wrong competitors. They take on the biggest names in their market area instead of the biggest threats to their business. As you develop your competitive plan of attack, follow these steps:

1. Start by winning market share from the businesses you're actually losing customers to *today*.

Do this even if it involves facing the harsh reality that your customers consider your business among a less prestigious group than you wish they did. After you name your current competitors, study their offerings, their marketing, and the customer service they provide as you honestly evaluate how your business compares.

2. Make a list of the companies you wish you were running with.

Evaluate why you're not in that group. Is it because of your business's image or location? Does the nature of your clientele mark you as a lower-level player? Or do your products and pricing prevent you from competing with the biggest names in your business arena?

3. Consider whether changing competitive levels is advantageous.

Assess whether your business is more apt to be successful at its current competitive level (think of the big-fish-in-a-small-pond concept) or at the next competitive level (where perhaps you can compete for more lucrative business but where competition may be stiffer and where customers may be fewer or more demanding).

If you decide that your business would be better off competing with more visible and prestigious businesses in your arena, commit to making the changes necessary to get the market to see you through new eyes.

Calculating Your Market Share

Having a sense of your market share provides a good indication of your competitive rank and a way to monitor your growth within your target market. These sections help you figure out your business's market share.

Sizing up your target market

To calculate your share of the market, first define the size of the market in which you compete.

The *total* market includes the entire nation or world — a market area that matters enormously to major global marketers like Nike or Levi's. But to a small business like yours, what matters is your *target* market — the one within the sphere of your business's influence. You can assess your target market's size by using the following criteria:

- **» Geographic targeting:** Where are your customers, and how many are there? For example, a retailer may determine that its geographic target market consists primarily of people who live or vacation within a two-hour drive of the retailer's place of business. An accountant may determine that her geographic target market is concentrated within the city limits. A consultant may target businesses within a five-state region.
- **» Customer targeting:** How many people or businesses actually fit your customer profile? An office furniture manufacturer may target all the nation's office-furnishing retail establishments, along with architects and interior designers who specify office furnishings. An online florist may focus exclusively on wedding planners and bridesto-be within a single state or region.
- **» Product-oriented targeting:** Sometimes, the most effective way to measure your target market's size is through an analysis of how many sales of products like yours occur in the market. For instance, a microbrewery may measure its share of a market as a percentage of all premium beer sold in its geographic target area. (The microbrewery wouldn't measure its sales against *all* beer sales; it

would focus on premium beer sales, because that's the microbrewery's sphere of business influence.) Likewise, an attorney who specializes in land-use planning would assess the number of land-use cases in the target market area before trying to calculate market share.

Doing the math

After you have a good sense of your total target market's size, you can use several approaches to calculate your share:

- **» Unit sales:** Some businesses can easily figure out the total number of products like theirs sold each year. A motel manager in a region that collects a hotel occupancy tax, for instance, could divide the tax the motel pays by the total area-wide tax collection to arrive at the motel's share of the market.
- **Number of potential customers:** If you know that 30,000 adults are in your target market area, and if you can make an educated guess that one in ten of them or 10 percent is a consumer of services like yours, you can assume that your business has a total potential market of 3,000 adults. If you serve 300 of those adults, you have a 10 percent share of your target market.



To aid in your guesswork, visit the reference area of your library and flip through the Standard Rate and Data Service (SRDS) *Local Market Audience Analyst* to find out about consumers in your market area.



EXAMPLE For instance, imagine a fabric and sewing supply store that serves a geographic area that includes 7,000 homes within a 15-minute drive of the store. The owners could find out from the *Local Market Audience Analyst* that 18.5 percent of the households in the area participate in home sewing. If the store's owners multiply the

7,000-household market area by 18.5 percent, they'll discover that they have 1,295 potential customers in their geographic market area. If the owners currently serve 250 of these potential customers, they have a market share of just less than 20 percent — meaning plenty of opportunity for growth.

>> Total sales volume: Another way to estimate market share is to calculate how much people spend at businesses like yours in your market area each year and then divide that figure by your sales revenue. For example, if annually in your market area people spend a total of \$1 million on products like those you sell, and if your business does \$100,000 annually in sales, then you have a 10 percent market share.



Regional business journals and newspapers compile lists that rank sales by businesses in specific industries or service sectors. Businesses submit their revenues (often slightly inflated, so read them with a realistic eye) as a basis for appearing in these lists. Study the lists for your industry to find clues to regional sales revenues in your field.



MARKET SHARE: SAMPLE CALCULATION

Suppose that Green Gardens, a residential landscaping business, serves a market area that includes 20,000 houses, of which approximately 10 percent use landscape services. Thus, the potential residential landscape service market is 2,000 homes. If Green Gardens serves 200 homes, it has a 10 percent market share.

Another way to look at market share is by dollar volume. Green Gardens could estimate the revenues of each of its competitors and then add those figures to the Green Gardens revenue figure to produce a rough estimate of total target market residential landscape service sales. If target market sales total \$4 million, and if Green Gardens has annual sales of \$600,000, Green Gardens has a 15 percent market share.

If Green Gardens combines its knowledge of market share based on unit sales (number of houses served) *and* market share based on dollar volume, its owners would see that they have a 10 percent share of all houses served, yet they have a 15 percent share of total dollar volume. This finding could lead them to conclude that they serve larger-sized accounts than some of their competitors. And based on that, they should have a small celebration!

Increasing Your Market Share

If you're in business and you're ringing up sales, you can rest assured that your business enjoys at least some level of market awareness and market share. But you can be equally certain that not everyone knows about or buys from your business. No brand in the world has 100 percent brand awareness, let alone 100 percent market share, so be reasonable with your market share goals and growth expectations.



warning Also, as you seek to increase market share, steer clear of these land mines:

- **» Avoid "buying" market share through price reductions.** Don't sacrifice your bottom line as you prepare to welcome new customers through the door.
- **» Be ready before issuing an invitation to new customers.** Don't procrastinate, but do give yourself time to be sure you're ready to make a great first impression. Run through the following checklist before launching a new business development effort:
 - Current customer satisfaction levels: Are your current customers happy with your product? Are they happy with your business in general? Do they return to your business again and again, or do you have a high turnover rate? Do customers speak well on your behalf? Are your customer satisfaction levels sky-high?



• **TIP Customer service adjustments:** Before working to draw in new customers, make changes that will enhance your customer experience and service levels, increasing the odds that you'll develop lasting and loyal customer relationships. Start by studying current customer reviews, ratings, and input,

looking for legitimate service or product complaints you can address before reaching out to new customers. Then, beyond righting wrongs, get proactive. Do you need to fine-tune your product offering — how you price it, how you package and present it, or even how you guarantee it? Do you need to improve how you interact with customers? This may include everything from enhancing your business environment to revising your on-hold telephone message to improving the speed and user-friendliness of your website.

• **Business readiness:** Do you have the inventory (or, if you own a service business, the staff, talent, and capacity) to deliver what you're offering? Is your staff well-informed and ready to help prospects become buyers when they respond to your marketing messages?

WHEN MARKET SHARE MEANS MARKET SATURATION

The common rule is that a 25 percent market share is considered a dominant market position. As you calculate your market share, watch closely as it reaches a dominant position. When it gets there, take time to celebrate, for sure, but also be aware that as your share edges farther upward, it will near a level called market saturation.

Market saturation occurs when a business captures the sales of about 40 percent of the potential customers within its target market, at which point one of several things tends to happen:

- **Competitors start to eat into market share.** After a business begins to saturate its marketplace, competitors realize the opportunity and enter to seize a share of the sales.
- **The dominant business gets complacent.** Quality control often gets lax and customers begin to stray.
- **Customers' interest or need wanes.** By the time a business gains dominant market share, often customers have bought the products they need and, other than replacements, their purchases grow few and far between.
- The business seeks new opportunities. With market saturation comes the need for change. Businesses that dominate their market areas seek growth by opening new markets or introducing new products. Most of all, they restore their emphasis on customer service and satisfaction the very thing that made the business a success in the first place.

Don't turn from a growing market too soon, but don't cling exclusively to a saturated market too long. Use market share knowledge as your steering wheel.

Chapter 12

The Workings of Stock and Bond Markets

IN THIS CHAPTER

Going from a private to public company

Looking at the workings of the stock and bond markets and the economy

Deciphering interest rates, inflation, and the Federal Reserve

To buy and enjoy using a computer or cellphone, you don't need to know the intricacies of how it's put together and how it works. The same holds true for investing in stocks and bonds. However, spending some time understanding how and why the financial markets function may make you more comfortable with investing and make you a better investor.

In this chapter, I explain the ways that companies raise capital, and I give you a brief primer on financial markets and economics so you can understand and be comfortable with investing in the financial markets.

How Companies Raise Money through the Financial Markets

All businesses start small — whether they begin in a garage, a spare bedroom, or a rented office. As companies begin to grow, they often need more money (known as *capital* in the financial world) to expand and afford their growing needs, such as hiring more employees, buying computer systems, and purchasing other equipment. Many smaller companies rely on banks to lend them money, but growing and successful firms have other options, too, in the financial markets. Companies can choose between two major money-raising options when they go into the financial markets: issuing stocks and issuing bonds.

Deciding whether to issue stocks or bonds



REMEMBER A world of difference exists between the two major types of securities, both from the perspective of the investor and from that of the issuing company:

- **» Bonds are loans that a company must pay back.** Instead of borrowing money from a bank, many companies elect to sell *bonds*, which are IOUs to investors. The primary disadvantage of issuing bonds compared with issuing stock, from a company's perspective, is that the company must repay this money with interest. On the other hand, the business doesn't have to relinquish ownership when it borrows money. Companies are also more likely to issue bonds if the stock market is depressed, meaning that companies can't fetch as much for their stock.
- **» Stocks are shares of ownership in a company.** Some companies choose to issue stock to raise money. Unlike bonds, the money that the company raises through a stock offering isn't paid back, because it's not a loan. When the investing public buys stock, these outside

investors continue to hold and trade it. (Although companies occasionally buy their own stock back, usually because they think it's a good investment, they're under no obligation to do so.)

Issuing stock allows a company's founders and owners to sell some of their relatively illiquid private stock and reap the rewards of their successful company. Many growing companies also favor stock offerings because they don't want the cash drain that comes from paying loans (bonds) back.

Although many company owners like to take their companies public (issuing stock) to cash in on their stake of the company, not all owners want to go public, and not all who do go public are happy that they did. One of the numerous drawbacks of establishing your company as public includes the burdensome financial reporting requirements, such as publishing quarterly earnings statements and annual reports. Not only do these documents take lots of time and money to produce, but they can also reveal competitive secrets. Some companies also harm their long-term planning ability because of the pressure and focus on short-term corporate performance that comes with being a public company.

Ultimately, companies seek to raise capital in the lowest-cost way they can, so they elect to sell stocks or bonds based on what the finance folks tell them is the best option. For example, if the stock market is booming and new stock can sell at a premium price, companies opt to sell more stock. Also, some companies prefer to avoid debt because they don't like carrying it.



REMEMBER From your perspective as a potential investor, you can usually make more money in stocks than bonds, but stocks are generally more volatile in the short term.

Taking a company public: Understanding IPOs

Suppose that The Capitalist Company (TCC) wants to issue stock for the first time, which is called an *initial public offering* (IPO). If TCC decides to go public, the company's management team works with *investment bankers*, who help companies decide when and at what price to sell stock and then help actually sell (distribute) the new shares to investors willing to purchase them.

Now suppose that based upon their analysis of the value of TCC, the investment bankers believe that TCC can raise \$20 million by issuing stock that represents a particular portion of the company. When a company issues stock, the price per share that the stock is sold for is somewhat arbitrary. The amount that a prospective investor will pay for a particular portion of the company's stock should depend on the company's profits and future growth prospects. Companies that produce higher levels of profits and grow faster can generally command a higher sales price for a given portion of the company.

Consider the following ways that investment bankers can structure the IPO for TCC:

Price of Stock	Number of Shares Issued
\$5	4 million shares
\$10	2 million shares
\$20	1 million shares

In fact, TCC can raise \$20 million in an infinite number of ways, thanks to varying stock prices. If the company wants to issue the stock at a higher price, the company sells fewer shares.



whether to buy a stock. Ultimately, the amount that investors will pay for a company's stock should depend greatly on the company's growth and profitability prospects. To determine the price-earnings ratio of a particular company's stock, you take the price per share of

the company's stock and divide it by the company's earnings per share.

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The value of a company's stock relative to (divided by) its earnings = its price-earnings ratio
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In the case of TCC, suppose that its stock is currently valued in the marketplace at \$30 per share and that it earned \$2 per share in the past year, which produces a price-earnings ratio of 15. Here are the numbers:

$$\frac{\$30 \text{ per share}}{\$2 \text{ per share}} = 15$$

Understanding Financial Markets and Economics

Tens of thousands of books, millions of articles, and enough PhD dissertations to pack a major landfill explore the topics of how the financial markets and economy will perform in the years ahead. You can spend the rest of your life reading all this stuff, and you still won't get through it. In the following sections, I explain what you need to know about how the factors that influence the financial markets and economy work so you can make informed investing decisions.

Driving stock prices through earnings

The goal of most companies is to make money, or earnings (also called *profits*). *Earnings* result from the difference between what a company takes in *(revenue)* and what it spends *(costs)*. I say *most* companies because some organizations' primary purpose is not to maximize profits. Nonprofit organizations, such as colleges and universities, are a good example. But even nonprofits can't thrive without a steady money flow.

Companies that trade publicly on the stock exchanges seek to maximize their profit — that's what their shareholders want. Higher profits generally make stock prices rise. Most private companies seek to maximize their profits as well, but they retain much more latitude to pursue other goals.



REMEMBER Among the major ways that successful companies increase profits are by doing the following:

» Building better mousetraps: Some companies develop or promote an invention or innovation that better meets customer needs. For example, many consumers welcomed the invention of the digital camera, which eliminated the need for costly and time-consuming

- development of film. The digital camera also made transferring and working with pictures much easier.
- **» Opening new markets to your products:** Many successful U.S.-based companies, for example, have been stampeding into foreign countries to sell their products. Although some product adaptation is usually required to sell overseas, selling an already proven and developed product or service to new markets generally increases a company's chances for success.
- **» Being in related businesses:** Consider the hugely successful Walt Disney Company, which was started in the 1920s as a small studio that made cartoons. Over the years, it expanded into many new but related businesses, such as theme parks and resorts, movie studios, radio and television programs, toys and children's books, and video games.
- **» Building a brand name:** In blind taste tests, popular sodas and many well-known beers rate comparably to many generic colas and beers that are far cheaper. Yet some consumers fork over more of their hard-earned loot because of the name and packaging. Companies build brand names largely through advertising and other promotions. (*For Dummies* is a brand name, but *For Dummies* books cost about the same as lower-quality and smaller books on similar subjects!)
- Managing costs and prices: Smart companies control costs. Lowering the cost of manufacturing their products or providing their services allows companies to offer their products and services more cheaply. Managing costs may help fatten the bottom line (profit). Sometimes, though, companies try to cut too many corners, and their cost-cutting ways come back to haunt them in the form of dissatisfied customers — or even lawsuits based on a faulty or dangerous product.
- **» Watching the competition:** Successful companies don't follow the herd, but they do keep an eye on what the competition is up to. If lots of competitors target one part of the market, some companies target a

less-pursued segment that, if they can capture it, may produce higher profits thanks to reduced competition.

Weighing whether markets are efficient

Companies generally seek to maximize profits and maintain a healthy financial condition. Ultimately, the financial markets judge the worth of a company's stock or bond. Trying to predict what happens to the stock and bond markets and to individual securities consumes many a market prognosticator.

In the 1960s, to the chagrin of some market soothsayers, academic scholars developed a theory called the *efficient market hypothesis*. This theory basically maintains the following logic: Lots of investors collect and analyze all sorts of information about companies and their securities. If investors think that a security, such as a stock, is overpriced, they sell it or don't buy it. Conversely, if many investors believe that a security is underpriced, they buy it or hold what they already own. Because of the competition among all these investors, the price that a security trades at generally reflects what many (supposedly informed) people think it's worth.

Therefore, the efficient market theory implies that trading in and out of securities and the overall market in an attempt to be in the right stocks at the right time is a futile endeavor. Buying or selling a security because of "new" news is also fruitless because the stock price adjusts so quickly to this news that investors can't profit by acting on it. As Burton Malkiel so eloquently said in his classic book *A Random Walk Down Wall Street*, this theory, "Taken to its logical extreme ... means that a blindfolded monkey throwing darts at a newspaper's financial pages could select a portfolio that would do just as well as one carefully selected by the experts." Malkiel added, "Financial analysts in pin-striped suits don't like being compared with bare-assed apes."

Some money managers have beaten the market averages. In fact, beating the market over a year or three years isn't difficult, but few can beat the market over a decade or more. Efficient market supporters argue that some of those who beat the markets, even over a ten-year period, do so because of luck. Consider that if you flip a coin five times, on some occasions you get five consecutive heads. This coincidence actually happens, on average, once every 32 times you do five coin-flip sequences because of random luck, not skill. Consistently identifying in advance which coin flipper will get five consecutive heads isn't possible.

Strict believers in the efficient market hypothesis say that it's equally impossible to identify the best money managers in advance. Some money managers, such as those who manage mutual funds, possess publicly available track records. Inspecting those track records (and understanding the level of risk taken for the achieved returns) and doing other common-sense things, such as investing in funds that have lower expenses, improve your odds of performing a bit better than the market.



Efficiency means that the current price of an investment accurately reflects its true value. Although the stock market is reasonably efficient, many consider the bond market to be even more efficient. The real estate market is less efficient because properties are unique, and sometimes less competition and access to information exist. If you can locate a seller who really needs to sell, you may be able to buy property at a sizeable discount from what it's really worth. Small business is also less efficient. Entrepreneurs with innovative ideas and approaches can sometimes earn enormous returns.

Moving the market: Interest rates, inflation, and the Federal Reserve

For decades, economists, investment managers, and other (often self-anointed) gurus have attempted to understand the course of interest rates, inflation, and the monetary policies set forth by the Federal Reserve. Millions of investors follow these economic factors. Why? Because

interest rates, inflation, and the Federal Reserve's monetary policies seem to move the financial markets and the economy.

Realizing that high interest rates are generally bad

Many businesses borrow money to expand. People like you and me, who are affectionately referred to as *consumers*, also borrow money to finance home and auto purchases and education.

Interest rate increases tend to slow the economy. Businesses scale back on expansion plans, and some debt-laden businesses can't afford high interest rates and go under. Most individuals possess limited budgets as well and have to scale back some purchases because of higher interest rates. For example, higher interest rates translate into higher mortgage payments for home buyers.

If high interest rates choke business expansion and consumer spending, economic growth slows or the economy shrinks — and possibly ends up in a recession. The most common definition of a *recession* is two consecutive quarters (six months) of contracting economic activity.

The stock market usually develops a case of the queasies as corporate profits shrink. High interest rates may depress investors' appetites for stocks as the yields increase on certificates of deposit (CDs), Treasury bills, and other bonds.

Higher interest rates actually make some people happy. If you locked in a fixed-rate mortgage on your home or on a business loan, your loan looks much better than if you had a variable-rate mortgage. Some retirees and others who live off the interest income on their investments are happy with interest rate increases as well. Consider back in the early 1980s, for example, when a retiree received \$10,000 per year in interest for each \$100,000 that he invested in certificates of deposit that paid 10 percent.

Fast-forward to the early 2000s: A retiree purchasing the same CDs saw interest income slashed by about 70 percent, because rates on the CDs were just 3 percent. So for every \$100,000 invested, only \$3,000 in interest income was paid.

If you try to live off the income that your investments produce, a 70 percent drop in that income is likely to cramp your lifestyle. So higher interest rates are better if you're living off your investment income, right? Not necessarily.

Discovering the inflation and interest rate connection

Consider what happened to interest rates in the late 1970s and early 1980s. After the United States successfully emerged from a terrible recession in the mid-1970s, the economy seemed to be on the right track. But within just a few years, the economy was in turmoil again. The annual increase in the cost of living (known as the *rate of inflation*) burst through 10 percent on its way to 14 percent. Interest rates, which are what bondholders receive when they lend their money to corporations and governments, followed inflation skyward.



driver of interest rates is the rate of inflation. Interest rates were much higher in the 1980s because the United States had double-digit inflation. If the cost of living increases at the rate of 10 percent per year, why would you, as an investor, lend your money (which is what you do when you purchase a bond or CD) at 5 percent? Interest rates were so much higher in the early 1980s because you or I would never do such a thing.

In recent years, interest rates have been low. Therefore, the rate of interest that investors can earn lending their money has dropped accordingly. Although low interest rates reduce the interest income that comes in, the corresponding low rate of inflation doesn't devour the purchasing power of your principal balance. That's why lower interest rates aren't necessarily worse and higher interest rates aren't necessarily better as you try to live off your investment income.

So what's an investor to do when he's living off the income he receives from his investments but doesn't receive enough because of low interest rates? Some retirees have woken up to the risk of keeping all or too much of their money in short-term CD and bond investments. A simple but psychologically difficult solution is to use up some of your principal to supplement your interest and dividend income. Using up your principal to supplement your income is what effectively happens anyway when inflation is higher — the purchasing power of your principal erodes more quickly. You may also find that you haven't saved enough money to meet your desired standard of living — that's why you should consider your retirement goals well before retiring.

Exploring the role of the Federal Reserve

When the chairman of the Federal Reserve Board speaks (currently it's Janet Yellen; before her, it was Ben Bernanke), an extraordinary number of people listen. Most financial market watchers and the media want to know what the Federal Reserve has decided to do about *monetary policy*. The Federal Reserve is the central bank of the United States. The Federal Reserve Board comprises the 12 presidents from the respective Federal Reserve district banks and the 7 Federal Reserve governors, including the chairman who conducts the Federal Open Market Committee meetings behind closed doors eight times a year.

What exactly is the Fed (as it's known), and what does it do? The *Federal Reserve* sets monetary policy. In other words, the Fed influences interest-rate levels and the amount of money or currency in circulation, known as the *money supply*, in an attempt to maintain a stable rate of inflation and growth in the U.S. economy.

Buying money is no different from buying lettuce, computers, or sneakers. All these products and goods cost you dollars when you buy them. The cost of money is the interest rate that you must pay to borrow it. And the cost or interest rate of money is determined by many factors that ultimately influence the supply of and demand for money.

The Fed, from time to time and in different ways, attempts to influence the supply of and demand for money and the cost of money. To this end, the Fed raises or lowers short-term interest rates, primarily by buying and selling U.S. Treasury bills on the open market. Through this trading activity, known as *open market operations*, the Fed is able to target the

Federal funds rate — the rate at which banks borrow from one another overnight.

The senior officials at the Fed readily admit that the economy is quite complex and affected by many things, so it's difficult to predict where the economy is heading. If forecasting and influencing markets are such difficult undertakings, why does the Fed exist? Well, the Fed officials believe that they can have a positive influence in creating a healthy overall economic environment — one in which inflation is low and growth proceeds at a modest pace.



reasons. Various pundits have accused former Fed Chairman Alan Greenspan of causing speculative bubbles, such as the boom in technology stock prices in the late 1990s or in housing in the early 2000s. Some economists have argued that the Federal Reserve has, at times, goosed the economy by loosening up on the money supply, which leads to a growth spurt in the economy and a booming stock market, just in time to make El Presidente look good prior to an election. Conveniently, the consequences of inflation take longer to show up — they're not evident until after the election. In recent years, others have questioned the Fed's ability to largely do what it wants without accountability.



REMEMBER Many factors influence the course of stock prices. Never, ever make a trade or investment based on what someone at the Federal Reserve says or what someone in the media or some market pundit reads into the Fed chairman's comments. You need to make your investment plans based on your needs and goals, not what the Fed does or doesn't do.

What the heck is "quantitative easing"?

During and after the 2008 financial crisis, many pundits interviewed on financial cable television programs and website pontificators used the Federal Reserve as a punching bag, blaming the Fed for various economic problems, including the 2008 financial crisis. Despite the rebounding economy and stock market, some of the critics got even more vocal in blasting the Fed's quantitative easing program begun late in 2010.

More often than not, these critics, who typically and erroneously claim to have predicted the 2008 crisis, have an agenda to appear smarter than everyone else, including the Fed. Some of these pseudo-experts are precious metals hucksters and thus like to claim that the Fed is going to cause hyperinflation that will impoverish you unless you buy gold, silver, and the like.

In one popular video that has millions of YouTube views, the author claims the following using goofy cartoonish characters:

- **»** The Fed is printing a ton of money to implement quantitative easing (QE).
- **»** QE is being done to stop deflation (falling prices), but the Fed is too dumb to realize that consumer prices are rising, not falling.
- **»** The Fed has been wrong about everything the past 20 years.
- Then-Fed Chairman Ben Bernanke was unqualified for his job because he had no business experience, had no policy experience, and had never held an elected office. He was a fool who was wrong about everything during his tenure in office and blew up the American economy and then went to work on blowing up the world economy.
- >> The government is stupidly buying Treasuries from Goldman Sachs at grossly inflated prices (rather than buying Treasuries from the Treasury department). Goldman Sachs is ripping off the American people.

Although it's stunning in and of itself that this video has been watched millions of times in a short time period, even more amazing and

disturbing is how many mainstream media and other websites and outlets have promoted and recommended the video, making little if any effort to fact-check and reality-check its contents. I do so to set the record straight and to advance your understanding of what quantitative easing really is and why the Fed is doing it. Let's go through the video's main assertions point by point:

- w The Fed is not printing a ton of money (expanding the money supply) to implement QE. Retail money market assets and bank deposits could increase, for example, if individuals decided to hold more cash. Demand for these highly liquid assets can come from folks around the world, so increased demand for the U.S. dollar during times of stress can lead to the growth of M2 (the leading measure of the money supply). Changes in money supply are complicated.
- The Fed is well aware that there's inflation right now but has been concerned that the rate has been quite low by historic standards and that there were signs of accelerating deflation during the severe recession.
- If the Fed had been wrong about everything the past 20 years, our economy would be in a shambles and our stock market wouldn't have appreciated more than 500 percent over that period. Yes, the U.S. has a somewhat elevated unemployment rate, but that's due to various factors, notably current tax policy.
- **»** Bernanke was well-qualified for his job.
- The Fed is buying Treasuries from banks at competitive prices and is doing so to encourage more bank lending. Saying that the Fed is directing this buying solely to Goldman Sachs is absurd. The Fed conducts such Treasury open market operations through an approved list of 18 primary dealers, and Goldman is one of the 18 dealers operating in a highly competitive environment. Goldman-bashing has been going on for a long time.

Interestingly, I haven't seen much questioning of the background and agenda of the person behind this fact-challenged YouTube video, who in

some articles is referred to as a "30-year-old real estate manager." He has no discernible background or expertise in the subject matter discussed in the video, which helps explain why nearly every statement in the video is wrong.

In various speeches and selected interviews, Fed Chairman Bernanke has explained QE. Here's one fairly plain English explanation that Bernanke gave during the height of the credit crisis (*Note:* "Central bank" means the Federal Reserve):

Quantitative easing can be thought of as an expansion of the central bank's balance sheet with no intentional change in its composition. That is, the central bank undertakes more open market operations with the objective of expanding bank reserve balances, which the banking system should then use to make new loans and buy additional securities. However, when credit spreads are very wide, as they are at present, and the credit markets are quite dysfunctional, it becomes less likely that new loans and additional securities purchases will result from increasing bank reserve balances.

In contrast, credit easing focuses on the mix of loans and securities that the central bank holds as assets on its balance sheet as a means to reduce credit spreads and improve the functioning of private credit markets. The ultimate objective is improvement in the credit conditions faced by households and businesses. In this respect, the Federal Reserve has focused on improving functioning in the credit markets that are severely disrupted and that are key sources of funding for financial firms, nonfinancial firms, and households.

Part 4

The Internet For Dummies

FEATURING CHAPTERS FROM:

The 6th edition of *Blogging For Dummies* (Print ISBN: 978-1-119-25780-6; ePub ISBN: 978-1-119-25781-3; ePdf ISBN: 978-1-119-25782-0), by Amy Lupold Bair.

The 6th edition of *Facebook For Dummies* (Print ISBN: 978-1-119-17903-0; ePub ISBN: 978-1-119-17905-4; ePdf ISBN: 978-1-119-17904-7), by Carolyn Abram.

The 9th edition of *eBay For Dummies* (Print ISBN: 978-1-119-26019-6; ePub ISBN: 978-1-119-26020-2; ePdf ISBN: 978-1-119-26026-4), by Marsha Collier.

The 4th edition of *LinkedIn For Dummies* (Print ISBN: 978-1-119-25113-2; ePub ISBN: 978-1-119-25114-9; ePdf ISBN: 978-1-119-25115-6), by Joel Elad.

Chapter 13

Creating Great Content

IN THIS CHAPTER

Discovering who your audience is Getting words onto your blog Adding value by including links Planning for blogging dry spells

Many elements work together to make a blog successful, from a well-designed layout to fancy technical widgets, but none of those elements can substitute for good content aimed at the right audience. In fact, if you write (or podcast or take photos or produce video) incredibly well and you're reaching readers who are engaged by your style and content, you can actually be successful without spending much time at all on your blog's appearance. Amazing content can even make your readers forgive an awkward interface or missing bells and whistles, such as RSS feeds or categories.

So, if you do nothing else to make your blog succeed, focus on producing great writing, photos, audio, or videos. Know what your audience wants and deliver it.

Most blogs include a written component, or are predominantly word based, so this chapter offers pointers on writing well for the web and understanding what your audience expects from your blog.



other bloggers who are covering the same subject area as your blog or trying to reach the same audience you want to attract. Remember that in the blogosphere the atmosphere is very collaborative, which means that competitors can also be friends, contacts, occasional contributors to your blog, participants in your comments area, and

good resources for information. So when I talk about competitors, I do so in the friendliest sense of the word!

Knowing Your Audience

First things first: How well do you know your audience? Are you hitting the right notes to attract the readers you want in the quantity you want them?



REMEMBER Not all bloggers care about the number of readers they get, but they do care about getting the right eyes on their words. Regardless of whether you're number-obsessed or just focused on your niche, you need to understand your audience and what your readers are looking for.

You can get an idea about your audience by

- Using statistics software to track the number of visitors to your blog and what links those visitors click
- » Noting the content that elicits the biggest and best response from your readers (or the response that you want, even if it isn't the biggest)
- >> Looking at the blogs of others in your subject area to see what you can find out from their comment activity, search engine rankings, and other data

You might have to wait awhile for statistics and comments, but you can easily look at others' blogs, even if you're still developing your own blog.

Finding your competitors

To find your competitors, you must first define your own niche. Your niche consists of what you're blogging about, the topics you cover, and what words you use most frequently in your posts. You use these keywords to describe yourself, and visitors use them to find you when

they conduct a search on Google, Yahoo!, Bing, or another search engine.

Use these descriptive words (plus the word *blog*) to locate blogs that have similar content to yours. You can also use one of the blog search engines and catalogs, such as Blog Catalog (www.blogcatalog.com), Blogging Fusion (www.bloggingfusion.com), Best of the Web (www.botw.org), Twingly (http://www.twingly.com), or Icerocket (www.icerocket.com). Figure 13-1 shows the results of a search on Twingly that used the terms *diy*, *wedding*, *dress*, and *flowers*. These results show posts from blogs that talk about these topics.



Twingly covers the global blogosphere

We index more than 1.2 million blog posts per day, from all over the world. We add 13,000 new active blogs every day and if that is not enough, you can easily add more yourself and we will cover them for you. Through our easy integrated APIs you get access to all of them at your fingertips!

ADI SEDVICES

FIGURE 13-1: Use Twingly to find your competitors' blogs.

Discovering the secrets of success

While you watch your competitors' blogs, you have a chance to figure out what topics they blog about, of course, but also how they reach out to their audience.



Your competitors might not be blogging in the most effective way. While you look at these blogs, decide whether your competitors are actually reaching their audiences successfully or whether they're falling short. For example, do their blog posts receive a lot of comments? Has their content been shared often on social media sites?

While you visit these blogs, keep a journal of your impressions. Watch the following to investigate how these bloggers handle publishing and outreach:

» How frequently the blogger puts new posts on the blog:

Frequency of blog posts is a big deal. Any blogger can tell you to post "frequently," but almost none can tell you what that really means. I talk more about how often you should post in the section "Writing Well and Frequently," later in this chapter, but you can explore this idea by noting how often your competitors choose to post to their blogs. Do they create new posts daily, or even multiple times a day? Or do they post a few times a week, or even once a week? When you become a reader of that blog, do you find yourself wanting more content or less?

when the blogger publishes blog posts: Time of day can have a surprising impact on how readers receive a blog post. You need to reach your audience members when they're likely to be sitting at their computers. If your audience consists of stockbrokers, time your posts so that new content becomes available just before business hours start on the East Coast, not during dinnertime on the West Coast. If you're targeting teens, try to publish before or after school hours, not while they're sitting in homeroom. (Theoretically, they are doing schoolwork at that point and not surfing the Internet!)



- **>> REMEMBER** Sure, your readers can visit your blog anytime and pick up content that you posted in the middle of the night, but you can impress them with a blog that always seems to have fresh content just when they want it.
- which the length of posts on the blog: You might be surprised to know that the ideal length of a blog post is a hotly debated topic among experienced bloggers. Some bloggers swear by the short-and-sweet recipe that guides most web writing: Blog posts should get to the point quickly and allow readers to get back to their busy days with the information that they need. Others find that longer posts even essays do the job, keeping readers on the site longer and providing more thoughtful commentary. The topic of your blog and your audience's appetite and available time combine to dictate the natural length of your blog posts. Looking at your competitors' blogs can tell you the number of words that they find optimal in a blog post, which you can use as a starting point for your blog.
- when the blogger links to outside websites: Linking to other blogs and websites is a great way to serve the reader. By pointing out other sources of information or even other blogs, you help them become more knowledgeable about your topic and keep them engaged with it. So, when do your competitors choose to link to other sites, and what sites do they link to? Are the links designed to entertain, educate, or inform? Are links included in the text of the post or broken out at the end? What makes you click a link yourself?

 I talk a lot more about linking to other sites as a strategy for reaching your audience in the section "Linking to Serve the Reader," later in this chapter.
- **»** When the blogger addresses his or her audience directly: Many bloggers use a very personal writing style that directly acknowledges the reader, the way this book does. You might enjoy being addressed directly by a blogger because the conversation feels more personal. Or, depending on the topic of the blog, perhaps a more formal,

- almost academic approach is more appropriate. Either way, check out how your competition is handling this issue. When do they ask readers for input or feedback, and how do they phrase those requests? Do readers actually respond, and if so, to what kinds of approaches?
- We of multimedia, such as photos, audio, and videos: Although a whole lot of words comprise most blogs today, photos, graphics, and videos are becoming equally important in the world of blogging. Take a look at how your competitors include multimedia in their blogs. Do they use photos to illustrate the ideas in the posts or just to attract the eye? What about animation or video? Do posts that have these extras get more comments or fewer? Do you like getting information in these other formats or do you find them distracting?
- Posts that get a lot of comments and posts that get very few: A blog that gets a lot of comments signals that the blogger is resonating with his or her audience even if just to make audience members mad. A blog that has no or few comments probably just leaves people flat (or maybe isn't even read). Not all bloggers get hundreds of comments every time they post. Some blog posts just get better responses than others, and part of what makes bloggers successful is being able to know what makes those posts really work so that they can repeat the success. Watch your competitors' blogs to see when a post gets a big response and look at what kind of response it gets.



- **>> REMEMBER** Also, watch for the posts that don't get any responses. Try to figure out why those posts didn't work so that you don't make the same mistake!
- **>> The writing style of the blogger:** Bloggers need to have good content, and for most bloggers, that comes down to having an accessible and readable writing style. For those blogs in your niche that attract participation and good press, what style does the blogger use? Personal? Professional? Humorous? What tone appeals to

readers and makes them come back to the blog again and again? What approach do you find more readable and engaging?

Use these same points of analysis on your own blog. After you have your blog up and running for awhile, take a look at your content with the same critical eye that you use on your competitors. What are you doing right? What are you doing incorrectly?

You may find this exercise hard to do. I'm sure you think that everything on your blog is great; after all, no one sets out to write a bad blog post! Still, some of your posts are likely more popular with readers than others, and if you can figure out why certain posts work better than others, you can repeat that success again and again. In fact, developing a critical eye for your own content can really help you make your blog succeed: This medium doesn't hold still, and you need to adapt your style and content while your audience grows and changes. Consider conducting this kind of survey of your content a couple times a year to make sure that you stay on track and topical to the folks you want to attract, even if you're aiming for just your immediate family.

If you find it tough to view your own content through that kind of lens, but you have a friend or two who get what you are doing and can look at it critically, ask them to do a site review. Just remember, they are giving you opinions and advice, but it's your call whether you implement any of that!

Profiling your audience

When you finish your competitive analysis (which I explain how to do in the preceding section) and after you review your own content successes and failures, picture your audience in your mind's eye.

Create a clear vision of who's in your audience. If you don't have the audience you're targeting at this point, develop a picture of whom you want in your audience.

You don't actually have to draw a picture, though. You can create this profile in words that describe the characteristics of your ideal audience member. You can include anything that you want in this profile, from

shoe size to personal hang-ups — any detail that helps you really know this person better and create content for this person on your blog.

warning Don't just say, "My ideal audience is anybody who is interested in [insert your blog topic here]." You already know that. Otherwise, this person wouldn't be on your blog in the first place. You want to capture all the details that make this person different, unique, and interesting.

Take From Hip to Housewife, as shown in <u>Figure 13-2</u>. From Hip to Housewife (<u>www.fromhiptohousewife.com</u>) is a blog written by author Nancy Friedman, who describes her writing as being "on aging and momming and my twenty year quest to lose the same ten pounds." This tagline combined with categories ranging from family to travel to parenting make it clear the type of reader she anticipates visiting her site.

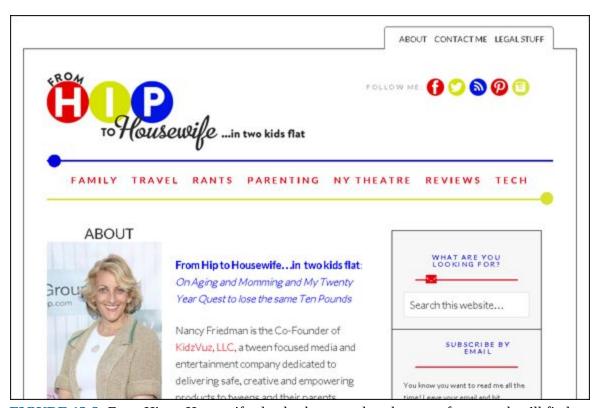


FIGURE 13-2: From Hip to Housewife clearly shows readers the type of content they'll find.

Some concepts and facts to explore for your audience profile include

- » Age
- » Gender
- >> The nature of their interest in your topic (for example, familial, personal, emotional, or professional)
- Seographic location and proximity to you or to the topic of your blog
- » Lifestyle (for example, workaholic, homebody, retired, world traveler, and so on)
- » Occupation
- >> Education level
- >> Marital status
- » Interests and hobbies
- » Income range
- » Political leanings

When you have a reader profile in hand, you can be more targeted about what you choose to write about and how you address that audience.

Writing Well and Frequently

Two of the many ingredients for a successful blog are good and frequently updated content. But what does it really mean to provide good and frequent content?

Good content compels, satisfying the readers' immediate interests but leaving them hungry for more. Think of a blog post as being like an appetizer: It should whet the appetite, pique the palette, and sustain the diner until the next course arrives. You don't want to give your readers "annual Thanksgiving dinner" — you want them to come back, come back soon, and come back often.

Blogging is quite a personal, conversational medium, and textual blogs have a strong feel of the author and his or her personality. The first blogs were actually online diaries, and even today, most bloggers choose to use words such as *I* or *my* in their blog posts, creating an intimate and open feel — even on corporate blogs. This *first-person* writing differs dramatically from most corporate communication, which at best refers to the company as *our* and at worst only refers to the company by its full and official name.

Take, for example, one of the McDonald's blogs, Open for Discussion, which was written by McDonald's Vice President Bob Langert. In a post on August 20, 2007, Bob wrote:

RESPECTING COPYRIGHT

As a general rule, anything and everything you see on the Internet is protected by copyright. Copyright is just what it sounds like: It focuses on "the right to copy" an original creation. Copyright law protects an author by giving that right solely to him or her.

Unless the creator of an image or photo specifically licenses his or her copyright to you, you can't reuse it, *even if you give the author credit or link back to the original story*. (This rule applies to text, photos, and videos, too.) But this rule has a few exceptions: You can quote a news story or a blog post on your blog if you use only part of it, and as long as you don't take credit for the work. Commentary and critique also allow you to excerpt a piece of text or other work. But don't think that just because you're the subject of a story or blog post that you have the right to repost the entire article on your blog or website. You don't. When in doubt, ask and get permission.

At www.copyright.gov, get the goods on what you can use on your blog without running afoul of the law that protects other authors' content. You might particularly want to read the areas around fair use, especially if you plan to write reviews.

"We all have one — a pet peeve that we just can't ditch. I was recently reminded of my #1 pet peeve while reading the latest account of McDonald's Moms' Quality Correspondents. They reported that McDonald's beef is 100% pure USDA-inspected beef. Frankly, I don't think this should be any kind of big 'Aha,' and I am amazed that so many people question this established fact."

Figure 13-3 shows this post.

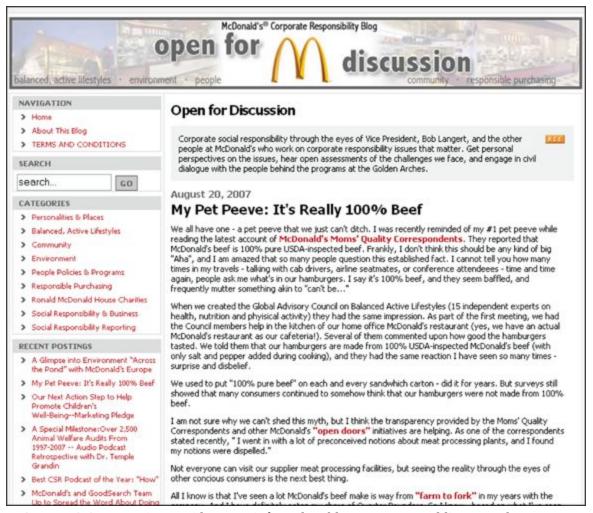


FIGURE 13-3: Even vice presidents are informal on blogs, as McDonald's V.P. Bob Langert was on Open for Discussion.

Writing in the first person isn't as easy as it looks (or reads); after all, most people spend years training to write more formally, and commonly produce all kinds of documents in which first-person writing is emphatically *not* suitable: memos, reports, news stories, invoices, and so on. You may have trouble finding an authentic, genuine voice that really feels comfortable. My best advice is to just practice, practice,

If you'd like your blog to have a casual tone, think of your blog posts as being like letters or emails. Speak directly and simply, as you would in a personal note or letter. Try not to overthink your words, but don't go right into stream of consciousness (fun to write, hard to read).



One of my favorite techniques for making my blog posts readable is to read my post out loud. If it sounds close to something I might actually say in conversation, it hits the right tone for a blog post — on my blog, at least.



REMEMBER If you make your blog informal and conversational, you still shouldn't ignore spelling, grammar, and sentence structure. Some bloggers do opt for an unedited approach, but keep in mind that people have more trouble, not less, reading poorly formulated writing. If you have a professional blog, or ever hope to make money from your blog, you definitely need to pay attention to spelling and grammar because these little details influence your credibility. Do your readers a favor — use the grammar and spell-check functions of your word processor — and proofread, too.



warning Many bloggers like to quote news articles and blog posts, and then expand on them. If you take this approach, make sure that you understand the rules of copyright law when you use someone else's words — it's always best to ask permission! For more, read the sidebar "Respecting copyright."



Although it's important to update your content frequently enough that your readers don't assume you've abandoned your blog, you also don't want to inundate them with new content — or worse, force yourself to write mediocre content just to post something.

Linking to Serve the Reader

Links — you need 'em. You may worry that by providing a link to a news story or online article, you're sending your readers away from your site into the black hole of the Internet, never to return. Your readers might, in fact, click the link and go read the article. But they probably won't forget where they found the link.



When adding a hyperlink to your blog content, be sure to change the outgoing link settings to "open in a new window." This keeps your blog post open on the screen rather than sends the reader away.

On a blog, links are just as much a resource as any other information that you provide. In fact, many blogs actually consist of collections of links around a topic or theme, pulled together to inform or entertain the blog's readers.



by using links, you're doing your readers a service that they won't forget — one they likely come back to you for.

Kelly Whalen doesn't shy away from adding links to her blog posts on The Centsible Life (www.thecentsiblelife.com), as shown in Figure 13-4.



FIGURE 13-4: Kelly Whalen adds links to her blog posts, helping her readers get more information.

In a December 21, 2015, post guiding readers to meal-plan, Kelly included links to everything from menu-planning printables to recipes used.

Links are the currency of the blogosphere. A lot of bloggers point their readers to blog posts that they find especially interesting, even going so far as to quote the other blogger. In general, bloggers are generous about linking to other blogs and websites because the favor is frequently returned. As the saying goes, "You have to spend a little to make a little."



warning Adding links to your posts is a good thing ... unless you're irresponsible about what you link to. Take your responsibility as a publisher seriously, and don't send people to suspect resources or throw them into an adult-oriented site without warning.



When you link to a blog post, be sure you link to the permalink URL, not the blog's home page. A *permalink* is the unique web address for an individual blog post — the permanent link to that page. You should use the permalink because the blogger might update the blog any time after you create the link, pushing the post that you mention down or even off the blog's home page.

The Web Style Guide (www.webstyleguide.com) covers everything from good web design standards to graphics production, but you can probably benefit most from Chapter 9 of the guide, which covers links, titles, and common online styles.

Breaking through a Blank Screen

At times, even outstanding bloggers hit dry spells and can't think of a word to write. You can safely anticipate a day sometime in the life span of your blog when you literally have nothing to say to your readers, no matter how much enthusiasm you have for your topic.

This phase will pass, but sometimes, you need a little help pushing back to a productive spot. Here are a few tips for making it through your dry spell:

- >> Stockpile a few evergreen posts. In newsrooms around the world, journalists regularly create *evergreen stories* (stories that can be printed or televised at any time and still be interesting). You can also put together a few evergreen blog posts that you can keep on hand for use on a day when your creative juices temporarily dry up. You can also use these kinds of posts for days when you're sick or on vacation but still want to have something publish on your blog. A lot of blog software allows you to schedule a publication date for a blog post in the future, so you can even set these posts to go up automatically while you take a well-deserved break.
- **»** Ask a friend to guest blog for a few days. Bring some new perspective to your blog when you have none left yourself by asking a friend, colleague, fellow blogger, or even critic to write some blog posts for you. Your readers might enjoy the change of style and tone (and if they don't, you make them that much happier when you come back!). Be sure to return the favor when your guest blogger has a dry spell of his or her own.
- **Recycle an oldie but goodie.** When you can't think of exciting new content, bring out a great post from your archives. New readers appreciate seeing something they missed, and old readers might find new information in a second read. Professional blogger Darren Rowse points his readers to a list of best-of posts on ProBlogger (www.problogger.net). In fact, Darren pulls out the best posts of all

- time, for the month, for new readers, and just some of his favorites (see Figure 13-5).
- **Post a photo.** Rather than 1,000 words, put up a single photo. Take a picture of where you usually blog, show off your new laptop, or just take a walk in your neighborhood. You can dig out a photo of yourself as a kid or show that embarrassing haircut you had in the '90s.
- **» Post about the books, movies, or television that you're consuming.** Tell folks about the other media you're enjoying. You can even hook up an Amazon Associates account and earn a little money from your recommendations.
- **» Give out your favorite recipe.** Dig out the cookbook and find your grandmother's fudge recipe or your mom's apple pie recipe and share it with your readers. Better yet, take a break from the computer and make the recipe yourself so that you can put up a photo with your post.
- **» Blog from a new location.** Sometimes, breaking the routine can shake loose those recalcitrant brain cells. Try blogging from another room in your house, or head to the local Internet cafe or coffee shop.
- **» Record an audio podcast or video blog (vlog).** If you can't write, talk! You might be pleasantly surprised and make this a regular feature of your blog.
- **» Do an interview.** Ask a friend, colleague, neighbor, child, parent, boss, or public figure whether you can interview him or her for your blog. Type up a few questions, email them off, and when the answers arrive in your inbox, a little copying and pasting should do the trick.
- **Take a quiz.** Let your readers know what superhero you are or what color your personality is by playing with some of the fun quizzes and polls online. The Superhero Quiz is at www.thesuperheroquiz.com (I'm Spider-Man), and you can find loads of others on blogthings (www.blogthings.com) and Quiz Meme (www.quizmeme.com).
- **» Ask for suggestions from your readers.** Appeal to your readers for help with finding new topics to post about. Also, look through your

old posts and see whether you can expand on a post that worked well; check out comments and emails from readers, too!

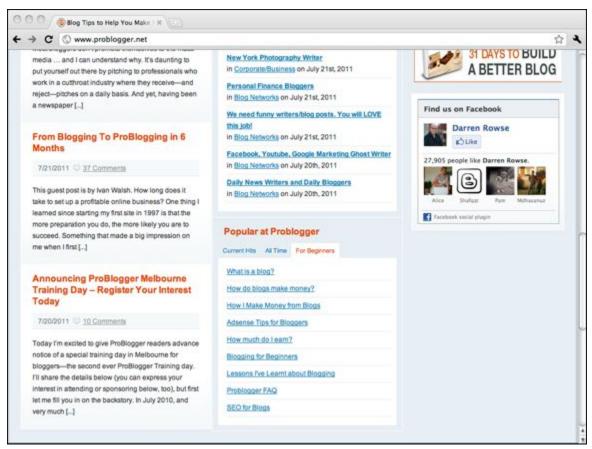


FIGURE 13-5: Darren Rowse points people to favorite posts from the past.

Chapter 14

Finding Your Way around Facebook

IN THIS CHAPTER

Navigating Facebook
Looking around the Home page
Using Search
Finding those less frequently used links

Here's the thing about using Facebook: It has a lot of options. Now, this is actually one of the best things about Facebook. You can upload photos, look at photos, chat with a friend, message a friend, read updates from friends ... the list goes on and on. What does get a little confusing is that there's no one way to do anything on Facebook. Depending on what page you're on, you'll see slightly different things. Depending on who your friends are, you'll see slightly different things. Using Facebook can't exactly be broken down into ten easy steps.

However, you can learn to recognize a few more constant places. Starting from when you log in, you will always start on your *Home page*. The Home page, though continually evolving, has a few constants that I detail in this chapter. If you ever find yourself lost on Facebook (it happens; trust me), click the Home link or the Facebook logo to go to the Home page, where you'll be able to reorient yourself.

<u>Figure 14-1</u> shows a sample Home page. This chapter details the elements of the Home page that you're likely to see, too: menus and links to other parts of the site. Some of these links can be found no matter where you are on Facebook, some appear only when you're on your Home page, and some will be there, well, sometimes. Learning about these links helps you understand how to find your way around

Facebook and enables you to work with some of Facebook's features and options.



FIGURE 14-1: Your Home page may look a little like this.

Checking Out the Blue Bar on Top

I happen to spend a lot of time in coffee shops working alongside writers, students, businesspeople, and hobbyists — all drinking steamy beverages and manning laptops. I can always tell at a glance when someone is browsing Facebook by the big blue bar across the top of the page. The blue bar is home to many of the important navigational links on Facebook. And anytime you're looking at a Facebook page, you'll have the blue bar accompanying you, like a really loyal puppy. Figure 14-2 shows the blue bar.



FIGURE 14-2: The blue bar at the top.

Here's what you need to know about the different parts of the blue bar:

- **>> Facebook logo:** The "f" Facebook logo on the left of the blue bar serves two purposes. First, it reminds you what website you're using. Second, no matter where you are on Facebook, if you click this icon, you're back at the Facebook Home page.
- **» Search:** The big white box next to the Facebook logo is the search box. This text area is where you can type any sort of search query. Simply click that text and start typing what you're looking for. After you click, Facebook opens up a menu with suggested searches. I talk more about how to find people and other Facebook content later on in the "Search" section of this chapter.

The text within the search box will actually change depending on where you are on Facebook. For example, when you're on a friend's Timeline, it will show your friend's name. When you're exploring a group, it will show the group's name. This is one way to keep from getting lost.

- Your Name> and Profile Picture: If you share a computer with other people, glancing at this link whenever you use Facebook is an easy way to make sure you're using your Facebook account and not your spouse's or kid's account. Clicking this link brings you to your Timeline.
- **» Home:** This link is always there to bring you back to the Home page. When in doubt, just go Home and start over.
- (New Users) Find Friends: If you're a new user of Facebook or don't have very many friends, Facebook adds this link to your blue bar to make it as easy as possible for you to go get more friends. Clicking it brings you to the Find Friends page, where you can use Facebook's various tools for finding and adding your friends.
- >> Friend Requests: Next to the Home link is an icon of two people, intended to depict friends. Clicking this icon reveals a menu that shows you any pending Friend Requests you may have. Whenever you receive brand-new Friend Requests, a little red number totaling the number of new requests shows up on top of this icon. When you view the new requests, regardless of whether you respond to them, the red flag goes away.
- **» Messages:** An icon depicting two speech bubbles lets you access a preview of your Messages Inbox. Clicking it shows you snippets from your most recent messages, as well as links to use if you want to send a new message or go to your Inbox. As with the Friend Requests, a little red flag appears to show you how many new messages you have. When you click that flag and view the preview of the new messages, the flag disappears.
- >> Notifications: When someone on Facebook has taken an action that involves you, you're notified by a red flag on top of the next icon the globe. Maybe the person has tagged you in a photo, posted to your Timeline, liked a comment you made, or posted something to a group you belong to. Click the globe to scroll through your most recent notifications, as well as a link to change your notification settings or see all your notifications on another page.

- >> **Privacy Shortcuts:** The little padlock icon represents the Privacy Shortcuts menu. Knowing who can see what on Facebook is one of the keys to feeling comfortable sharing on Facebook, and this shortcut menu makes it easy to check up on yourself. This menu provides an easy way to find out the answers to three basic privacy and safety questions: Who can see my stuff? Who can contact me? and How do I stop someone from bothering me?
- **» Account menu (down arrow):** In this chapter, I reference the *Account menu*. That's the menu that appears when you click this arrow. Here's a rundown of some of the categories you can find on the Account menu:
 - Your Pages: If you create or manage Pages, you'll be able to find links to use Facebook on behalf of your Pages from the Account menu. You can also find links to create new Pages or manage your existing Pages.
 - Groups: The Account menu contains links to create groups, check out your new groups, and manage and groups you have created.
 - *Ads:* If you create an ad to be shown on Facebook, you'll find links to manage and create more ads in this menu.
 - Activity Log: It's a way to keep track of all the actions you
 have taken recently on Facebook and who may be able to see
 those actions. You can get to your Activity Log from this
 menu.
 - *News Feed Preferences:* Your News Feed is a constantly updated list of stories by and about your friends. It's what you see front and center on your Home page every time you log in to Facebook.
 - *Settings:* Choosing this brings you to the Settings page, where you can change your name, your email address or password, your mobile information (which allows you to access the site from a mobile phone), or the language you want to use on the

- site. This is also where you go to find privacy settings, notification settings, and to deactivate your account.
- *Log Out:* Clicking this ends your Facebook session. If you share your computer with others, always be sure to log out to ensure that another person can't access your Facebook account.



warning If you have the Remember Me option selected when you log in, you won't ever be logged out until you click Log Out. Remember Me keeps you logged in despite closing the browser; therefore, I recommend using the Remember Me option only on a computer you don't share with others.

• *Help:* There are a few different ways to access help from the Account menu. Clicking Help switches over to a Help menu with links to frequently asked questions and a search box. If you ever have a problem and you can't find the answer in this chapter, the Help menu and the Help Center are good places to start. The Support Inbox is where you'll go if you ever have a problem that requires you contacting Facebook's Help team. Any correspondence with that team will take place in your Support Inbox. If you ever see something on Facebook you think you shouldn't (such as harassment or porn), you can go to the account menu and choose to Report a Problem.

Search

Search has become an integral part of using the Internet. It's the way we find the info we need — whether that's a businesses address, a person's contact info, or the year of the great San Francisco earthquake. Facebook's search is also important, though it works a bit differently from the way a search engine like Google or Bing does.

Most of the time, you will use Search to hop quickly to a friend's Timeline or to check out a Page you follow. Simply start typing your friend's name into the search box in the big blue bar on top of the page. Facebook displays an *auto-complete menu* as you type, showing possible matches as you add more and more letters. When you see the name of the person you are looking for, click on her name or picture to go to her Timeline.

Even though the most simple use of Search is what you'll use most of the time, it's worth noting that Facebook has an incredible database of information that you can search through at any time. You can search through friends' posts, photos, videos simply by entering a search term into the search box. Given the amount of information you might see in your News Feed on any given day, it can be incredibly helpful to search to find that one piece of information you are looking for (I *know* someone posted a link to the best place to pick apples in the fall, but I can't remember when ...). The search results page allows you to filter for the latest results, or to look only at people, photos, videos, Pages, or places.

The Left Sidebar

The left side of the Facebook Home page is taken up by what Facebook calls the *sidebar*. The sidebar is the menu on the left side of the page that provides links to frequently used areas of the site.

The sidebar is divided into a few sections. The top section provides links to go to and edit your Timeline. The Favorites section provides links to the parts of Facebook you use most. The other sections are based on different parts of Facebook — Groups, Apps, Pages, and so on. Depending on how you use Facebook (for example, you may belong to many groups or no groups), the sidebar will appear slightly different to you. Figure 14-3 shows a sample sidebar.



FIGURE 14-3: A sample sidebar.

The Favorites section

By default, the Favorites section shows you links to News Feed, Messages, and Events. You cannot remove News Feed from this section; Facebook has simply decreed that News Feed will be one of your favorite parts of Facebook (and, in this case, I'm not inclined to disagree). Facebook will also add items to this section as you use Facebook. For example, if you start to spend a lot of time posting and commenting on a particular group, Facebook will automatically add it to your Favorites section. Because you might not always agree with

Facebook, it's always possible to change which links appear here and the order in which they appear.

To remove a link from the Favorites section, follow these steps:

1. Hover your mouse over the link you want to remove.

A small gear icon appears to the left of the link.

2. Click the gear icon.

A menu opens over the gear icon with two options: Remove from Favorites or Rearrange (see <u>Figure 14-4</u>).

3. Click Remove from Favorites.

The menu closes and the link disappears from the Favorites section.



FIGURE 14-4: Use this menu to Remove or Rearrange.

You may also want to rearrange the links that appear in your Favorites section so that your most favorite of favorite links are at the top and your least favorite of favorite links are at the bottom of the list. To do so, follow these steps:

1. Hover your mouse over any of the links in the Favorites list.

A small gear icon appears to the left of the link.

2. Click the gear icon.

A menu opens over the gear icon.

3. Select Rearrange.

When you do so, your cursor changes from an arrow or hand to a four-way arrow or compass icon. Also, an icon with three horizontal bars appears to the right of each item in the Favorites section (except

for News Feed). This indicates that you can move these items around.

4. Click and drag the items into your preferred order.

Each link needs to be moved individually, so you may need to repeat this step a number of times.

5. Click Done.

The Done link appears below the last item in your Favorites section.

Other sections

The rest of the sections you may find in your left sidebar represent parts of Facebook that you may or may not use. A few of the sections (such as Interests and Developer) are used so infrequently, I've even left them off the following list.

- **» Groups:** Groups are a way for (you guessed it) groups of people to communicate and share with each other. Groups can be small or large, and can represent real world groups or not. Each group you join appears in the Groups section of the sidebar. You can click on the group name to navigate to that group's page. You can also hover over a group's name and click the gear icon that appears in order to add that group to the Favorites section, edit your settings, or leave the group.
- **Events:** Facebook's Events feature allows people to easily organize and invite people to an event. Any upcoming events you've RSVP'd to appear in the Events section of your sidebar, as well as a link to create an event.
- **Pages:** *Pages* are Timelines for everything that's not a regular person. Public Figures like Barack Obama or Lady Gaga have Pages, as do small businesses, fictional characters, television shows and movies, pets of all hues and stripes, and pretty much everything else you can think of. If you are a Page owner (meaning you use Facebook to represent something other than yourself), your Pages

- appear in a list in this section, as well as links to create a Page, or create Ads to promote your Page.
- >> Friends: Friend Lists are a feature that allows you to create clusters (or lists) of friends and then easily share directly with those friends. Think of sharing with a list as more like sending out an email blast and sharing with a group as more of a post to a message board. Facebook automatically creates certain lists (such as Close Friends) and you can create your own lists that you find useful to using Facebook. All your lists appear in the Friends section of your sidebar.
- **Apps:** Much like apps that you may use on your smartphone, apps on Facebook are features and functionality you may use to enhance your Facebook experience. Technically things like Groups and Events are apps, though they are considered important enough to merit their own sidebar sections. Apps can be built by Facebook or by other companies. Any apps you use appear in this section of the sidebar.



You can add a group, Page, app, or friend list to your Favorites menu by hovering over the item you want to add, clicking the gear icon, and selecting Add to Favorites.

Viewing News Feed

This chapter is about navigating Facebook, which is why the blue bar and the sidebar are so important. At the same time, these menus aren't really the focus of the Home page. Instead, these menus serve as a bit of a background to the main event in the center of the page: News Feed. As I mention earlier, News Feed is what you see as the main focus of your Home page.

So what is News Feed? Imagine that your morning paper, news show, or radio program included an additional section that featured articles solely about the specific people you know. That's what News Feed is. As long as the people you know are active on Facebook, you can stay up-to-date with their lives via your News Feed. A friend may post photos from his recent birthday party, another may write a post about her new job, and another may publish a public event for her upcoming art show. These may all show up as stories in your Facebook News Feed. A News Feed bonus: You can often use it to stay up-to-date on current events just by seeing what your friends are talking about or by liking the Pages of real-world news organizations and getting their updates in your News Feed. When there's unusual weather, I find out about it on Facebook first because I see a flurry of posts asking if that was really hail.

News Feed is possibly one of the best and most interesting things about Facebook, but also one of the hardest to explain. This is because no matter how I describe seeing a photo of my friend and her new baby pop up in my News Feed, it won't be as exciting as when *your* friend posts those photos.

At the very top of News Feed is what's called the *Publisher* or *share box*, shown in <u>Figure 14-5</u>. This box is what you use to add your own content to Facebook: status posts, photos, links to articles you find interesting, and so on. These posts also go into News Feed and may appear in your friends' News Feeds. Your friends can then comment, like, and generally interact with you about your post.



FIGURE 14-5: Share what's on your mind from the Publisher.

Right On

Much like the left sidebar, the items you see on the right side of the page change depending on how you use Facebook. If you're a newer user you may see different things than if you have been using Facebook for a long time. People with many friends may see something different than people with fewer friends. Here are some of the items you may see on the right side of your Home page:

- **» Reminders:** You may see reminders for things like upcoming events, friends' birthdays, or requests you need to respond to.
- was Trending: Trending topics shows a taste of what *everyone* is talking about on Facebook. For example, if everyone is talking about a particular presidential candidate or a particularly hilarious video of a rat stealing a pizza slice, those topics will appear under the heading of Trending Topics. You can click on any of the trending topics to learn more about them. You can also click to see more, or use the filters next to the word Trending to see trending topics in politics (state building icon), science and technology (atomic icon), sports (soccer ball icon), or entertainment (movie reel player icon).
- >> Ticker: Earlier in this chapter, I mention News Feed and how it is a constantly updated list of posts from your friends and Pages you like. Well, one of the things to know about Facebook is that it actually isn't *all* of your friends' posts. For most people, it would be overwhelming to get an update every time every friend did something on Facebook. News Feed tries to show you the best of the best. Ticker, on the other hand, shows you everything. Ticker itself shows an abbreviated summary of what happened (for example, Juliana likes Martha's link). You can then hover your mouse over that item to see details about the link Martha shared and who else likes or commented on it.
- **» Facebook Suggestions:** Facebook's suggestions are generally ways for you to continue to find and interact with people and things you may find interesting. Facebook may suggest people it thinks you

- would want to add as friends, Pages you might like, groups you might want to join, and so on. These suggestions are based on people, Pages, and groups you already have interacted with.
- **>> Sponsored Ads:** Ads on the right side of the page appear in a section labeled "Sponsored." Facebook is 100% free for you to use, and one of the ways it pays the bills is by selling ads like these.

The Littlest Links

At the very bottom of the rightmost column are a handful of important, but infrequently needed links. These links all appear in grey text.

- **» English (US):** If you signed up for Facebook on a computer in the United States, Facebook defaults to English. If for any reason you want to change the language in which you use Facebook, click this link to select your desired language.
- **» Privacy:** Details the Facebook Data Use Policy, if you're looking for a little light bedtime reading.
- **Terms:** This link takes you to a page where you can view all of Facebook's Terms and Policies, including the Statement of Rights and Responsibilities (which you agreed to when you signed up), the Data Policy, and its Community Standards.
- **» Cookies:** Sadly, clicking this link doesn't make chocolate chip cookies suddenly appear in your hand. Instead, it brings you to a page that explains how Facebook uses *web cookies*, or stored data on your web browser. Cookies are used on many websites to keep your experience more convenient (for example, automatically displaying Facebook in the language of whatever country your computer is in) and also to deliver ads to you.
- **» Advertising:** Click this link to create or manage ads that you've posted to Facebook.
- **Ad Choices:** Clicking this link brings you to the Facebook Help pages where you can learn more about how Facebook targets ads to you, and what you can do to adjust what ads you see.
- **More:** Clicking this link opens a menu of still more links. Click any of these options to navigate to different parts of Facebook:
 - About: Facebook's About page is where you can learn more about Facebook, the company, and what it's been doing in the news lately.

- **Careers:** If you're considering applying for a job at Facebook, check out its careers page first.
- **Create Page:** If you want to create a Page for a band, brand, celebrity, or other non-person entity, you can use this link.
- **Developers:** If you are a software engineer looking for ways to build apps that use Facebook, click this link to learn more about the Facebook Platform.
- **Help:** A duplicate of the link in your Account menu, this takes you to the Facebook Help Center.

Chapter 15

Selling in Your Slippers for Fun and Profit

IN THIS CHAPTER

Discovering the multiple benefits of selling
Looking for inventory in your own backyard
Knowing what to sell, when to sell, and how much to ask
Staying out of trouble — what you can't sell on eBay
Paying the piper with eBay fees
Keeping the taxman happy (or at least off your back)

Finding items to sell can be as easy as opening your closet (garage? kitchen drawer?) or as challenging as acquiring antiques overseas. (I've even taken the leap and imported items from Taiwan to sell on eBay.) Either way, establishing yourself as a successful eBay seller isn't as difficult as it seems when you know the ropes. In this chapter, you find out how to look for items under your own roof, figure out what they're worth, and turn them into ready cash. But before you pick your house clean (I know eBay can be habit-forming, but please keep a *few* things for yourself!), read up on the eBay rules of the road — such as how to sell, when to sell, and what *not* to sell.

Why Should You Sell Stuff on eBay?

Whether you need to clear out 35 years of odd and wacky knickknacks cluttering your closets or you seriously want to earn much-needed money, the benefits of selling on eBay are as diverse as the people doing the selling. The biggest plus to selling on eBay is wheeling and dealing from your home in pajamas and slippers (every day is Casual Friday in my office). But no matter where you conduct your business or how you dress, many more important big-time rewards exist for selling on eBay.

Most people starting a business have to worry about rounding up investment capital (startup money they may lose), building inventory (buying stuff to sell), and finding a selling location such as a booth at a swap meet or even a small store. Today, even a mom-and-pop startup operation can require a major investment. eBay helped to level the playing field a bit; everybody can get an equal chance to start a small business with very little money. Anyone who wants to take a stab at doing business can get started with just enough money to purchase initial items.



Get a few transactions under your belt. I suggest you buy a few inexpensive items from other sellers. See how they handle the transaction. Does their way of business satisfy you as a customer? Ask yourself what you might do differently and apply that to your future sales. (A plus to this is that you build positive feedback with every transaction.)

Sell your old collection of postcards, ashtrays, concert souvenirs (you really never wear that Cher "farewell tour" hoodie — do you?), or souvenir spoons. See how you like the responsibilities of listing, collecting money, shipping, and customer service. Grow a bit more, and you'll find yourself spotting trends, acquiring inventory, and marketing your items for maximum profit. In no time, you'll be making items

disappear faster than magician Criss Angel (though you may have a little trouble with the walking-on-water part — how'd he *do* that, anyway?).



If you still want to go long on eBay, please take a look at my book, *eBay Business All-in-One For Dummies* — a complete reference for your online business (including your website). It will give you just what you need to ramp up from hobbyist to big-time e-commerce tycoon making a few hundred (or even several thousand) dollars a month!



A fun way to get your feet wet on eBay is to buy some small items. When I say small, I mean it. Some of the least expensive items you can buy on eBay are recipes. Type **recipe** in the search box and sort the results by Lowest Prices First and click the **Home & Garden** category. You'll find recipes that range from a penny up. You don't have to pay a shipping charge, either. The sellers are required to send you a copy in the mail, but they often also email the recipe direct to you after you pay. You can also begin selling your very own secret recipes. This is a great way to become familiar with how eBay works, and you'll be gaining experience with feedback — as well as building yours!

LIFE LESSONS LEARNED ON EBAY

If you have children, they will benefit if you get them involved with your eBay transactions. They'll get real-life lessons they can't learn in school. Give them a feel for meeting deadlines and fulfilling promises. Get them writing emails (if they aren't already), and when you sell, get them to help pack the items. eBay is a great place to learn basic economics and how to handle money. When I first started on eBay, I taught my preteen daughter about geography by using eBay. Every time I completed a transaction, she used a search engine to look up the city in which the buyer (or seller) lived — and then marked the city by placing a pin on a huge map of the United States. While helping me with shipping, she graduated from college, having majored in business and marketing, and has a good job today. (Thank you, eBay!)



Get creative and make eBay a profitable learning experience, too. Remember, however, that eBay doesn't let anyone under the age of 18 register, buy, or sell — so make sure that you're in charge of handling all transactions. Your kids can help out, but they need to be under your supervision at all times.

Finding Stuff to Sell

Finding merchandise to sell on eBay is as easy as checking your garage and as tough as climbing up to the attic. Just about anything you bought and stashed away (because you didn't want it, forgot about it, or it didn't fit) is fair game. Think about all those unwanted birthday and holiday presents (hey, it was the thought that counted — and the givers may have forgotten about them, too). Now you have a place you can try to unload them for cash. They could even make someone else happy.

In your closet, find what's just hanging around:

» Clothing that no longer fits or is out of fashion. (Do you really want to keep it if you wouldn't be caught dead in it or you know it will never fit?) Don't forget the pair of shoes you wore once and put away.



REMEMBER You may not get top dollar for used items, but selling them will give you experience, build your feedback, and fill your pocket with a few well-earned dollars that you didn't have before.

- » Any item with a brand-name label that's in new or almost-new condition.
- **» Gifts.** Have you received many well-meaning gifts that you've never used? You stashed them in the closet, right? One man's trash (mathoms for the LOTR fans) is another man's (or woman's) treasure.
- **» Kids' clothes.** (They outgrow things fast sometimes before they wear them. Use profits from the old items to buy new clothes they can grow into. Now, that's going green.)



Have the articles of clothing in the best condition possible before you put them up for sale. For example, shoes can be cleaned and buffed till they're like new. According to eBay's policies, clothing *must* be cleaned before shipping.

And consider what's parked in your basement, garage, or attic:

- **» Old radios, stereo and video equipment, and 8-track systems:** Watch these items fly out of your house especially the 8-track players (believe it or not, people love 'em).
- **»** Books you finished reading long ago and don't want to read again: Some books with early copyright dates or first editions by famous authors earn big money on eBay.
- **» Leftovers from an abandoned hobby:** Who knew that building miniature dollhouses was so much work?
- **» Unwanted gifts:** Have a decade's worth of birthday, graduation, or holiday gifts collecting dust? Put them up on eBay and hope Grandma or Grandpa doesn't bid on them because they think *somebody* needs another mustache comb!

Saleable stuff may even be lounging around in your living room or bedroom:

- **>> Home décor you want to change:** Lamps, chairs, and rugs (especially if they're antiques) sell quickly. If you think an item is very valuable but you're not sure, get it appraised first.
- **Exercise equipment:** If you're like most people, you bought this stuff with every intention of getting in shape, but now all that's building up is dust. Get some exercise boxing up all that equipment after you've sold it on eBay. **Remember:** The USPS will pick up for free.

- **» Vinyl records:** Have a few boxes of vintage vinyl? If you're not buying a turntable any time soon, put them up for sale! (Think records are dead? You may be very surprised.)
- **» Autographs:** All types of autographs from sports figures, celebrities, and world leaders are popular on eBay. A word of caution, though: A lot of fakes are on the market, so make sure that what you're selling (or buying) is the real thing. If you're planning on selling autographs on eBay, be sure to review the special rules that apply to these items. Here's where to find them:

http://pages.ebay.com/help/policies/autographs.html.

Know When to Sell

Warning ... I'm about to hit you with some of my timehonored clichés (these truths never change):

- >> Timing is everything.
- » Sell what you know and know when to sell.
- » Buy low and sell high.
- » Fast quarters are better than slow dollars.

Okay, granted, clichés may be painful to hear over and over, but they do contain nuggets of good information. (Perhaps they're repeated for a reason?)

Experienced eBay sellers know that when planning a sale, timing is almost everything. Fur coats don't sell well in July, and as a seller of collectibles you don't want to be caught with 200 Nintendo WiiU games during a run on Xbox. (Hold on to them; vintage games do sell well.) *Star Wars* action figures are traditionally good sellers unless a new sci-fi title is all the rage.



Some items — such as good antiques, rugs, comic books, and sports cars — are timeless. But timing still counts. Don't put your rare, antique paper cutter up for auction if someone else is selling one at the same time. I guarantee that will cut into your profits.

SNAPPING UP PROFITS

Way back in 1980, when Pac-Man ruled, my friend Ric decided to try his hand at photography. Hoping to be the next Ansel Adams — or to at least snap something in focus — he bought a Kowa 66, one of those cameras you hold in front of your belt buckle while you look down into the viewfinder. Soon after he bought the camera, Ric's focus shifted. The camera sat in its box, instructions and all, for over 15 years until he threw a garage sale.

Ric and his wife didn't know much about his Kowa, but they knew that it was worth something. When he got an offer of \$80 for it at the garage sale, his wife whispered "eBay!" in his ear, and he turned down the offer.

Ric and his wife posted the camera on eBay with the little information they had about its size and color, and the couple was flooded with questions and information about the camera from knowledgeable bidders. One bidder said that the silver-toned lens made it more valuable. Another gave them the camera's history.

Ric and his wife added each new bit of information to their listing description and watched as the bids increased with their every addition — until that unused camera went for more than \$400 in a flurry of last-minute sniping in 1999. These days, when Ric posts an item for sale, he always asks for additional information and adds it to the listing page.

What difference does a year make? You'll find that the values of all items on eBay trend up and down. In 2000, this camera sold on eBay for over \$600; in late 2001, it sold for \$455. In the winter of 2003, interest in it was waning; it sold in the \$375 to \$400 range. In 2009, one sold for \$390, in 2011, \$440. Believe it or not, in these days of digital cameras, one *just* closed on eBay for \$419. Not bad, considering "everyone" is saying film cameras are dead merchandise.



Timing is hardly an exact science. Rather, timing is a little bit of common sense, a dash of marketing, and a fair amount of information gathering. Do a little research among your friends. What are they interested in? Would they buy your item? Use eBay itself as a research tool. Search Sold listings to see whether anyone's making money on the same type of item. If people are crazed for some fad item and you have a bunch of those, *yesterday* was the time to sell. (In other words, if you want your money out of 'em, get crackin' and get packin'.)



REMEMBER If the eBay market is already flooded with dozens of an item and no one is making money on them, you can afford to wait before you plan your listing.

Know Thy Stuff

At least that's what Socrates would have said if he'd been an eBay seller. Haven't had to do a homework assignment in a while? Time to dust off those time-trusted skills. Before selling your merchandise, do some digging to find out as much as you can about it.

Getting the goods on your goods

You may know a little about your item, but writing a detailed description of your collectible or rare item can increase your selling price immensely. Here are some ideas to help you flesh out your knowledge of what you have to sell:

Whit the books. Study historic guides and collector magazines; perhaps even check your local library (yes, they still exist) for books about the item. Especially out-of-print books will give you valuable information. To find some online, go to

https://books.google.com/advanced book search/

and search your topic. I just went there, searched "Barbie collector," and found almost 6,000 results!



warning Even though some collectors use published price guides when they put a value on an item, so much fast-moving e-commerce is on the Internet that printed (or even digital) price guides often lag behind the markets they cover. Take their prices with a grain of salt.

- **» Go surfin'.** Conduct a web search and look for info on the item on other e-commerce sites. If you find a print magazine that has some good information, check to see whether the magazine is available on the web by typing the title of the magazine into your browser's search window.
- **»** When the shopping gets tough, go mobile. If you're out and about searching tag sales or resale shops, use eBay's handy smartphone app and see whether (and for how much) the item is selling on eBay.



REMEMBER When you understand the demand for your product (whether it's a collectible or a commodity) and how much you can realistically ask for it, you're on the right track to a running a successful sale.

- **» Call in the pros.** Need a quick way to find the value of an item you want to sell? Call a dealer or a collector and say you have one to sell. Merchants who smell a good deal will make an offer; at that point, ask them what it would sell for in their store.
- **» Bing to the rescue.** Run a search of your keywords on Bing.com. You can run a search on Google, but Bing provides another view of Internet-wide results.



warning Be certain that you know what you have — not only what it is and what it's for, but also whether it's genuine. Make sure that it's the real McCoy. You are responsible for your item's authenticity; counterfeits and knock-offs are not welcome on eBay. In addition, manufacturers' legal beagles are on the hunt for counterfeit and stolen goods circulating on eBay — and they will tip off law enforcement.

Spy versus spy: Comparison selling

Back in the old days, successful retailers like Gimbel and Macy spied on each other to figure out ways to get a leg up on the competition. Today, in the bustling world of e-commerce, the spying continues, and dipping into the intrigue of surveilling the competition is as easy as clicking your mouse. Collectible items are often the most difficult to price.

Often what makes something valuable is the fact that it is controversial, although it didn't start out that way. Also, discontinued products gain in popularity. Scarcity is the name of the game. Take the beloved 1980s TV show, *The Dukes of Hazzard*. Its fans were legion and loyal to the

innocent theme of the show, yet today it's looked at through a different lens.

Dukes of Hazzard stuff, such as DVDs of the show, movie memorabilia, General Lee models, and lunch boxes, are still huge sellers with millennials and Gen X-ers looking for memories of their childhood. That piece of tin that once held their lunchtime PB&J may very well fetch a nice sum. To find out for sure, you can do some research on eBay. To find out the current market price for a Dukes of Hazzard lunch box, you can conduct a Sold listings search and find out exactly how many Dukes of Hazzard lunch boxes have been sold in the past few weeks. You can also find out their high selling prices and how many bids the lunch boxes received by the time the auctions were over. And repeating a completed search in a week or two is not a bad idea — you can get at least a month's worth of data to price your item. Figure 15-1 shows the results of a Sold listings search sorted by the highest prices first.

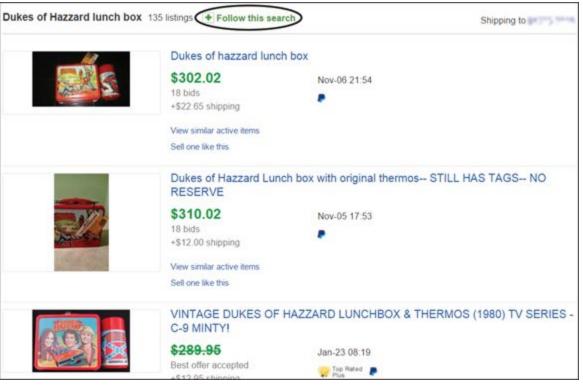


FIGURE 15-1: Use the Sold listings search to find out the current selling price. Time to sell a rare lunch box.



You can easily save your searches for pricing research on eBay. Just click the plus sign next to the *Follow this search* link at the top of the results to add a search to your saved searches list. Then it's on your My eBay Lists page, and you can repeat the search with a click of your mouse.



Look at the pictures on item pages for each item that your Sold listings search turns up. That way, you can confirm that the items (lunch boxes, for example) are identical to the one you want to sell. And when you do your research, factor in your item's condition. Read the individual item descriptions. If your item is in better condition, expect (and ask for) more money for it; if your item is in worse condition, expect (and ask for) less. You can always add a Make Offer option to your listing and decide on the fly whether you will accept a specific price suggested by a buyer. Note which categories the items are listed under; they may give you a clue about where eBay members are looking for items just like yours.

If you want to be extremely thorough in your comparison selling, go to a search engine to see whether the results of your eBay search mesh with what's going on elsewhere. If you find that no items like yours are for sale anywhere else online, and are pretty sure that people are looking for what you have, you may just find yourself in Fat City.



REMEMBER Don't forget to factor in the history of an item when you assess its value. Getting an idea of what people are watching, listening to, and collecting can help you assess trends and figure out what's hot.

Know What You Can (and Can't) Sell

The majority of items sold on eBay are aboveboard. But sometimes eBay finds out about listings that are either illegal (in the eyes of the state or federal government, or even those of international authorities) or prohibited by eBay's rules and regulations. In either case, eBay steps in, calls a foul, and makes the item invalid.

eBay doesn't have rules and regulations just for the fun of it. eBay wants to keep you educated so you won't unwittingly bid on, buy, or sell an item that has been misrepresented. eBay also wants you to know what's okay and what's prohibited so that if you run across an item that looks fishy, you'll help out your fellow eBay members by reporting it. And eBay wants you to know that if you do sell legally iffy items, getting your listing shut down is the least of your worries: You can be suspended if you knowingly list prohibited items. And I won't even talk about criminal prosecution.

You need to know about these three categories:

- **» Prohibited** lists the items that may *not* be sold on eBay under any circumstances.
- **» Restricted** lists the items that may be sold under certain conditions.
- **» Potentially Infringing** lists the types of items that may be in violation of copyrights, trademarks, or other rights.



warning You may not even offer to *give away for free* a prohibited or an infringing item, nor can you give away a questionable item that eBay disallows; giving it away doesn't relieve you of potential liability.



The items that you absolutely *cannot* sell on eBay can fit into *all three* categories. Those items can be legally ambiguous at best — not to mention potentially risky and all kinds of sticky. To find a detailed description of which items are prohibited on the eBay website, follow these steps:

1. Click the Policies link, which is on the bottom of all eBay pages. You arrive at the friendly eBay Rules & Policies page.

2. Scroll to the Prohibited and Restricted items link and click.

You are presented with the lists and links that help you decipher whether selling your item falls within eBay's policy boundaries.

Or, if you're reading this in an e-book or you don't mind typing, you can go directly to

http://pages.ebay.com/help/policies/overview.html.

Sometimes an item is okay to own but not to sell. Other times the item is prohibited from being *sold and possessed*. To complicate matters even more, some items may be legal in one part of the United States but not in others. Or an item may be illegal in the United States but legal in other countries.



WARNING Because eBay's base of operations is in California, United States law is enforced — even if both the buyer and seller are from other countries. Cuban cigars are legal to buy and sell in Canada, but even if the buyer *and* the seller are from Canada, eBay says "No permiso" and shuts down sales of Havanas fast. Figure 15-2 shows an auction that was shut down soon after I found it. To see a current list of countries where trade is embargoed, visit

http://pages.ebay.com/help/policies/embargo.html.

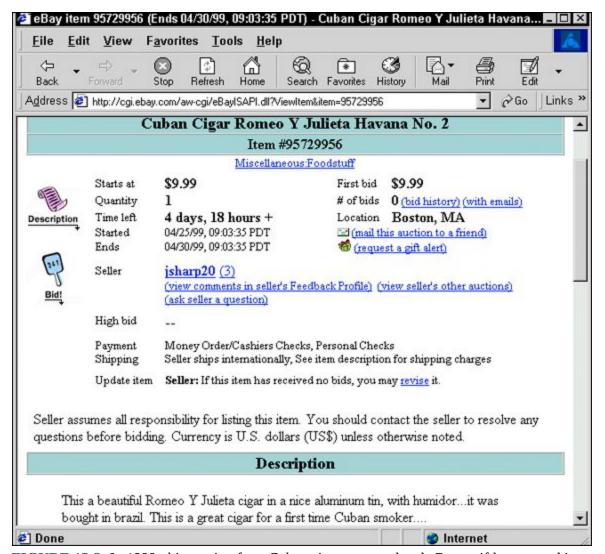


FIGURE 15-2: In 1999, this auction for a Cuban cigar appeared and eBay swiftly removed it.

Prohibited items

Even though possessing (and selling) many of the items in the following list is legal in the United States and elsewhere, you are absolutely, positively *prohibited* from buying and selling the following on eBay:

» Firearms of all types: This also means firearm accessories — including antique, collectible, sport, or hunting guns; air guns; BB guns; silencers; converters; kits for creating guns; gunpowder; high-capacity ammunition magazines (receptacles designed to feed ten rounds or more into a gun, not the publications about ammo); and armor-piercing bullets. You can't even sell a gun that *doesn't* work.



You *can* buy and sell single bullets, shells, and even antique bombs and musket balls — as long as they have nothing explosive in them.

- Firearms and weapons: No way can you sell any type of firearm that is designed to propel a metal (or similar) projectile, regardless of whether it works. (If we're talking paintball, archery, or spud pistols that's another story.) Military weapons? Items included in that category and all *verboten* are bazookas, grenades, and mortars.
- **» Police-related items:** Stop in the name of the law if you're thinking about buying or selling any of these items, including actual United States federal badges or reproduction badges. In fact, selling just about any U.S. government badge (even the Forest Service) can get you in hot water.



REMEMBER You also can't own or sell those agencies' identification cards or credential cases or those really cool jackets they use in raids. Selling a copy or reproduction of any of these items is prohibited, too, because these items are copyrighted (see the section on infringing items in this chapter).

If you find a badge that's legal to sell and own, you need to provide a letter of authorization from the agency. The same letter of authorization is required for fake badges, such as reproductions or movie props.

- **» Replicas of official government identification documents or licenses:** Birth certificates, drivers' licenses, and passports fall into this category.
- **»** Current vehicle license plates or plates that claim to resemble current ones: Note that expired license plates (at least three years old) are considered collectible as long as they are no longer valid for use on a vehicle and you mention the plate's age in the listing.

- **» Lockpicking devices:** These items can be sold only to authorized recipients. Federal law prohibits the mailing of such devices.
- **>> Human parts and remains:** Hey, we all have two kidneys, but if you get the urge to sell one to pay your bills, eBay is not the place to sell it. You can't sell your sperm, eggs, blood, or anything else you manage to extricate from your body. What's more, you can't even *give* away any of these items as a free bonus with one of your auctions.
- **» Drugs or drug paraphernalia:** Narcotics, steroids, or other controlled substances may not be listed. Drug paraphernalia includes a swath of items that are primarily intended or designed for using a controlled substance, including vaporizers, bongs, and water pipes.
- **»** Anything that requires a prescription from a doctor, a dentist, or an optometrist to dispense: Listen, just because it's legal to use doesn't mean that it doesn't require special permission to get. For example, even though penicillin is legal to buy in the United States, only a doctor can prescribe it which is why, when you get sick, you have to stand in that *loooong* line at the pharmacy sneezing on all the other sick people. And if you're looking for Viagra auctions on eBay, don't even *go* there.
- **» Stocks, bonds, or negotiable securities:** Nope, you can't sell stock in your new pie-baking company or an investment in property you may own. And if you're thinking of offering credit to someone, you can't do that either. (Note that collectible items are permitted.)
- **>> Bulk email lists:** No bulk email or mailing lists that contain personal identifying information. You may not even sell tools or software designed to send unsolicited commercial email or promote social-media "likes" or recruit "followers."
- **» Animals and wildlife, including animal parts from endangered species:** If you've had it with Buster, your pet ferret, don't look to eBay for help in finding him a new home. And you can't sell your stuffed spotted owls or rhino-horn love potions, either. If you're in the animal business *any* animal business eBay is not the place for you.

- **» Child pornography:** Note that this material is strictly prohibited on eBay, but you can sell other forms of erotica.
- **» Forged items:** Autographs from celebrities and sports figures are big business and a big opportunity for forgers. Selling a forgery is a criminal act. The state of New York is taking the lead on this issue, investigating at least two dozen suspected forgery cases linked with online auctions.



If you're in the market for an autograph, don't even consider bidding on one unless it comes with a *Certificate of Authenticity* (COA) or a letter of authenticity (LOA). eBay requires that sellers give buyers the right to a full refund if any doubt about authenticity crops ups. <u>Figure 15-3</u> shows an item that comes with a personal COA from an auction on eBay.

The FBI investigates and takes down those who sell forgeries on the Internet. For some interesting reading, check out the FBI's Operation Bullpen at https://www.fbi.gov/sandiego/about-us/history/operation-bullpen/.

- **» Items that infringe on someone else's copyright or trademark:** Take a look at the very next section for details on infringing items.
- **>> Stolen items:** Need I say more? (Seems obvious, but you'd be surprised.) If what you're thinking about selling came to you by way of a five-finger discount or fell off a truck, don't sell it on eBay.



The item you are bidding on is a 3x5 Card, Autographed by the late James Stewart

The card is white and in mint condition... Signed bold and clear, in black felt tip pen ...

This Autograph is 100% Genuine, and I will provide my COA that Guarantees it for life...

FIGURE 15-3: When bidding on an item with a personal COA, be sure that the seller is reputable (check the feedback).



REMEMBER Ignorance is no excuse. If you list an item that's in any way prohibited on eBay, eBay will end your auction. If you have any questions, always check eBay's Trust & Safety department at

http://pages.ebay.com/help/policies/items-ov.html.

Infringing items

In school, if you copied someone's work, you were busted for plagiarism. Even if you've been out of school for a while, you can still get busted for copying someone else's work. Profiting from a copy of someone else's legally owned *intellectual property* is an *infringement* violation. Infringement, also known as *piracy*, is the encroachment on another person's legal ownership rights on an item, a trademark, or a copyright. eBay prohibits the selling of infringing items at its site.



All the legal mumbo jumbo, translated to English, comes down to this: Profiting from someone else's idea, original work, or patented invention without legal permission is very bad and can get you in hot water.

HOT PROPERTY BUSTED

In 1961, a young jockey named John Sellers won his first Kentucky Derby on a horse named Carry Back. He was so emotional about the victory that he was crying as he crossed the finish line. Seventeen years later, someone broke into his California home and stole his priceless trophy. But today, decades after it was stolen, it's back in his possession — thanks to an observant eBay member. The prized trophy was put up for auction in 1999 by a seller who had bought it legitimately. An eBay member who knew the history of the trophy saw that it was for sale and alerted the seller. The seller stopped the auction immediately, contacted the former jockey, and personally returned the trophy to him. Now that's a great finish!

Here's a checklist of no-no items commonly found at the center of infringement violations:

- **»** Music that's been recorded from an original compact disc, cassette tape, or record.
- **»** Movies that have been recorded from an original DVD, laser disc, or commercial VHS tape.
- **»** E-books you purchased for your own use and do not have the rights to resell or distribute.
- **»** Television shows that have been recorded off the air, off cable, or from a satellite service.



Selling a used *original* CD, tape, commercial VHS movie cassette, DVD, or CD-ROM is perfectly legal. Some television shows have sold recorded episodes; you can sell those originals as well. But if you're tempted to sell a personal copy that you made of an original, you are committing an infringing violation.

- **»** Software and computer games that have been copied from CD-ROMs or disks (and that includes hard drives anybody's).
- **»** Counterfeit items (also called *knock-offs*), such as clothes and jewelry, that have been produced, copied, or imitated without the

permission of the manufacturer. (Bart Simpson knock-off T-shirts abounded in the early '90s.)



warning If you pick up a brand-name item dirt cheap from a discount store, you can check to see whether it's counterfeit by taking a look at the label or comparing it with like items on a Google image search. If something isn't quite right, the item may be a knock-off.



REMEMBER Trademark and copyright protection don't just cover software, music, and movies. Clothing, toys, sunglasses, and books are among the items covered by law.

Intellectual property owners actively defend their rights and, along with help from average eBay users, continually tip off eBay to fraudulent and infringing auctions. Rights owners can use eBay's Verified Rights Owner (VeRO) Program, as well as law-enforcement agencies. (See "Intellectual Property Violations," later in this chapter, for info about the VeRO program.)

Restricted items: Know the laws

Because some items are prohibited in one place and not another, eBay lists a few items that you can trade but that are restricted and regulated. As a member of eBay, you're responsible for knowing the restrictions in your area — as well as those on the eBay website.

Certain items are illegal in one geographic area and not another. This list mentions a few of the major questionable items:

>> Event tickets: Laws regarding the resale of event tickets vary from state to state, even city to city. Some laws prohibit reselling the ticket for a price higher than the amount printed on the face of the ticket. Some states limit the amount you can add to the ticket's face value. Be sure to double-check your state website for laws covering ticket

sales. An event search engine website, SeatGeek, keeps a pretty upto-date listing of the laws. You can find the information in an article on SeatGeek at

http://seatgeek.com/blog/ticket-industry/ticket-resalelaws#lawsbystate

Be certain that you're following the appropriate laws for your area.

» Wine and alcohol: Selling wine and alcohol on eBay — and anywhere else, for that matter — is tricky business. For starters, you have no business in this business unless you're at least 21 years old and licensed to sell. eBay does not permit sales of any alcohol products unless they are sold without their contents for their "collectible" containers. You may sell wine for consumption if you have a license to sell and ship wine and are pre-approved by eBay.



For the latest news and all the clickable links you need to keep your wine-shipping business on the good side of the law, visit www.wineinstitute.org/initiatives/stateshippinglaws or check with the Alcoholic Beverage Control (ABC) agency of your state. The Wine Institute page also gives the latest info on the status of shipping wine in the United States.

>> Erotica: Some forms of erotica are allowed on eBay, some in Adult Only and others in the Health & Beauty ⇒ Health Care ⇒ Sexual Wellness category. To see what eBay allows and what it prohibits, type http://pages.ebay.com/help/policies/adult-only.html into your browser.

Forbidden tactics

The folks on eBay didn't just fall off the turnip truck. eBay staffers have seen just about every scam to get around paying fees or following policy guidelines. Chances are good that if you try one of these scams, you'll get caught. Then eBay cancels the listing. Do it once, and shame on you (don't count on getting the listing fee credited back to you). Do it a lot, and you're no longer welcome on eBay.

The following items are definitely forbidden:

- **Raffles and prizes:** You need to *sell something* in your auction; you can't offer a chance to win a prize either by chance or a giveaway. You can offer to give away a bonus product with a sold item.
- **Advertisements:** An eBay auction is not the place to make a sales pitch (other than attractive copy describing your item, that is) for an item for sale elsewhere. Some eBay bad guys list an auction name and then use the auction to send bidders to some other auction or website. The Real Estate category and eBay Motors are exceptions. You can run an ad there to sell property.
- **» Bait-and-switch tactics:** These are a variation on the ugly old sales technique of pretending to sell what you're not really selling. Some eBay users who are selling an unfamiliar brand of item try to snag bidders by putting a more familiar brand in the title. For instance, writing *Designer Chanel purse not really, but a lot like it!* is a fake-out. eBay calls it *keyword spamming*. I call it lousy.
- **>> Choice listings:** You cannot offer your bidder a choice of significantly different items. But you *can* offer variations of the same item. For example, if you're selling a particular T-shirt, list small, medium, and large sizes.
- **» Mixing apples with oranges:** This gambit tries to attract more bidders to view an item by putting it in a high-traffic category where it doesn't belong. Forget it. eBay may move it for you if necessary, but keeping that rutabaga recipe book *away* from the list of automotive repair manuals is more considerate.
- **» Go emoji-less:** Although it may seem that using emoji might be a way to get eyes on your title, don't. The folks at eBay saw this potential headache coming, and quickly banned the use of special characters, superscript, and subscript in titles and subtitles.
- **Duplicate listings:** You may not list more than one fixed-price listing of an identical item at the same time. If you are running an auction, you may have more than one listing for identical items. Auctions for identical items listed by the same seller will be filtered

by eBay, and only one duplicate listing without bids will appear at a time.

Reporting a Problem Listing

You probably think that eBay can't possibly monitor millions of items for sale on a daily basis. You're right; it can't. eBay relies on eBay members like you to let it know when you suspect a shady listing is afoot. If you ever smell something fishy, for goodness' sake, report it to eBay. Sometimes eBay takes a few days to cancel a listing, but rest assured that eBay invests time to protect its users from fraudulent listings and violations of policy.

If you see something that just doesn't look right, you should report the listing using an online form by clicking the *Report Item* link, which is on the right, on the same line as the Description tab on every eBay item page, or go directly to this page:

http://ocs.ebay.com/ws/eBayISAPI.dll?ReportItemMember

Intellectual Property Violations

If you own intellectual property that you think is being infringed upon by an item for sale on the eBay site, you should take advantage of the eBay *Verified Rights Owner* (VeRO) Program. Owners of trademarked or copyrighted items and logos, as well as other forms of intellectual property, can become members of this program for free.

You can find out more about the VeRO Program by going to http://pages.ebay.com/help/tp/vero-rights-owner.html

Read the information there; if you qualify, click to download the form, fill it out, and fax it to eBay. Then you're on your way to protecting your intellectual property from being auctioned to the highest bidder. Remember, only *you* can stop the infringement madness. If eBay agrees with you that your intellectual property is being infringed upon, it invalidates the sale and informs the seller by email that the auction "is not authorized." The high bidders in an auction are also notified and warned that there was an issue with the listing.

I am a member of the VeRO Program. Should someone think it's a good idea to digitize and sell counterfeit copies of my books, I file my VeRO notice, and the listing is removed within hours.



warning eBay understands that sometimes people don't know that they're selling infringing items, but it draws a hard line on repeat offenders. eBay not only shuts down the offenders' listings but can also suspend repeat offenders. Also, eBay cooperates with the proper authorities on behalf of its VeRO Program members.

If eBay deems your listing or transaction to be invalid because the item doesn't meet eBay's policies and guidelines, you can find out why by checking the page at

http://pages.ebay.com/help/sell/questions/listing-ended.html

If you still feel that you're in the right, find the Contact Us link. Click there to plead your case.

eBay Fees? What eBay Fees? Oops

• • •

The "Cliché Police" are going to raid me sooner or later, but here's one I'm poking a few holes in this time around: *You gotta spend it to make it.* This old-time business chestnut means that you need to invest a fair amount of money before you can turn a profit. Although the principle still holds true in the real world (at least most of the time), on eBay you don't have to spend much to start your business. This is one reason why eBay has become one of the most successful e-commerce companies on the Internet. eBay keeps fees low and volume high.

For the beginning seller (without an eBay Store), eBay charged the following types of fees for listing on the site at the time of this writing:

- **» Auction and Fixed-price Insertion Fees:** Up to 50 listings are free per month. After that, \$0.30 per additional listing.
- **» Real estate listing fees:** These vary because you have the choice of listing your property as an ad rather than an auction. Because eBay real estate auctions are *nonbinding* (due to legalities), you may be better off running an ad. eBay charges different prices for different types of real estate:
 - Timeshares, manufactured homes, and land
 Auction-style/fixed-price: 1-, 3-, 5-, 7-, or 10-day listing (\$35); 30-day listing (\$50)
 Classified Ad format: 30-day listing (\$150); 90-day listing (\$300)
 - Residential, commercial, and other real estate
 Auction-style/fixed price: 1-, 3-, 5-, 7-, or 10-day listing (\$100); 30-day listing (\$150)
 Classified Ad format: 30-day listing (\$150), 90-day listing (\$300)

- **Motors (Automotive) fees:** For low-volume sellers (who post six or fewer vehicle listings per calendar year), the first six listings are free, with subsequent listings \$50; motorcycles are only \$20.
- **Additional reserve-price auction fees:** \$3; auctions with reserves over \$150 are charged 2 percent of the reserve, with a maximum of \$100.
- **» Final value fees:** A percentage of the sales price (read further on).
- **» Optional fees:** Vary.

Insertion fees are negligible

Every item (after your first 50 listings a month) listed on eBay is charged an *insertion fee*. If you are listing more than 50 items a month, you might consider opening an eBay Store (as long as you are *selling* the majority of the items you list).

The insertion (or listing) fee kicks in after those initial 50 items and is based on whether you are listing fixed-price items or auctions. Later in this chapter, I explain how an auction reserve price affects what you have to pay.

Take a look at Table 15-1 for eBay's insertion fee structure.

TABLE 15-1 Basic Insertion Fees

Number of listings	Insertion Fee
First 50 listings per month (whether auction or fixed price)	Free
Additional listings over 50 (per month)	\$0.30

If you're running a reserve-price auction, eBay bases its reserve listing fee on the reserve price, not the starting bid.



Here's a snapshot of how a reserve price affects your auction Insertion Fee. If you set a starting bid of \$0.99 for a gold Rolex watch (say what?), but your reserve price is \$5,000 (that's more like

it), you're charged a 2 percent insertion fee based on the \$5,000 reserve price (reserve fee is 1 percent of the reserve price). (See <u>Table 15-2</u>, later in this chapter, for the reserve auction fees.)

TABLE 15-2 eBay Optional-Upgrade Fees

Option	Fee (Auction)	Fixed-Price Fee (per 30 Days)
1- or 3-day duration	\$1.00	n/a
Value Pack (Gallery Plus, Subtitle, and Listing Designer)	\$0.65	\$2.00
Boldface title	\$2.00	\$4.00
Gallery Plus	\$0.35	\$1.00
List in two categories	Double-listing and upgrade fees	Double-listing and upgrade fees
Listing Designer	\$0.10	\$0.30
Subtitle	\$0.50	\$1.50
International site visibility	Auctions on a tiered scale based on starting price from \$0.10 to \$0.40	All fixed-price listings \$0.50
Auction BIN (Buy It Now) fee	Free	

So what does the insertion fee buy you on eBay?

- **»** A really snazzy-looking display page for your item that millions of eBay members can see, admire, and breathlessly respond to. (Well, we can only hope.)
- **»** The use of eBay services, such as the Trust & Safety program, which protects your selling experience.

Final value fees

If you follow the movie business, you hear about some big A-list stars who take a relatively small fee for making a film but negotiate a big percentage of the gross profits. This is known as a *back-end deal* — in effect, a commission based on how much the movie brings in. eBay does the same thing, taking a small *insertion fee* when you list your item and then a commission on the back end when you sell your item. This

commission is called the *final value fee* (FVF) and is based on the total amount of the sale (the selling price of the item, shipping, and any other fees a seller may charge, excluding any sales tax).



Estate/Timeshares category as it does in other categories; instead, it charges a flat *notice fee* of \$35 rather than an FVF for Timeshares, Land, and Manufactured Homes. There's no fee for Residential, Commercial, and Other. But in the Motors category, you pay a "Successful listing" fee of \$60 for passenger vehicles if your listing ends with a final amount under \$2,000. If your item's final bid is over \$2,000, you'll pay a \$125 fee.

In real life, when you pay sales commissions on a big purchase such as a house, you usually pay a fixed percentage. It is the same on eBay. A listing's final value fee (whether auction or fixed price) is 10 percent (with a maximum of \$750). This is taken from the total amount of the sale, including the final price of the item, shipping charges, and any other amounts you may charge the buyer. Sales tax is not included.



REMEMBER Final value fees are different (and lower) for eBay Store owners.

Here's a sample final value fee calculation for a successful auction:

- >> You sell an item for \$95 with a shipping cost of \$5.
- **»** Your final value fee on the total amount is 10 percent of \$100 (\$10).



If you try to work out your own final value fees, you may get an extreme headache — and come up with fractional cents. Know that eBay rounds up fees of \$0.005 and more and drops fees that are less than \$0.005. These roundings are done on a per-transaction basis, and generally they even out over time.

Optional fees

You don't have to pay a license fee and destination charge, but setting up your auction can be like buying a car. eBay has a nice array of options to jazz up your listings.

As a hint of things to come, <u>Table 15-2</u> lists the eBay listing options and what they'll cost you.



The auction Buy It Now feature is free.

Keep calculating your profits

When you've finished all the legwork needed to make some money, do some brain work to keep track of your results. The best place to keep watch on your eBay sales is on your My eBay page, a great place to stay organized while you're conducting all your eBay business. When it comes to calculating your bottom line, it's best to get used to using a program like QuickBooks.

Before you list, calculate your fees. eBay has a very basic fee calculator at www.fees.ebay.com/feeweb/feecalculator. If you'd rather be able to calculate every last penny (and discount eBay offers), there's a free, eBay calculator at http://salecalc.com/, shown in Figure 15-4.

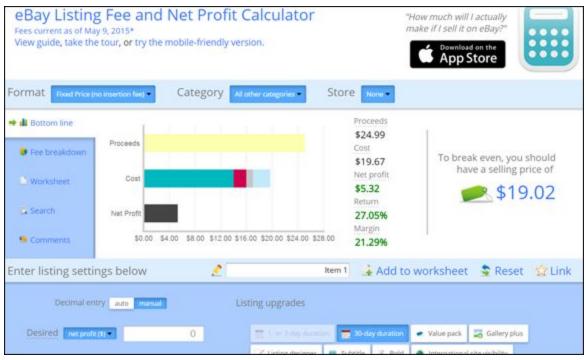


FIGURE 15-4: As you type in your costs on Salecalc, graph bars move to show where your costs and profits rise and fall.

I personally use Salecalc because it includes all possible fees (even PayPal) and discounts. Salecalc also updates the site when eBay fees change. On *Salecalc*, you can work your math backward. If (say) you'd like to make 10 percent on an item, the calculator tells you how much profit you'll make — after calculating all the fees and costs for you. Salecalc also offers an app for Apple mobile devices:

https://appsto.re/us/2L0 3.i.



Here's a checklist of what to watch out for after the sale ends:

- **» Keep an eye on how much you're spending to place items up for sale on eBay.** You don't want any nasty surprises, and you don't want to find out that you spent more money to set up your listing than you received selling your item.
- **» Keep track of your expenses for your taxes.** I explain Uncle Sam's tax position on eBay next. Stay tuned.

- » Make sure that you get refunds and credits when they're due.
- **» Double-check your figures to make certain eBay hasn't made mistakes.** If you have any questions about the accounting, let eBay know.

Uncle Sam Wants You — to Pay Your Taxes

What would a chapter about money be without a discussion of taxes? As Ben Franklin knew (and we've all found out since), you can't escape death or taxes. (Hey, it's not a cliché; it's accepted wisdom.) Whether in cyberspace or face-to-face life, never forget that Uncle Sam is always your business partner.

From 2011 on, the IRS receives a 1099-K form from PayPal that reflects the total transaction amounts for sellers who have completed over 200 transactions or who have had over \$20,000 in transactions paid through their sites. You will have to include this income on your annual income tax filing, so filing your taxes may become a bit more complex. To get more information on this IRS form from payment processors, visit this page: http://PayPal.com/IRS.

You will have to file a schedule 1040-C, "Profit or Loss From Business." Here you will have to post your income (and expenses) for your eBay business.



REMEMBER Be sure to keep track of all your eBay business expenses to offset your profits. If you live outside the United States, check the tax laws in that country so you don't end up with a headache down the road.



REMEMBER As with offline transactions, knowledge is power. The more you know about buying and selling on eBay before you actually start doing it, the more savvy the impression you make — and the more satisfying your experience.

For in-depth details on taxes and bookkeeping, check out my book, *eBay Business All-in-One For Dummies*.

Two wild rumors about federal taxes

I've heard some rumors about not having to pay taxes on eBay profits. If you hear any variation on this theme, smile politely and don't believe a word of it. I discuss two of the more popular (and seriously mistaken) tax notions running around the eBay community these days.

The U.S. government uses two laws on the books to go after eBay outlaws. One is the Federal Trade Commission (FTC) Act, which prohibits deceptive or misleading transactions in commerce. The other is the Mail or Telephone Order Merchandise Rule, which requires sellers to ship merchandise in a timely manner or offer to refund a consumer's money. The FTC is in charge of pursuing these violations. If you have a question about federal laws, you can find a lot of information online. For example, I found these two websites keep current lists of U.S. law and federal codes that affect e-commerce sellers:

https://www.ftc.gov/tips-advice/businesscenter/guidance/business-guide-ftcs-mail-internet-ortelephone-order and

www.fourmilab.ch/ustax/ustax.html (Click the Contents link for easy-to-locate links.)

Rumor #1: e-commerce isn't taxed

One story claims that "there will be no taxes on e-commerce sales (sales conducted online) for three years." No one ever seems to know when those three years start or end.

Well, presently it *is* four years down the pike from the Marketplace Fairness Act of 2013 (which is still not yet the law of the land), but the scene is still murky with regard to Internet sales tax. Although this may sound like the states will be charging state sales tax on all e-commerce purchases, the reality isn't that simple. The bill would require all online sellers with total sales over \$1,000,000 to pay sales tax in each state in which they have transactions. When you get to a million dollars in sales,

many states have joined a streamlined tax act that allows businesses to pay such tax on one form. Someday I hope I have to worry about this issue.

Rumor #2: Profits from garage sales are tax exempt

"eBay is like a garage sale, and you don't have to pay taxes on garage sales." (Uh-huh. And the calories in ice cream don't count if you eat it out of the carton. Who comes up with this stuff anyway?)

This notion is just an urban (or shall I say *suburban*) legend — somebody's wishful thinking that's become folklore. If you make money on a garage sale, you have to declare it as income — just like anything else you make money on. Most people never make any money on garage sales because they usually sell things for far less than they bought them for. However, the opposite is often true of an eBay transaction.



warning Even if you lose money, you may have to prove it to the government, especially if you're running a small business. You most definitely should have a heart-to-heart talk with your accountant or tax professional as to how to file your taxes. If something might look bad in an audit if you *don't* declare it, consider that a big hint.

To get the reliable word, I checked with the IRS's e-commerce office. The good folks there told me that even if you make as little as a buck on any eBay sale after all your expenses (the cost of the item, eBay fees, shipping charges), you still have to declare it as income on your federal tax return.

If you have questions about eBay sales and your taxes, check with your personal accountant, call the IRS Help Line at 800-829-1040, or visit the IRS website at www.irs.gov. And be friendly. (Just in case.)

State sales tax

If your state has sales tax, a *sales tax number* is required before you *officially* sell something. If sales tax applies, you may have to collect the

appropriate sales tax for every sale that falls within the state that your business is in. A 1992 U.S. Supreme Court decision said that states can only require sellers that have a physical presence in the same state as the consumer to collect so-called use taxes, but all that may have changed.

To find the regulations for your state, visit one of the following sites, which supply links to every state's tax board. The tax board should have the answers to your questions.

www.taxsites.com/State-Links.html

www.aicpa.org/ADVOCACY/STATE/STATECONTACTINFO/Pages/StateCont actInformation.aspx

State income taxes

Yes, it's true. Not only is Uncle Sam in Washington, D.C., looking for his slice of your eBay profits, but your state government may also be hankering to join the feast.



If you have a good accountant, give that esteemed individual a call. If you don't have one, find a tax professional in your area. Tax professionals actually do more than just process your income tax returns once a year; they can help you avoid major pitfalls even before April 15.

Here's how to find out what your responsibilities are in your home state:

- >> You may need to collect and pay state sales taxes, but only if you sell to someone in your state.
- You can get tax information online at this website:
 http://www.taxadmin.org/state-tax-forms
 The site has links to tax information for all 50 states.
- >> You can also call your state tax office and let the good folks there explain the requirements. The state tax office should be listed in the government section of your state government website.

Chapter 16

Accessing LinkedIn with Your Mobile Devices

IN THIS CHAPTER

Learning about the different mobile apps available
Installing a LinkedIn mobile app
Breaking down the sections of the main LinkedIn mobile app
Understanding how your mobile app usage can affect your LinkedIn experience

Mobile devices seem to be everywhere these days. Smartphones, tablet devices, wearable devices like the Apple Watch, and whatever portable devices are being invented as I type this sentence, are having increased usage, especially as more people prefer to use their mobile device as their main (or only) gateway to Internet content. Because of this shift, companies of all sizes are paying more and more attention to developing their own mobile applications, or "apps" for short, that give their user base an easier way to interface with the company than having the users open up the web browser for their device and surf over to the company's website.

LinkedIn is no exception, and its mobile strategy has been evolving for years. Assisted by some outside purchases, such as LinkedIn's acquisition of the news site Pulse in 2013, LinkedIn has evolved to provide its user base with a suite of mobile apps that cater to general and specific uses of the LinkedIn website and its functions. In late 2015, LinkedIn launched a major redesign of its flagship mobile app to simplify the experience and encourage users to access LinkedIn through the app when they are on the go, perhaps on the way to a client meeting or expanding their personal network at a conference.

In this chapter, I detail LinkedIn's presence in the mobile app space. I discuss the different apps available as of this writing, and then talk about installing an app on your mobile device. I then analyze the main LinkedIn app and detail the functionality currently available in that app. Finally, I talk about how your activity on the app affects your use of LinkedIn on the desktop or laptop.

Surveying the Different LinkedIn Apps

As more and more people use their mobile devices to access the Internet and do their daily tasks, companies such as LinkedIn have been aggressively ramping up their mobile app development to meet the needs of their device-toting user base. The look and design of the apps have evolved over time to give LinkedIn users a clear picture of the data they are trying to retrieve in an easy-to-read format.

In addition, the number of LinkedIn apps has increased over time to keep the user experience simple and effective. Rather than having one bloated app that forces users to access all the different LinkedIn functions, the company decided to develop stand-alone mobile apps that focus on a specific function to allow users to better use these functions on their mobile devices. These can be used separately or in conjunction with LinkedIn's main mobile app. You can always look at LinkedIn's different mobile offerings by checking out its mobile page at https://mobile.linkedin.com, as shown in Figure 16-1.

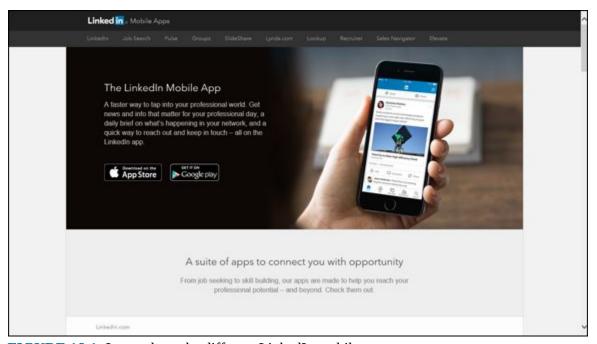


FIGURE 16-1: Learn about the different LinkedIn mobile apps.

As of this writing, LinkedIn currently offers apps in these areas:

- **» LinkedIn mobile app:** The main LinkedIn app allows you to interact with LinkedIn the same way you would when using your desktop or laptop computer. You can view your news feed of friends' stories, update your profile, talk to your connections, add new people to your network, or search for more information.
- **» LinkedIn Job Search:** This targeted app allows you to search and filter the job openings on the LinkedIn job board to find jobs where you can apply. This app also includes the functionality that lets you see whom you know at the company you're applying to, as well as information about the person who posted the job opening. You can apply for jobs through the app with a couple of taps, and track the jobs that you've looked at, applied for, or saved. You can set up notifications on your mobile device to hear when jobs become available to apply for or if a targeted job posting is about to expire.
- **» LinkedIn Groups:** If you're a big user of LinkedIn Groups, then this app is for you. It allows you to monitor and contribute to the discussions in the LinkedIn Groups where you are a member, as well as give you the ability to post new discussions to those groups from your mobile device.
- **» LinkedIn Lookup:** This app is designed for use by workers in medium to large companies, and is meant to help you find, learn, and connect with co-workers in your own company, regardless of whether that co-worker is in your first-degree network. The app allows you to search by the person's title, skills, expertise, name, and more. You can review any co-worker's profile and contact her directly using the information in the app.
- **» LinkedIn Pulse:** Stay up to date on the news and information that matters to you. Read up on the influencers, companies, and industries you are following with this Pulse app. You can also see what your peers are viewing. The mobile app goes further than the desktop, allowing you to save stories with a swipe of your finger to read at a later date. You can "swipe left" to indicate to Pulse that you

- didn't like that content, which will help Pulse tailor future news feeds for you. You can also set up Smart Notifications that let you know when your connections are mentioned in the news.
- **» LinkedIn SlideShare:** This app gives you mobile access to over 18 million slide presentations, information graphics, and videos that have been uploaded by LinkedIn members around the world. Learn about various topics from your network and leading industry professionals, all from the ease of your mobile device.
- >> Lynda.com: In April 2015, LinkedIn acquired Lynda.com, a subscription-based online learning website. While part of the LinkedIn family, Lynda.com developed its own stand-alone mobile app, which is available to its subscribers and allows users to access Lynda's vast library of educational presentations to learn about thousands of different skills. Learn from the experts while on the go and advance your skills and career with Lynda's monthly subscription and this app. You can also download this content to your mobile device for future viewing.

When you are on either the iTunes App Store or Google Play Store, you can look for apps owned by LinkedIn by looking for apps where the developer is LinkedIn Corporation. You can see from <u>Figure 16-2</u> the variety of apps available for different devices for Apple iOS devices, for example.

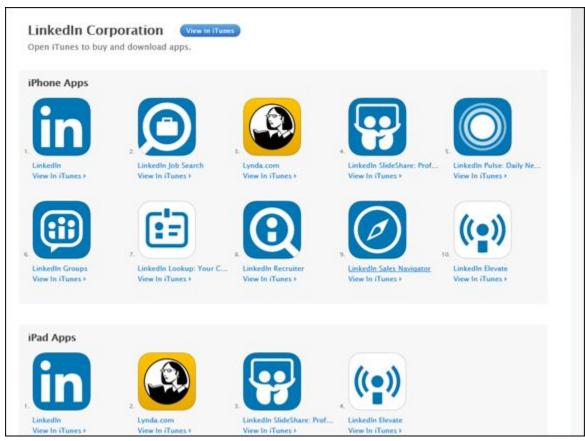


FIGURE 16-2: Download different LinkedIn apps to your iOS device.



REMEMBER There are other apps available to premium users, targeting specific users like recruiters and sales professionals. Consult the LinkedIn mobile page at https://mobile.linkedin.com for more information about these apps.

Installing a LinkedIn Mobile App



warning As of this writing, LinkedIn apps are only available for mobile devices running the Apple iOS operating system or the Android operating system, and not every app will work on every device. For example, as Figure 16-2 demonstrates, while there are ten apps for an iPhone, only four of those apps work on an iPad device. Consult the app store for your device to see what you can install.

When you're ready to install an app, follow these steps from your mobile device (for the purposes of illustration, the figures in this process demonstrate how I use an iPad to install the main LinkedIn app):

- 1. Pull up your main source for installing mobile apps. For example, if you've got an Apple device, start up the App Store; if you've got an Android device, start up the Google Play Store.
 - You can also go to LinkedIn's mobile page at https://mobile.linkedin.com, find the app you want to install, and then click either the App Store or Google Play Store button, depending on your device.
- 2. On the search screen, type in the word LinkedIn (and any additional words, if you want one of the specialized LinkedIn mobile apps, like LinkedIn Job Search or LinkedIn Pulse).
 This should bring up a results screen of apps similar to Figure 16-2 from the previous section. Click the appropriate icon to bring up the app info screen.
- 3. When you see the name and description of the app you want, click the Get or Install button to start installing the app, as shown in Figure 16-3.
 - Your device may prompt you to log into your iTunes or Android account at this point. In addition, some apps, like the main LinkedIn mobile app, offer in-app purchases, which means that either Apple or

Google will want to verify your billing method in case you buy something inside the app.



warning There may be requirements for the level of operating system you need on your device before you can install this app. If your operating system needs to be updated, your mobile device will warn you of this and stop the installation process. You will need to update your OS and then reattempt this installation.

4. Once the app is fully installed, you should see an icon on your screen. Tap that icon to start the LinkedIn app.

You should be taken to a login screen, as shown in <u>Figure 16-4</u>, where you can sign in with your LinkedIn account or join LinkedIn with a new account.

5. The first time you open the LinkedIn app, you will be asked to log into your LinkedIn account. Click Sign In, type in your LinkedIn user ID and password into the boxes provided, and then click the Next button.

Once you've signed into your LinkedIn account, the first thing the app will ask you is whether to enable notifications, where the app can send a message to your device's screen when certain actions occur. When you see the box pop up (see Figure 16-5), you can click the OK button to turn on notifications, or click Don't Allow to keep notifications turned off. At any time you can go into the app's settings to change this setting.

Congratulations, you've installed the app! Repeat this process with any other app you want to install on your device.

Once you've installed the LinkedIn app, there may be a shortcut to bringing the other LinkedIn apps onto your device. Bring up the LinkedIn app, make sure you are on the home screen, and see if you have a grid of dots in the upper-right corner. If you can see those dots, tap on that grid to bring up an "app launcher" sidebar (see

<u>Figure 16-6</u>), where you can tap one of the menu items to install other apps on your device.



<u>FIGURE 16-3:</u> Click the Get or Install button to start the installation process.



FIGURE 16-4: Sign in to your LinkedIn account from the app.

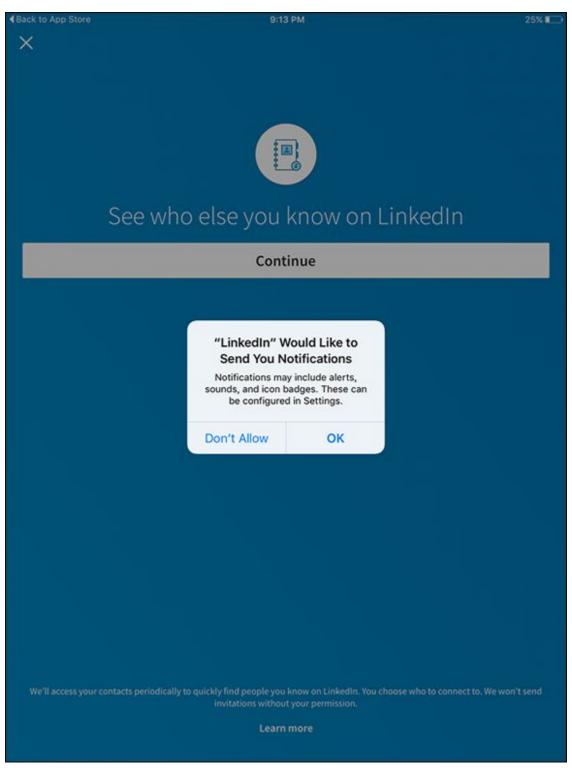
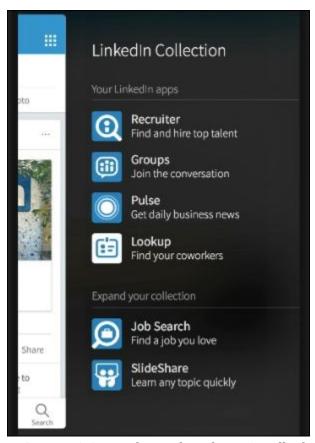


FIGURE 16-5: Decide whether you want the mobile app to send notifications to your device.



<u>FIGURE 16-6:</u> Use the app launcher to install other apps quickly.

Breaking Down the Sections of the LinkedIn Mobile App

After you install the main LinkedIn mobile app and sign in to your LinkedIn account from the app, you are ready to start using the app. Before you do, though, it's important to understand the capabilities now at your fingertips.

When you use the LinkedIn mobile app, you will notice a series of buttons along the bottom of the screen. These buttons allow you to easily reach the different sections of the LinkedIn app.

The five core sections of the LinkedIn mobile app are organized by these headers:

- **>> Home:** This section (see <u>Figure 16-7</u>) mirrors your home page news feed, integrating elements from your first-degree connections and the news sources you follow on LinkedIn, as well as news items and blog posts that LinkedIn thinks you may like, plus job recommendations. LinkedIn takes advantage of the interactivity with your mobile device by allowing you to swipe (with your finger) stories in this section to indicate whether you find them valuable or not, and then remembers your choices and learns over time to help present a finer-tuned list of elements more to your liking.
- **Me:** This section mirrors the Notifications list that LinkedIn provides you on the website (see Figure 16-8), showing you when and where you are being mentioned, and who is reading your profile or your posts. You can also easily update your profile from this section so your professional brand can stay strong or get a muchneeded refresh. Finally, you can update your settings from this section, by clicking the cog wheel at the top right of the screen. This is particularly important to mobile users because you can set push notifications from the settings screen, allowing you to see pop-up notifications on your device like an incoming text message so you don't miss a new item of interest.



warning As of this writing, you cannot edit every section of your profile in the LinkedIn mobile app. If you do not see the capability to edit that section, then you know you will have to edit it on the desktop version of LinkedIn.

- **» Messages:** This section mirrors your LinkedIn Inbox, allowing you to message or chat with your connections on LinkedIn. This way, you can initiate a new conversation while on the go or follow up on existing communications while away from your desk. You can change your notifications for any given conversation or delete any conversation from the screen.
- **Wy Network:** This section works very similar to the feed you see on the LinkedIn website home page, where you will see a rundown of activities from people you are connected with on LinkedIn. If you look at Figure 16-9, you will see a stack of "cards" where you can interact with people's updates. You can like or comment on updates from your connections, congratulate a contact on a work anniversary or job change, and see suggestions to stay connected. You go through the elements of this section by swiping and clicking.

You can see any incoming connection requests and act on them by clicking the People icon from the top-left corner of the screen without having to log into the website. Finally, this section offers you the ability to sync with your calendar — so LinkedIn can prompt you to review a profile of someone you have a scheduled meeting with that day, for example — making you better prepared for that meeting.

Search: This section mirrors the general LinkedIn search experience, where you can search for people, jobs, groups, companies, news items, and more. When you type keywords in the search bar at the top, options pop up that give you suggested search result groupings.

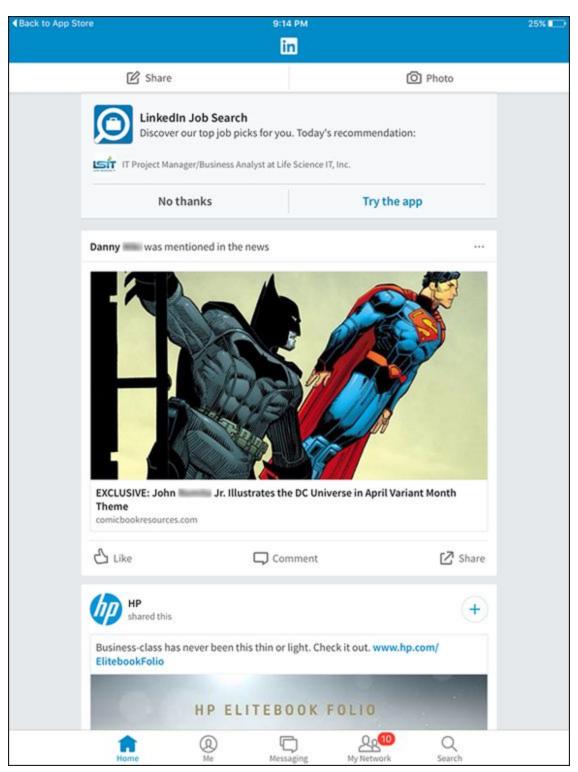


FIGURE 16-7: See your feed elements from LinkedIn on the home screen.

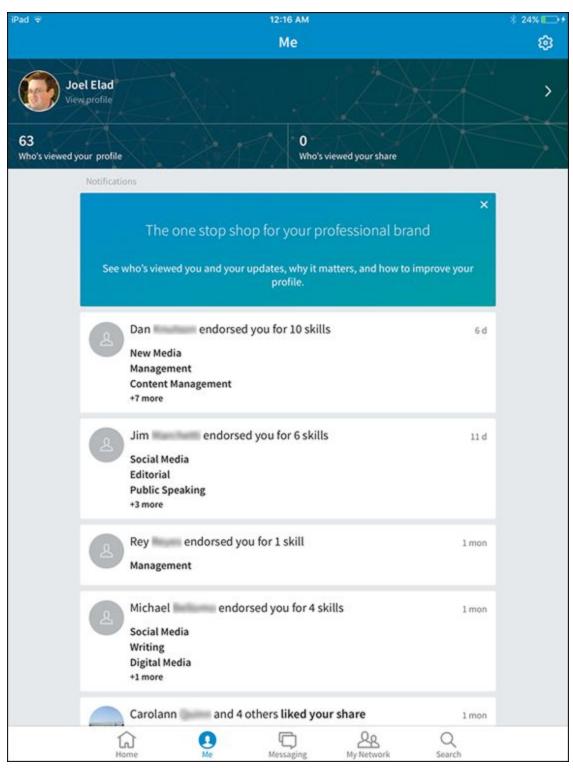


FIGURE 16-8: See who's viewed your profile and how you're interacting with your network.

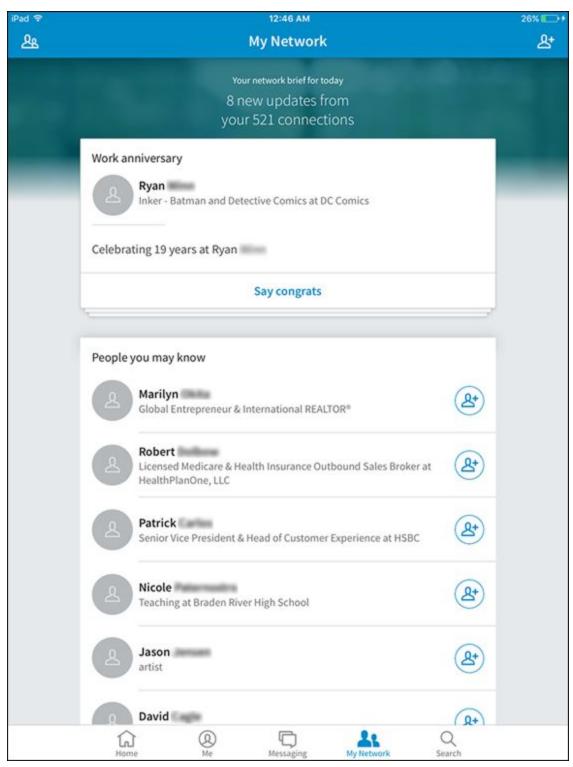


FIGURE 16-9: Interact with your network through the mobile app.

When you search for people, you will notice that LinkedIn will try to "guess" what you are looking for by studying variations of a name you type in, coupled with your network of connections and list of companies

you are employed at, to promote the most likely results at the top of the search results list. You can also type in a collection of keywords (someone's name and employer, job skills, or alma mater, for example) to help find the person on LinkedIn.

Connecting Your App Usage with Website Usage

After you've installed one or more of the LinkedIn mobile apps, and you start using the apps interchangeably with your desktop or laptop when you use LinkedIn, you should notice a synergy where all your actions are captured and available regardless of platform. Many of your actions are replicated or transmitted to your main LinkedIn account and will be reflected when you log onto the LinkedIn website with your PC or Mac:

- **»** Communication will show up in LinkedIn Messages, and you will see the same order of conversations on both the app and the website, where the most recent conversation is at the top of the screen.
- **»** Any profile updates you made with the app will be stored in the profile you see through the website and vice versa. Depending on your profile settings, your network will be notified of any profile changes you make on either the app or via the website.
- **»** Any interactions you have with LinkedIn members, whether you like or comment on someone's update, participate in a Groups discussion, or accept or reject an invitation, will be the same whether you did it through the app or the website.
- When you swiped stories from the mobile app news feed, those choices will be remembered when LinkedIn displays your home page news feed when you access the LinkedIn website on your PC or laptop.

Similar to the settings available from the LinkedIn website, you can update a number of your settings through the LinkedIn app by clicking the Me button, and then clicking the Settings icon (cog wheel) in the top right of that screen. Any settings updated with your mobile device will be reflected when you next log onto the desktop version of LinkedIn. As of this writing, only some settings are accessible through the app, and they are divided into three categories:

- **» Account settings:** You can update the list of email addresses on your account, add a phone number, change your password, sync your contacts, or review the active sessions you have where you're logged onto LinkedIn from your various devices.
- **» Privacy settings:** From the app, you can choose whether your network gets notified when you make profile changes and you can choose who can follow you. You can change the setting where you are visible or private when viewing someone else's profile and manage the list of whom you're blocking. You can change your advertising preferences and choose who can find your profile by typing in your phone number.
- **»** Communication settings: You can decide which, if any, mobile push notifications you receive from LinkedIn. This way, you can decide what you want the LinkedIn app to notify you about, which only works on a mobile device.

Part 5

Hobbies

FEATURING CHAPTERS FROM:

The 4th edition of *Guitar For Dummies* (Print ISBN: 978-1-119-29335-4; ePub ISBN: 978-1-119-29653-9; ePdf ISBN: 978-1-119-29654-6), by Mark Phillips and Jon Chappell.

The 8th edition of *Digital Photography For Dummies* (Print ISBN: 978-1-119-23560-6; ePub ISBN: 978-1-119-23564-4; ePdf ISBN: 978-1-119-23563-7), by Julie Adair King.

The 4th edition of *Bridge For Dummies* (Print ISBN: 978-1-119-24782-1; ePub ISBN: 978-1-119-24783-8; ePdf ISBN: 978-1-119-24784-5), by Eddie Kantar.

The 4th edition of *Chess For Dummies* (Print ISBN: 978-1-119-28001-9; ePub ISBN: 978-1-119-28003-3; ePdf ISBN: 978-1-119-28002-6), by James Eade.

Chapter 17

Shopping for a Guitar

IN THIS CHAPTER

Building a buying strategy
Knowing what you want in your first guitar
Matching music styles to guitar models
Graduating to your second guitar (and third and fourth and ...)
Following a few guidelines before you make the big buy

Buying a new guitar is an exciting proposition. You go to the music store and immediately face a world of possibilities, a supermarket of tantalizing choices. Every guitar on the wall seems to scream, "Pick me! Pick me!" Should you resist, exercise restraint, and avoid the models you know you can't afford?

Heck no. Be bold and just try any model that strikes your fancy. After all, you're not asking to test drive the Ferrari appearing in the showroom window; you're simply asking the salesperson to see how different guitars feel and sound. And you're not being frivolous, either. Playing a range of guitars helps you understand the differences between high-quality, expensive guitars and acceptable but affordable guitars.

So indulge yourself. Even if you think you may not have enough experience to recognize the subtle distinctions between a good guitar and a great guitar, at least expose yourself to them. And don't wait until the day you decide to buy an instrument to pick one up for the first time. Make several visits to the music store before you're ready to buy and then take the time to absorb your experiences. Try to visit a few different music stores if you can. Some stores may be the exclusive dealer of a specific brand in your region; other retailers may not be able to sell that brand of guitar. Also, you pick up far more knowledge about what makes a good, playable guitar than you may think just by handling several

different instruments. So get out there and get some hands-on experience.



REMEMBER Buying a guitar can be a similar experience to thinking you have the basics of a foreign language down pat and then visiting the country where it's spoken: You practice for weeks, but the first time a native starts speaking to you, you're completely flustered. But don't rush it; hang in there. You're just buying a guitar; you're not in a strange land trying to find the closest restroom facilities. You're eventually going to sort it all out, with the help of this chapter.

First Things First: Developing a Purchasing Plan



REMEMBER Before you walk into your local music store ready to plop down your hard-earned dough on a new guitar, you need to take stock of what you're doing. You need to ask yourself some tough questions about your pending purchase — and you need to do so *now*. Don't simply wait until you get to the store to develop a buying strategy (which, by that time, usually translates into no strategy at all). Keep in mind that the two most important factors in making any purchasing decision — especially concerning a guitar, where passions tend to run high — are to develop a plan and to gather all the information you need to make the best choice.

Start developing your purchasing plan by answering some specific questions about exactly what you want in a guitar — and how much you can spend to attain it. Narrowing your scope doesn't mean that you can't change your mind after you get to the store and see all the nifty instruments available or that you can't let on-the-spot inspiration and whim play a significant part in your final decision. ("I just *can't* decide between these two guitars … oh, what the heck! Just give me *both* of them!") But you *do* need a point from which to depart.



- In focusing on the instrument of your (practical) dreams, ask yourself the following questions:
- **» What's my level of commitment?** Regardless of your current ability, do you realistically envision yourself practicing every day for the next five years, pursuing a dedicated program of guitar excellence? Or do you first want to see whether this whole "guitar thing" is going to stick? Just because you can *afford* a \$1,000 guitar

doesn't mean that you should necessarily buy one. You can buy a quality instrument for much less than a grand. Before plunking down any cash, honestly determine the importance of the guitar in your life and then act responsibly according to that priority. (Or completely ignore this advice and go crazy, you guitar-playing rebel, you!)

- **what's my spending limit?** The answer to this question is critical because, often, the more expensive the guitar, the greater its appeal. So you need to balance your level of commitment and your available resources. You don't want to have to give up food for six months and live in a cardboard box just because you got carried away in a moment of buying fever at the music store. You can very easily overextend yourself. If you don't set a limit on how much you can spend, you can't know whether you exceed that limit ... or by how much.
- **>> Am I a new-guitar person or a used-guitar person?** You're going to have a much easier time comparing attributes among new guitars. And prices of new instruments are pretty much standardized, though variation does exist among different types of retailers large, urban stores versus mom-and-pop establishments, online retailers versus brick-and-mortar sellers, and so on.

Both retail and online operations offer a warranty against any manufacturer defects on new instruments. You don't find any comparable protection if you're buying a guitar from a newspaper ad (although music stores also sell used instruments, usually with their own, store-issued warranties) or from Craigslist, eBay, or other online classified service. But on the other hand, you *can* sometimes get a really good deal on a used instrument ... *if you know what to look for.* And, of course, if you want a vintage instrument, you're looking at a used guitar by definition.

Grasping How a New Guitar Is Priced

In the not too distant past, a new guitar's cost was based on its *list*, or retail, price (set by the manufacturer), which the retailer then discounted to the selling price, or the actual amount you, the buyer, paid. Needless to say, the list price was much higher than the discounted price, from several hundred to even a couple thousand dollars more, especially if you were dealing with a high-end instrument. And the discount varied according to the customer and the policy or the whim of the individual retailer.

But the old pricing method, where the retailer advertises the list price along with his discount selling price, is almost entirely obsolete. Much more common now is to see just the vendor's advertised selling price. This practice encourages the retailers to offer the lowest price they can right at the outset (without forcing the customer to negotiate for it), in order to stay competitive. You may still find some variation in price for the same instrument among large retailers and between large and small retailers (who often can't offer a large discount because they don't deal in high-volume inventories). But pricing for new guitars tends to be fairly consistent. If you're at all unsure whether you're getting the lowest price, you can always ask the salesperson, "Is this the best you can do?" or "Is this the absolute lowest price? I saw this same make and model online from Uncle Bubba's Fly-by-Night Guitar Emporium for \$75 less." Many retailers have a price-matching policy and honor any legitimate competitive offer, rather than lose a sale to a competitor. But if the retailer can't move any further on the price, you can accept the terms or try to do better.



If you're thinking about buying a used guitar, from a private owner in a newspaper ad or an online service like Craigslist or eBay, be very cautious when assessing the quality and condition of

the guitar, especially if photos are the only things you have to go on (which is almost always the case). Also, be aware that most posted prices (also known as *asking prices*) from private owners are too high. Be prepared to dicker to get a better price for such a guitar — even if it's exactly what you're looking for.

After you feel that you have satisfactory answers to the preceding questions, proceed to the second prong of your guitar-purchasing attack plan: *gathering information on the specific guitar for you*. The following section helps you become more knowledgeable about guitar construction, materials, and workmanship. Remember, being an informed buyer is the best defense against making a bad deal in the retail arena.

Noting Some Considerations for Your First Guitar

If you're just starting out as a novice guitarist, you may ask the musical question, "What's the minimum I need to spend to avoid winding up with a piece of junk?" That's a good question, because modern manufacturing practices now enable *luthiers* (the fancy term for guitar makers) to turn out some pretty good stuff for around \$200 — and even less sometimes.



If you're an adult (that is, someone older than 14), and you're looking to grow with an instrument, plan to spend between \$200 and \$250 for an acoustic guitar and a little less for an electric. (Electric guitars are a little easier to build than acoustics are, so they usually cost a bit less than comparable acoustics.) Not bad for something that can provide a lifetime of entertainment and help you develop musical skills, is it?

In trying to decide on a prospective guitar, consider the following criteria:

- Appearance: You must like the way a particular guitar looks, or you're never really happy with it. So use your eye and your sense of taste (and we're referring here to your sense of aesthetics, so please, don't lick the guitar with your tongue) to select possible candidates. A red guitar isn't inherently better or worse than a blue one, but you're perfectly free to base your decision to buy simply on whether you like the look of the guitar.
- **Playability:** Just because a guitar is relatively inexpensive doesn't necessarily mean that it's difficult to play (although this correlation was often the case in the past). You should be able to press the strings down to the fretboard with relative ease. And you shouldn't

find the up-the-neck frets unduly difficult either, although they're sometimes harder to play than the lower frets.



Here's a way to get some perspective on playability. Go back to that Ferrari — er, more expensive guitar — at the other end of the rack and see how a high-quality guitar plays. (*Hint:* "Like a hot knife through butter" isn't an uncommon reaction when playing a really great guitar.) Then return to the more affordable instrument you're considering. Is the playability wildly different? It shouldn't be, though a more expensive guitar often has better playability than a less-expensive model. If your prospective instrument doesn't feel comfortable to you, move on.

- >> Intonation: Besides being relatively easy to play, a good guitar must play in tune. Test the intonation by playing a 12th-fret harmonic on the 1st string and match that to the fretted note at the 12th fret. Although the notes are of a different tonal quality, the pitch should be exactly the same. Apply this test to all six strings. Listen especially to the 3rd and 6th strings. On a guitar that's not set up correctly, these strings are likely to go out of tune first. If you don't trust your ears to tell the difference, enlist the aid of an experienced guitarist on this issue; it's *crucial*.
- >> Solid construction: If you're checking out an acoustic, rap gently on the top of the instrument (like your doctor does to check your ribs and chest) to make sure it's rattle free. Peer inside the hole, looking for gobs of glue and other evidence of sloppy workmanship. (Roughsanded braces are a big tip-off to a hastily constructed instrument.) On an electric, test that the metal hardware is all tightly secured and rattle free. Without plugging into an amp, strum the open strings hard and listen for any rattling. Running your left hand along the edge of the neck to check that the frets are smooth and filed correctly is another good test. If you're not sure what you should be feeling, consult an experienced guitarist on this "fret check."

Sifting through Models to Match Your Style

Can you imagine walking into a music store and saying, "I'm a folk player. Do you have a folk bassoon? No, not a rock bassoon or a jazz bassoon — and *please*, not that country bassoon. How about that nice folk bassoon over in the corner?"

Absurd, right? But you're a guitarist, so asking for a type of guitar by musical style is completely legitimate. Ask for a heavy-metal guitar, for example, and the salesperson nods knowingly and leads you to the corner of the store with all the scary-looking stuff (lightning bolts, skulls, and bright colors). If you request a jazz guitar, you and the salesperson trundle off in a different direction (down toward the guys wearing berets and black turtlenecks sporting "Bird lives!" buttons).

<u>Figure 17-1</u> shows a collection of some popular guitar models. Notice the diversity in shape and design.



Photographs courtesy of Charvel Guitars, Epiphone Guitar Corp., Fender Musical Instruments Corporation, Gibson Guitar Corp., Guild Guitars, PRS Guitars, and Taylor Guitars

FIGURE 17-1: Different downstrokes for different folks.

Now, some musical styles do share guitar models. You can play both blues and rock, for example, with equal success on a Fender Stratocaster (or Strat, for short). And a Gibson Les Paul is just as capable of playing a wailing rock lead as a Strat. (As a rule, however, the tone of a Les Paul is going to be different than that of a Strat.) Making your own kind of music on the guitar of your choice is part of the fun.



- Following are some popular music styles and classic guitars that most people associate with those styles. (While many of these models are beyond the price range of a first-time buyer, familiarity with them will help you associate models with styles and vice versa. Often, lower-priced guitars are based on the higher-end iconic models.) This list is by no means exhaustive but does include recognized standard bearers of the respective genres:
- **» Acoustic blues:** National Steel, Gibson J-200
- » Bluegrass: Martin Dreadnought, Taylor Dreadnought, Collings Dreadnought, Santa Cruz Dreadnought, Gallagher Dreadnought
- » Classical: Ramirez, Hopf, Khono, Humphrey, Hernandez, Alvarez
- » Country: Fender Telecaster, Gretsch 6120, Fender Stratocaster
- **» Electric blues:** Gibson ES-355, Fender Telecaster, Fender Stratocaster, Gibson Les Paul
- **» Folk:** Dreadnoughts and Grand Concerts by Martin, Taylor, Collings, Larrivée, Lowden, Yamaha, Alvarez, Epiphone, Ibanez, and Guild; Gibson J-200; Ovation Adamas
- **>> Heavy metal:** Gibson Les Paul, Explorer, Flying V, and SG; Fender Stratocaster; Dean; Ibanez Iceman; Charvel San Dimas; Jackson Soloist
- **» Jazz:** Gibson ES-175, Super 400 L-5, and Johnny Smith; archtops by D'Angelico, D'Aquisto, and Benedetto; Epiphone Emperor Regent; Ibanez signature models

- **» New age, new acoustic:** Taylor Grand Concert, Ovation Balladeer, Takamine nylon-electric
- » **R&B:** Fender Stratocaster, Gibson ES-335
- **» Rock:** Fender Stratocaster, Gibson Les Paul and SG, Ibanez RG and signature series, Paul Reed Smith, Tom Anderson, Ruokangas



REMEMBER Although the preceding list contains guitars that people generally associate with given styles, don't let that limit your creativity. Play the music you want to play on the guitar you want to play it on, no matter what some chart tells you. In other words, after you study this list, take it with a grain of salt and go pick out the guitar you want, play the music you want, and never mind what some chart tells you. These guitars are all super-sweet, and the price tag reflects the quality as well as the heritage of these guitars.

Moving On to Your Second Guitar (and Beyond)

Your toughest decisions in buying a guitar may come not with your first instrument at all but with your second. Admit it — your first time out was probably a blur, but now that you know a little bit about guitar playing and what's available out there, you face perhaps an even more daunting prospect than before: What should you choose as your *next* guitar?



- If you haven't already developed gear-lust for a certain model but are hankering for a new toy just the same, consider the following three common approaches to choosing another guitar:
- **» The contrasting and complementary approach:** If you own an acoustic, you may want to consider getting an electric (or vice versa), because having an array of different guitars in your arsenal is always nice. Diversity is very healthy for a person seeking to bolster a collection.
- **The clone approach:** Some people just want to acquire as many, say, Les Pauls as they can in a lifetime: old ones, new ones, red ones, blue ones ... hey it's *your* money. Buy as many as you want (and can afford).
- **The upgrade approach:** If all you ever want to do is master the Stratocaster, just get a better version of what you had before. That way, you can use the new guitar for important occasions, such as recording and performing, and the old ax for going to the beach.



How much should you spend on your second (or later) instrument? One guideline is to go into the next spending bracket from your old guitar. This way, you don't end up with many similar guitars. Plan on spending about \$200 more than the current value (not what you paid) of the guitar you own. By doing so, you ensure that even if you stick with a certain model line, you're getting a guitar that's categorically different from your initial instrument.

When should you stop buying guitars? Why, as soon as you die or the money runs out, of course. Actually, no hard-and-fast rules dictate how many guitars are "enough." These days, however, a reasonably well-appointed guitar arsenal includes a single-coil electric (such as a Fender Strat and/or Telecaster), a humbucker electric (such as a Gibson Les Paul), a semihollow-body electric, a hollow-body jazz (electric), an acoustic steel-string, an acoustic 12-string, and a nylon-string classical. Then maybe you can add one or two more guitars in a given specialty, such as a steel-bodied guitar set up especially for playing slide or a 12-string electric.



REMEMBER When upgrading to a second guitar, the issue again becomes one of *quality*. But this time, instead of just making sure you have an instrument that plays in tune, frets easily, and doesn't collapse like a house of cards if you breathe on it, you also need to *make informed decisions*. Don't worry — that's not as grave as it sounds. Consider for the moment, however, the following four pillars for judging quality in an instrument:

- **» Construction and body type:** How the guitar is designed and put together
- **Materials:** The woods, metals (used in hardware, pickups, electronics), and other substances used

» Workmanship: The quality of the building

» Appointments: The aesthetic additions and other doodads

Not sure just what all those terms mean in determining the quality of a guitar? The following sections clue you in.

Construction and body type



REMEMBER How a guitar is built defines what type of guitar it is and (generally) what type of music it's used for. Consider just two examples:

- **»** A *solid-body electric guitar* is used for rock. It has no holes in the body which adds to its *sustain* (the guitar's ability to increase the amount of time a plucked note rings).
- **»** An *acoustic archtop* is used for traditional jazz, because it has a carved, contoured top, which produces the mellow tones most associated with that style.

The following sections cover the three most important issues regarding guitar construction: solid versus laminated wood, body caps, and neck construction.

Solid wood versus laminated wood

A solid-wood acoustic guitar is more desirable than a *laminated* acoustic guitar (where, instead of using a solid, thicker piece of top-wood, the guitar maker uses several layers of inexpensive wood pressed together and covered with a veneer). Guitars made completely out of solid wood are more expensive — costing about \$500 or more.



REMEMBER The guitar's top is the most critical element in sound production; the back and sides primarily reflect the sound back through the top.

So if you can't pick up the tab for an all-solid-wood acoustic guitar, look to various configurations in which the top is solid and various other parts are laminated. A good choice is a solid-top guitar with laminated back and sides, which is much less expensive than an all-solid-wood model.



If you're unsure as to whether a guitar has solid or laminated wood, ask the dealer or consult the manufacturer.

Body caps

In the electric realm, one big determinant of price is whether the top has a cap. A *cap* is a decorative layer of fine wood — usually a variety of *figured* maple (one having a naturally occurring decorative grain pattern) — that sits on top of the body without affecting the sound. Popular cap woods include flame maple and quilted maple. Figured-wood tops usually come with clear, or see-through, finishes to show off the wood's attractive grain pattern.

Neck construction

The following list describes the three most common types of neck construction, from the least expensive to the most expensive:

- **» Bolt-on:** The neck attaches to the back of the guitar with large bolts (although a plate sometimes covers the bolt holes). Fender Stratocasters and Telecasters are examples of guitars with bolt-on necks.
- **>> Set-in (or glued-in):** The neck joins the body with an unbroken surface covering the connection, creating a seamless effect from neck to body. The joint is then glued. Gibson Les Pauls and Paul Reed Smiths have set-in necks.
- **Neck-through-body:** A high-end construction where the neck is one long unit (although usually consisting of several pieces of wood glued together) that doesn't stop at the body but continues all the way through to the tail of the guitar. This type of neck is great for

getting maximum sustain. A Jackson Soloist is an example of a guitar with a neck-through-body design.



REMEMBER Just because a construction technique is more advanced or expensive doesn't mean that it's necessarily better than other techniques. Could you "improve" the sound of Jimi Hendrix's Strat by modifying its neck to a glued-in configuration? *Sacrilege!*

Materials: Woods, hardware, and other goodies

A guitar isn't limited by what it's made of any more than a sculpture is. Michelangelo's *David* and your Aunt Agnes's candy dish are both made of marble, but which one would you travel to Florence to see? (Hint: Assume that you don't have an overly developed sweet tooth.) So don't judge a guitar *only* by its materials, but consider that a guitar with better materials (abalone inlays as opposed to plastic ones) tends to have commensurately better workmanship — and is, therefore, a better guitar — than a model that uses inexpensive materials. In the following sections, we note some important guitar materials to consider.

Woods

As you may expect, the more expensive or rare a wood, the more expensive the guitar you construct from that wood. Guitar makers break woods down into categories, and each category has a bearing on the guitar's overall expense.



REMEMBER Following are the three criteria used for classifying wood:

Type: This category simply determines whether a piece of wood is mahogany, maple, or rosewood. Rosewood tends to be the most

- expensive wood used in the construction of acoustic-guitar bodies, followed by maple and then mahogany.
- **>> Style:** You can classify woods further by looking at the wood's region or grain style. For example, the figured maples, such as quilted and flame, are more expensive than rock or bird's-eye maples.
- **>> Grade:** Guitar makers use a grading system, from A to AAA (the highest), to evaluate woods based on grain, color, and consistency. High-quality guitars get the highest-grade wood.

Hardware

In more expensive instruments, you see upgrades on all components, including the *hardware*, or the metal parts of the guitar. Chrome-plated hardware is usually the cheapest, so if you begin looking at more expensive guitars, you start to see gold-plated and black-matte-finished knobs, switches, and tuning machines in place of chrome.



FEMEMBER The actual hardware the manufacturer uses — not just the finishes on it — changes, too, on more expensive instruments. High-quality, name-brand hardware often replaces the guitar maker's less prestigious, generic brand of hardware on high-end axes. For example, manufacturers may use a higher-grade product for the tuning machines on an upscale guitar — such as *locking Sperzels* (a popular third-party tuner type and brand), which lock the string in place as opposed to forcing the user to tie the string off at the post.

The bridge is an important upgrade area as well. The so-called *floating* bridge (so designated because you can move it up and down by means of the whammy bar) is a complicated affair of springs, fine-tuning knobs, and anchors. The better floating assemblies, such as the Floyd Rose system or systems manufactured under a Floyd Rose license, operate much more smoothly and reliably than do the simple three-spring varieties found on low-cost guitars. (The strings spring right back to

pitch on a Floyd Rose system, even after the most torturous whammy bar abuse.)

Pickups and electronics

Unless a guitar manufacturer is also known for making great pickups, you see more and more use of third-party pickups as you go up the quality ladder. In the electric arena, Seymour Duncan, DiMarzio, Bartolini, Bill Lawrence, Lace, and EMG are examples of high-quality pickup brands that guitar makers piggy-back onto their models. Fishman and L.R. Baggs are two popular acoustic pickup systems found on many well-known guitars.

Although they're not known by name brands, the electronics in electric guitars also improve along with the other components as you venture into more expensive territory. You can see a greater variety, for example, in pickup manipulation. Manufacturers can provide circuitry that changes double-coil, or humbucker, pickups into single-coils, enabling them to emulate the behavior of Stratlike pickups. Having one guitar that can imitate the pickup behavior of other guitar types provides you with a tonally versatile instrument. You also see more manipulation in wiring schemes. For example, guitar makers may reverse the *polarity* of a pickup — the direction the signal flows — to make the guitar sound softer and swirlier.

With more expensive guitars, you may also encounter improved volume and tone controls, resulting in better *taper*. Taper is the gradualness or abruptness of change (also called *response*) of a signal's characteristics (in this case, volume and tone) as you turn a knob from its minimum value to its maximum. A knob exhibiting a smoother taper is evidence of a higher grade of electronics. Really cheap guitars give you no sound at all until turned up to 3; then you get a swell of sound from about 4 to about 7 and no change at all between 7 and the knob's maximum value, 10 - 0, on those really rare, loud guitars, 11. (And if you don't get that last joke, watch the hilarious rockumentary spoof *This Is Spinal Tap*. It's required viewing for all guitarists.)

Workmanship

For more expensive guitars, you can really bring out the white glove and get fussy. We've seen prospective buyers bring in a dentist's mirror to inspect the interior of an acoustic guitar.

For acoustic guitars in the mid-priced to expensive range, you should expect to find *gapless joints* — solid wood-to-wood connections between components, especially where the neck meets the body. You should also expect clean and glob-free gluing (in the top and back bracing), a smooth and even finish application, and a good setup: the strings at the right height with no buzzing, the neck warp- and twist-free, and the intonation true.

Look at the places on a guitar where different surfaces meet — particularly where the neck joins the body and the edge of the fingerboard where the metal frets embed into the fret slots. You should see no trace of excess glue, and the surfaces should be uniformly mated to each other.

You can glean all this information by simply playing the guitar and noting your impressions. Like traveling in a Rolls-Royce or Bentley, playing a quality guitar should be one smooth ride.

Appointments (cosmetic extras)

Appointments are the fancy stuff that have no acoustic or structural effect on the guitar. They exist solely as decorative elements. Some people find fancy appointments showy or pretentious, but we feel that a great guitar is a work of art to behold with the eye as well as the ear. So go for the bling.

Typical appointments include intricate neck inlays (such as abalone figures countersunk into the fretboard), a fancy headstock design, and, on an acoustic guitar, the *rosette*, or decorative design around the sound hole.

One subtle aspect about appointments: You may think that the only difference between two guitars is in the appointments — for example, a fancy inlay job may seem to be the only thing that distinguishes between a certain company's Grand Deluxe and Deluxe models. But the truth is

that the more expensive guitar — although nominally the same in materials and construction — often gets the choicest materials and enjoys higher quality-control standards.

This situation is just a Darwinian reality. If 12 pieces of wood, all destined to become guitar tops, come into the factory, slated for six Grand Deluxes and six Deluxes (fictitious titles, by the way, bearing no resemblance to actual guitar models, living or deceased), the six best pieces of wood go to the Grand Deluxes and the six next-best pieces to the Deluxe models. They may all share identical grading, but humans with subjective powers decide which models get which tops.

Before You Buy: Walking through the Buying Process

Buying a guitar is similar to buying a car or house (okay, it's a *little* less monumental than buying a house) in that it's an exciting endeavor and lots of fun, but you must exercise caution and be a savvy customer, too. Only you know the right guitar for you, what the right price is for your budget and commitment level, and whether a deal feels right. Don't deny your natural instincts as a shopper, even if you're new to guitar shopping. Look, listen, consider, go have lunch before the big buy, and talk it over with your sweetie. We provide some helpful guidelines in the following sections.



REMEMBER Keep in mind that you're *shopping*. And the whole shopping experience is no different with guitars than with any other commodity. Do your research and get differing opinions *before* you buy. And trust your instincts.

Choosing between online and brick-andmortar sellers

With many purchases these days, you face the question, "Do I buy from a store or online?" For a musical instrument, a good rule is this: If you know *exactly* what you want — down to the color and options — you may consider buying an instrument online. You often get the best available price for your chosen instrument by going this route, and you may even avoid paying sales tax (if the music company is out of state), though you may pay shipping. (Some online sellers offer free shipping under certain conditions.) Most online sellers offer a money-back guarantee if you return the instrument quickly, for any reason, no questions asked. That's a hard deal to beat.



REMEMBER Buying sight unseen is common with many products, such as electronic gadgets and computers. But if you can't cotton to buying something as personal as a guitar without falling in love with it first — and you want to "date" your guitar before "marrying" it — you definitely want to stick with the traditional brick-and-mortar storefront approach. A guitar bought from a store usually comes with an official service agreement and unofficial, friendly cooperation from the staff that's worth its weight in gold. Music stores know they're competing with online sellers, and they make up for it in spades with service.

Seeking expert advice

A certain saying goes, "An expert is someone who knows more than you do." If you have such a friend — whose knowledge and experience in guitars exceeds your own — bring the friend along, by all means. This friend not only knows about guitars but also knows *you*. A salesperson doesn't know you, nor does he necessarily have your best interests in mind. But a friend does. And another opinion never hurts, if only to help you articulate your own.



Enlist your guitar teacher (if you have one) to help you navigate through the guitar buyer's jungle, especially if he's been with you awhile and knows your tastes and playing style. Your teacher may know things about you that you may not even realize about yourself — for example, that you've gotten sidetracked in the steel-string section although your principal interests lie in nylon-string guitar music. A good teacher asks questions, listens to your answers, and gently guides you to where *you* want to go.

Another saying, however, goes, "Moe was the smartest of the Three Stooges." If you have a friend who's like Moe — smarter than you in matters of the guitar but otherwise one string short of a set — leave him

at home. You don't need a wise guy goofing around (and tweaking the salesperson's nose with a pair of pliers) while you're trying to concentrate.

Involving the salesperson

Dealing with a salesperson doesn't need to be a stressful, adversarial affair, but some people get pretty anxious about the entire situation. Part of that reason is that music store personnel sometimes get a bad rap for being intimidating, aloof, or unknowledgeable (or a combination of all three qualities). But ignore the rumors and negative stereotypes. Bad apples can exist in any industry, but most salespeople in music stores genuinely try to get you the best instrument for your needs. But you can help your chances for a good experience if you establish your priorities before you enter the store, so that you don't come off as vague and unprepared if he asks you questions.

A typical first question from a salesperson may be, "How much do you want to spend?" In essence, the question means "What price range are you looking at so I know which end of the store to take you to?" It's a fair question, and if you can answer directly, you end up saving a lot of time. He may also ask about your playing ability and your style preferences, so be ready to answer those questions, too.



Be prepared to answer the salesperson's questions succinctly—for example, "I prefer Strat-style guitars, although not necessarily by Fender, and I'm an intermediate blues player — not a shredder — and I'd like to keep costs at less than \$600." Answers such as these make you sound decisive and thoughtful. The salesperson should have plenty to go on from that kind of information. But if you instead say, "Oh, for the right guitar, price is no object; I like the one that what's-his-name played on last year's Grammy Awards," you're not going to be taken seriously — nor are you likely to end up with the instrument you need.

As the salesperson speaks, listen carefully and ask questions. You're there to observe and absorb, not impress. If you decide you're not ready to buy at this point, tell him that. Thank him for his time and get his card. You're certainly free to go elsewhere and investigate another store. To do so is not only your option — it's also your duty!

Closing the deal



REMEMBER You can often find out the price of an instrument before you walk into the store. Visit the websites of popular online sellers (such as Guitar Center and Sweetwater) to determine the ballpark prices of the models you're interested in. As of this writing, a Gibson Les Paul Standard sells for between \$1,860 and \$2,600, on average, and a Fender American Standard Stratocaster costs about \$1,500. Figure 17-2 shows these two industry stalwarts.



Gibson Les Paul Fender Stratocaster

Photographs courtesy of Gibson Guitar Corp. and Fender Musical Instruments Corporation

FIGURE 17-2: Two standards by which players judge most of the electric guitars on the market.

Remember that the advertised selling price is often the lowest the seller can offer. If you're going to compare online prices to brick-and-mortar

prices, make sure your online prices are from reputable and established sellers, and be sympathetic to the slightly higher prices you may find in a store.



Finally, in deciding where to buy, don't neglect the value of service. Retail stores — unlike online sellers — are in a better position to devote close, personal service to a new guitar customer. Perhaps as a result of facing stiff competition from the booming online biz, many stores are upping their service incentives. Service includes anything from fixing minor problems and making adjustments to providing periodic *setups* (sort of like a tune-up and oil change for your guitar). And, a music store can be a great place to just hang out and talk guitars!

Chapter 18

Going to Bridge Boot Camp

IN THIS CHAPTER

Gathering what you need to play bridge
Taking a quick look at the basic points of the game
Building your bridge skills with available resources

You made a good choice, a very good choice, about learning to play bridge. Perhaps I'm biased, but bridge is the best card game ever. You can play bridge all over the world, and wherever you go, you can make new friends automatically by starting up a game of bridge. Bridge can be more than a game — it can be a common bond.

In this chapter, I talk about some basic concepts that you need to have under your belt to get started playing bridge. Consider this chapter your first step into the game. If you read this whole chapter, you'll graduate from Bridge Boot Camp. Sorry — you don't get a diploma. But you do get the thrill of knowing what you need to know to start playing bridge.

Starting a Game with the Right Stuff

Before you can begin to play bridge, you need to outfit yourself with some basic supplies. Actually, you may already have some of these items around the house, just begging for you to use them in your bridge game. What do you need? Here's your bottom-line list:

- **>>** Four warm bodies, including yours. Just find three friends who are interested in playing. Don't worry that no one knows what he's doing. Everyone begins knowing nothing; some of us even end up that way.
- **»** A table a square one is best. In a pinch, you can play on a blanket, on a bed, indoors, outdoors, or even on a computer if you can't find a game.
- » One deck of playing cards (remove the jokers).
- ➤ A pencil and a piece of paper to keep score on. You can use any old piece of paper — a legal pad, the back of a grocery list, or even an ancient piece of papyrus will do.



I've been playing bridge for a long time now, so here's a helpful hint from a veteran: Watching a real bridge game can help you better understand the mechanics of the game. That can make getting started with the game a little easier.

Ranking the Cards

A deck has 52 cards divided into four suits: spades (\spadesuit), hearts (\blacktriangledown), diamonds (\spadesuit), and clubs (\clubsuit).



REMEMBER Each suit has 13 cards: the AKQJ10 (which are called the *honor cards*) and the 98765432 (the *spot cards*).

The 13 cards in a suit all have a rank — that is, they have a pecking order. The ace is the highest-ranking card, followed by the king, the queen, the jack, and the 10, on down to the lowly 2 (also called the *deuce*).



The more high-ranking cards you have in your hand, the better. The more honor cards you have, the stronger your hand. You can never have too many honor cards.

Knowing Your Directions

In bridge, the players are nameless souls — they are known by directions. When you sit down at a table with three pals to play bridge, imagine that the table is a compass. You're sitting at due South, your partner sits across from you in the North seat, and your opponents sit East and West.



North. Just as in the opera, where the tenor always gets the girl, in a bridge diagram, you're represented as South — you are called the *declarer*, and you always get to play the hand. Your partner, North, is always the *dummy* (no slur intended!). Don't worry about what these terms mean just yet — the idea is that you play every hand from the South position. Keep in mind that in real life, South doesn't play every hand — just in this chapter, every newspaper column, and most bridge books!

<u>Figure 18-1</u> diagrams the playing table. Get acquainted with this diagram: You see some form of it throughout this chapter, not to mention in newspaper columns and magazines. For me, this diagram was a blessing in disguise — I never could get my directions straight until I started playing bridge.

North (Your Partner)

West East

South (You)

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FIGURE 18-1: You're South, your partner is North, and your opponents are East and West.

Playing the Game in Four Acts

First and foremost, bridge is a partnership game; you swim together and you sink together. Your opponents are in the same boat. In bridge, you don't score points individually — you score points as a team.



REMEMBER Each hand of bridge is divided into four acts, which occur in the same order:

Act 1. Dealing

Act 2. Bidding

Act 3. Playing

Act 4. Scoring

Act 1: Dealing

The game starts with each player seated facing his or her partner. The cards are shuffled and placed on the table face down. Each player selects a card, and whoever picks the highest card deals the first hand. The four cards on the table are returned to the deck, the deck is reshuffled, and the player to the dealer's right cuts the cards and returns them to the dealer. (After each hand, the deal rotates to the left so one person doesn't get stuck doing all the dealing.)

The cards are dealt one at a time, starting with the player to the dealer's left and moving in a clockwise rotation until each player has 13 cards.



Wait until the dealer distributes all the cards before you pick up your hand. That's bridge etiquette lesson number one. When each player has 13 cards, pick up and sort your hand using the following tips:

- >> You can sort the cards in any number of ways, but I recommend sorting your cards into the four suits.
- Alternate your black suits (clubs and spades) with your red suits (diamonds and hearts) so you don't confuse a black spade for a black club or a red diamond for a red heart. It's a bit disconcerting to think you're playing a heart, only to see a diamond come floating out of your hand.
- **»** Hold your cards back, way back, so only you can see them. Think vertically. Winning at bridge is difficult when your opponents can see your hand.

Act 2: Bidding for tricks

Bidding in bridge can be compared to an auction. The auctioneer tells you what the minimum bid is, and the first bid starts from that point or higher. Each successive bid must be higher than the last, until someone bids so high that everyone else wants out. When you want out of the bidding in bridge, you say "Pass." After three consecutive players say "Pass," the bidding is over. However, if you pass and someone else makes a bid, just as at an auction, you can reenter the bidding. If nobody makes an opening bid and all four players pass consecutively, the bidding is over, the hand is reshuffled and redealt, and a new auction begins.

In real-life auctions, people often bid for silly things, such as John F. Kennedy's golf clubs or Andy Warhol's cookie jars. In bridge, you bid for something really valuable — tricks. The whole game revolves around *tricks*.

Some of you may remember the card game of War from when you were a kid. (If you don't remember, just pretend that you do and follow along.) In War, two players divide the deck between them. Each player takes a turn placing a card face up on the table. The player with the higher card takes the *trick*.

In bridge, four people each place a card face up on the table, and the highest card in the suit that has been led takes the trick. The player who

takes the trick collects the four cards, puts them face down in a neat pile, and leads to the next trick. Because each player has 13 cards, 13 tricks are fought over and won or lost on each hand.



REMEMBER Think of bidding as an estimation of how many of those 13 tricks your side (or their side) thinks it can take. The bidding starts with the dealer and moves to his left in a clockwise rotation. Each player gets a chance to bid, and a player can either bid or pass when his turn rolls around. The least you can bid is for 7 tricks, and the maximum you can bid is for all 13. The bidding goes around and around the table, with each player either bidding or passing until three players in a row say "Pass."

The last bid (the one followed by three passes) is called the *final contract*. No, that's not something the mafia puts out on you. It's simply the number of tricks that the bidding team must take to score points.

Act 3: Playing the hand

After the bidding for tricks is over, the play begins. Either your team or the other team makes the final bid. Because you are the star of this book, assume that your team makes the final bid for nine tricks. Therefore, your goal is to win at least 9 of the 13 possible tricks.

If you take nine (or more) tricks, your team scores points. If you take fewer than nine tricks, you're penalized, and your opponents score points. In the following sections, I describe a few important aspects of playing a hand of bridge.

The opening lead and the dummy

After the bidding determines who the declarer is (the one who plays the hand), that person's partner becomes the dummy. The players to the declarer's left and right are considered the *defenders*. The West player (assuming that you're South) *leads*, or puts down the first card face up in the middle of the table. That first card is called the *opening lead*, and it can be any card of West's choosing.

When the opening lead lands on the table, the game really begins to roll. The next person to play is the dummy — but instead of playing a card, the dummy puts her 13 cards face up on the table in four neat vertical columns starting with the highest card, one column for each suit, and then bows out of the action entirely. After she puts down her cards (also called the *dummy*), she says and does nothing, leaving the other three people to play the rest of the hand. The dummy always puts down the dummy. What a game!

Because the dummy is no longer involved in the action, each time it's the dummy's turn to play, you, the declarer, must physically take a card from the dummy and put it in the middle of the table. In addition, you must play a card from your own hand when it's your turn.

The fact that the declarer gets stuck with playing both hands while the dummy is off munching on snacks may seem a bit unfair. But you do have an advantage over the defenders: You get to see your partner's cards before you play, which allows you to plan a strategy of how to win those nine tricks (or however many tricks you need to make the final contract).

Following suit

The opening lead determines which suit the other three players must play. Each of the players must *follow suit*, meaning that they must play a card in the suit that was led if they have one. For example, pretend that the opening lead from West is a heart. Down comes the dummy, and you (and everyone else at the table) can see the dummy's hearts as well as your own hearts. Because you must play the same suit that is led if you have a card in that suit, you have to play a heart, any heart that you want, from the dummy. You place the heart of your choice face up on the table and wait for your right-hand opponent (East, assuming that the dummy is North) to play a heart. After she plays a heart, you play a heart from your hand. Voilà: Four hearts now sit on the table. The first trick of the game! Whoever has played the highest heart takes the trick. One trick down and only 12 to go — you're on a roll!

What if a player doesn't have a card in the suit that has been led? Then, and only then, can a player choose a card, any card, from another suit

and play it. This move is called a *discard*. When you discard, you're literally throwing away a card from another suit. A discard can never win a trick.

In general, you discard worthless cards that can't take tricks, saving good-looking cards that may take tricks later. Sometimes, however, the bidding designates a *trump suit* (think wild cards). In that case, when a suit is led and you don't have it, you can either discard from another suit or take the trick by playing a card from the trump suit. For more info, see "<u>Understanding Notrump and Trump Play</u>" later in this chapter.



warning If you can follow suit, you must. If you have a card in the suit that's been led but you play a card in another suit by mistake, you *revoke*. Not good. If you're detected, penalties may be involved. Don't worry, though — everybody revokes once in a while. I once lost a National Championship by revoking on the last hand of the tournament.

Playing defense

Approximately 25 percent of the time, you'll be the declarer; 25 percent of the time, you'll be the dummy; and the remaining 50 percent of the time, you'll be on defense! You need to have a good idea of which card to lead to the first trick and how to continue after you see the dummy. You want to be able to take all the tricks your side has coming, trying to defeat the contract. For example, if your opponents bid for nine tricks, you need at least five tricks to defeat the contract. Think of taking five tricks as your goal. Remember, defenders can't see each other's hands, so they have to use signals (legal ones) to tell their partner what they have. They do this by making informative leads and discards that announce to the partner (and the declarer) what they have in the suit they are playing.

Winning and stacking tricks

The player who plays the highest card in the suit that has been led wins the trick. That player sweeps up the four cards and puts them in a neat

stack, face down, a little off to the side. The declarer "keeps house" for his team by stacking tricks into piles so everyone can see how many tricks that team has won. The defender (your opponent) who wins the first trick does the same for his or her side.



REMEMBER The player who takes the first trick *leads first*, or plays the first card, to the second trick. That person can lead any card in any suit desired, and the other three players must follow suit if they can.

The play continues until all 13 tricks have been played. After you play to the last trick, each team counts up the number of tricks it has won.

Act 4: Scoring, and then continuing

After the smoke clears and the tricks are counted, you know soon enough whether the declarer's team made its contract (that is, took at least the number of tricks they have contracted for). The score is then registered.

After the hand has been scored, the deal moves one player to the left. So if South dealt the first hand, West is now the dealer. Then North deals the next hand, then East, and then the deal reverts back to South.

Understanding Notrump and Trump Play

Have you ever played a card game that has wild cards? When you play with wild cards, playing a wild card automatically wins the trick for you. Sometimes wild cards can be jokers, deuces, or aces. It doesn't matter what the card is; if you have one, you know that you have a sure winner. In bridge, you have wild cards, too, called *trump cards*. However, in bridge, the trump cards are *really* wild, because they change from hand to hand, depending on the bidding.

The bidding determines whether a hand will be played with trump cards or in a *notrump contract* (a hand with no trump cards). If the final bid happens to end in some suit as opposed to notrump, that suit becomes the trump suit for the hand. For example, suppose that the final bid is 4 ± 1 . This bid determines that spades are trump (or wild) for the entire hand.

More contracts are played at notrump than in any of the four suits. When the final bid ends in notrump, the highest card played in the suit that has been led wins the trick.

Building Your Skills with Clubs, Tournaments, and the Internet

You know, you're not in this bridge thing alone. You'll find help around every corner. You won't believe how much is available for interested beginners.

- **» Bridge clubs:** Most bridge clubs offer beginning bridge lessons and/or supervised play. They also hold games that are restricted to novices, in addition to open games.
- **Tournaments:** Many tournaments offer free lectures for novice players as well as novice tournament events and supervised play. Watching experts (or anyone else) play is free.
- **The Internet:** After you get the knack, you can play bridge 24 hours a day online ... free! The Internet is also an excellent venue to watch people play and learn the mechanics and techniques of the game (both what to do and what not to do!).

SO WHAT'S THE FASCINATION WITH BRIDGE?

You may have met a few unfortunates who are totally hooked on playing bridge. They just can't get enough of it. Being a charter member of that club, I can offer a few words on why people can get so wrapped up in the game.

- One fascination is the bidding. Bidding involves a lot of partner-to-partner communication skills. Cleverly exchanging information between you and your partner in the special language of the game is a great challenge. Your opponents also pass information back and forth during the bidding, so figuring out what they're telling each other is another challenge. However, no secrets! They are entitled to know what your bids mean and vice versa. Bidding is such an art that some bridge books deal entirely with bidding.
- Another hook for the game is taking tricks. You get to root out all kinds of devious ways to take tricks, both as a declarer and as a defender.
- And don't forget the human element. Bridge is much more than a game of putting down and picking up cards. Emotions enter into the picture sooner or later, every emotion or personality trait that you see in life emerges at the bridge table.

Chapter 19

Going after the King: Check, Stalemate, and Checkmate

IN THIS CHAPTER

Attacking the king: Check

Recognizing when no one can win: Stalemate

Winning the game: Checkmate

The object of the game of chess is to checkmate your opponent's king. Simply attacking the king isn't enough — you have to attack him in such a way that he can't escape. If you achieve that result, my friend, you win the game — time for a victory lap (in private, of course — no need to be rude)!

You always want to deliver checkmate if at all possible. Unfortunately, your opponent is trying to checkmate you at the same time. Sometimes you have such an overwhelming advantage that your opponent's resistance is futile. But because not all games are the cut-and-dry win/lose sort, you need to be aware of a couple other situations that pertain to the end result. In this chapter, I distinguish the differences between check, checkmate, and stalemate.

Check 'Em Out: Attacking the Enemy King

To *give check* simply means that you're attacking the enemy king. In <u>Figure 19-1</u>, white has a king and queen to black's lone king. The black king is currently in check because the white queen has moved to the g-file (1. Qg6+) and is now attacking it.

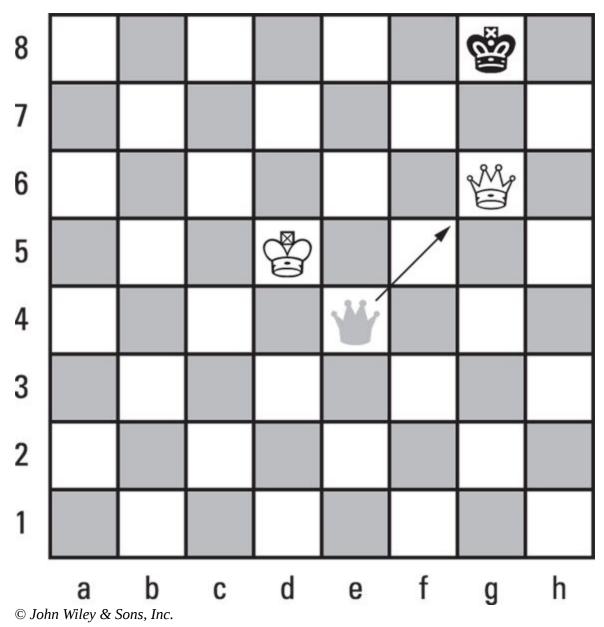


FIGURE 19-1: The white queen moves to a position to attack the black king. Check!



REMEMBER Because check is an attack on the king, the victim can't ignore it. If your opponent puts your king in check, you have three ways to respond:

- **»** Capture the attacking piece.
- **»** Move a piece between the checking piece and the king to block the attack.
- **»** Move your king out of check.

In the example shown in <u>Figure 19-1</u>, the black king's only option is to move out of check because black doesn't have any other pieces on the board. Here, the king can move to either f8 or h8.



WARNING One of the important things to remember when playing chess is to postpone immediate gratification. Sometimes, giving check (especially early on) can backfire. If your opponent escapes the check by blocking your attack, for example, you may be forced to retreat. Make certain that when you give check, it somehow helps your cause; to give check and then be forced to retreat is simply a waste of time. Experienced players give check only if it improves their position. For example, if the king has to move early in the game to escape a check, he loses the ability to castle. If you play a check that ruins your position, you may say, quite correctly, that your check bounced!



REMEMBER You may actually say "check" when you attack your opponent's king, but doing so isn't mandatory, and experienced players usually don't. If you do say "check," say it in a low voice so as not to disturb other players. Pumping your fist in the air and yelling,

"Check ... Yessssss!" is considered bad taste. (Under no circumstances is it correct to do a dance. Chess players try to keep their emotions under control at all times.)

NOT ALL CHECKS ARE CREATED EQUAL

The nastiest check short of checkmate is the *discovered check*. This type of check occurs when you move a piece out from between another of your pieces and the enemy king, and your second piece then gives check. That is, its check is suddenly "discovered" because the intervening piece is now gone, and the second piece now has a line of sight — and movement — to the opposing king. The piece you move to reveal the check can thus move anywhere and capture anything in its power with immunity, because the other side must respond to the check. If the piece you move also gives check, the combination is called *double check*. The enemy king is forced to move, because running like mad is the only way to ward off both attacks.

When you can keep checking the enemy king on every turn but can't checkmate it, you have *perpetual check*. Perpetual check results in a *draw*, because checkmate is impossible. The king can escape any individual check, and the king has no prospects of avoiding future, continuous checks, so neither side can win. This type of check can be a handy strategy if you're losing. (Getting a draw isn't such a bad thing if it takes the place of a loss!)

If your opponent is sure to lose but postpones defeat by giving a pointless check, the move is known as a *spite check*. Spite checks are considered an example of bad chess manners. Don't check out of spite!

Stuck in a Rut: Stalemate

Stalemate occurs when one side has no legal moves left to make and that person's king isn't in check. In chess you can't pass up your turn — you always have to move. However, if your opponent puts you in a situation where you can't make a move, the game is declared *drawn* due to stalemate. (If one side has no legal moves and *is* in check, you're in an entirely different situation — checkmate! See the next section.)



REMEMBER Keep in mind that moving your own king into check is illegal, which means any square attacked by an opponent's piece or pawn is off limits.



WARNING King and queen versus king is the easiest two-piece combination for accomplishing checkmate, but you must be sure to guard against delivering a stalemate. Because the queen can control so many squares, stalemating the opposing king by accident is quite easy! If, for example, it's black's move in Figure 19-2, the game is a stalemate. The black king isn't in check and has nowhere to go, because every square it could theoretically move to (e7, e8, f7, g7, or g8) is under attack by the white king or queen.

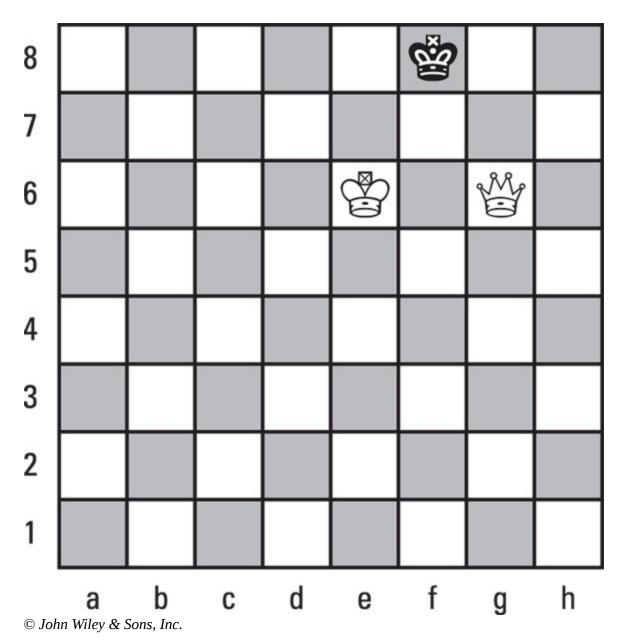


FIGURE 19-2: The white king and queen have delivered a stalemate.

No Escape for Ye King: Checkmate

Checkmate occurs when one king is in check and can't escape and therefore signals the end of the game. Checkmate can occur at any time, with any number of pieces on the board, but it's good to become proficient at delivering checkmate with as few pieces as possible.

Check out <u>Figure 19-3</u> to see an example of checkmate. The black king is initially placed in check when the white queen moves to f7 to attack him (1. Qf7). But the black king has no legal moves:

- >> He can't capture the queen because the white king is guarding her.
- **»** He has no other black piece to block the check.
- >> He can't move out of check to a square that isn't also under attack.

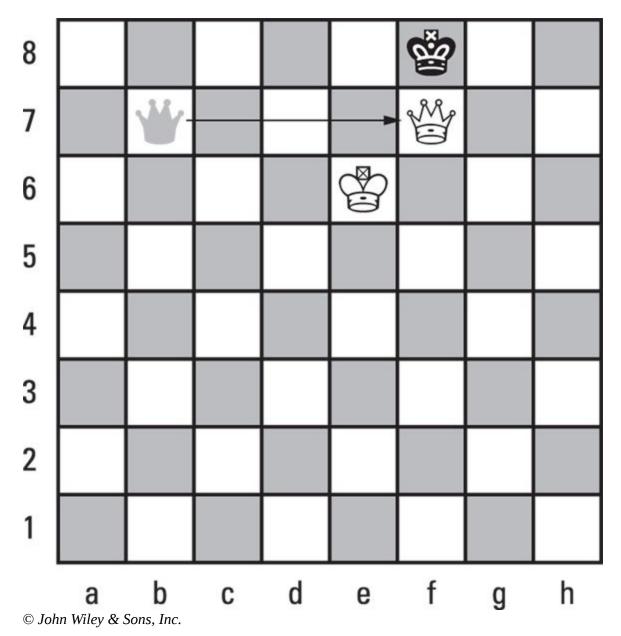


FIGURE 19-3: By moving to put the black king in check, the white queen accomplishes checkmate.

Therefore, black is checkmated, and white cries victory. Remember the old adage, "It is better to give checkmate than to receive it!"



(systematically reducing the number of squares to which the king has access). When you cut off squares, you use your own king and

whatever piece or pieces you have left to force your opponent's king to an edge of the board, where it's easiest to deliver checkmate. Kings can't check one another, so if the only pieces left are the two kings, the game ends in a draw.



REMEMBER Just as the king can't deliver checkmate on his own, no single piece can deliver checkmate without the help of the king. Other than the powerful queen, a lone piece can't even force the enemy king to the edge of the board where the king is most easily checkmated. You must advance your own king into a position where it can help drive back the enemy.

In the following sections, I describe a couple of techniques for delivering checkmate: using the king with the queen and using the king with the rook.

Cutting off squares with the king and the queen



REMEMBER Because the queen is the most powerful piece, a checkmate with king and queen against king is fairly easy to administer. The key to delivering checkmate with the queen is to drive the enemy king to any edge of the board and watch out for moves that may lead to stalemate (which I describe earlier in this chapter).

<u>Figure 19-4</u> sets the stage for an impending checkmate — check out the starting positions of the black king and the white king and queen. The black king is on d5, the white king is on g8, and the white queen is on g6.

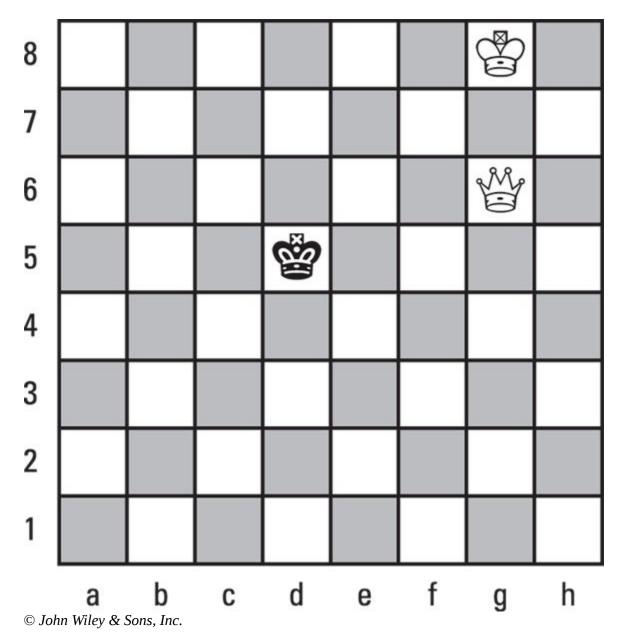


FIGURE 19-4: The end of the game is nigh, and white is determined to declare checkmate.

White cuts off squares by moving the queen to the left one square to f6 (1. Qf6), as shown in <u>Figure 19-5a</u>. (The squares that are now cut off from the black king are marked with Xs.) The black king has only three squares from which to choose — c4, c5, and e4 — so he retreats to e4 (1.... Ke4); see <u>Figure 19-5b</u>.

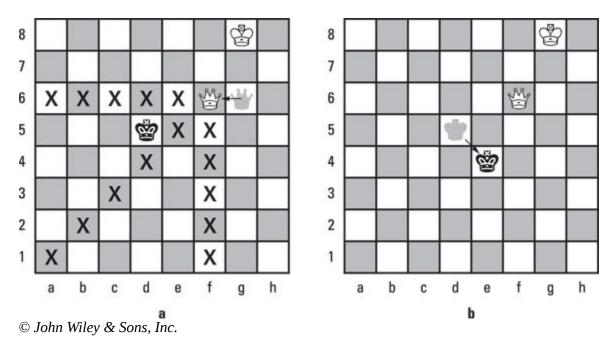
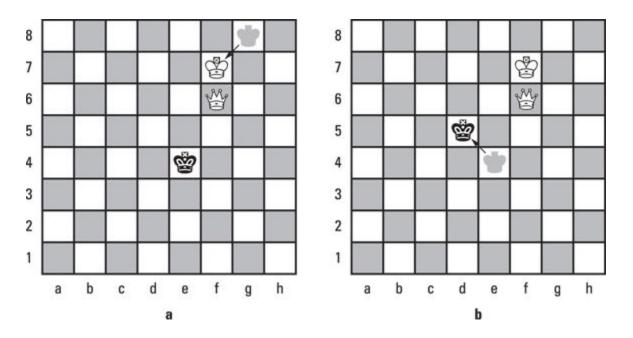


FIGURE 19-5: The white queen cramps the black king's space, and the black king moves.

To support his queen, the white king advances to f7 (2. Kf7); see <u>Figure 19-6a</u>. Even the mighty queen can't deliver checkmate without the help of the king — she'd spend all day in a never-ending game of cat and mouse. The black king will try to stay in the center of the board for as long as possible, because he knows that the edges of the board are danger zones. The king moves back to d5 (2.... Kd5), as <u>Figure 19-6b</u> shows.



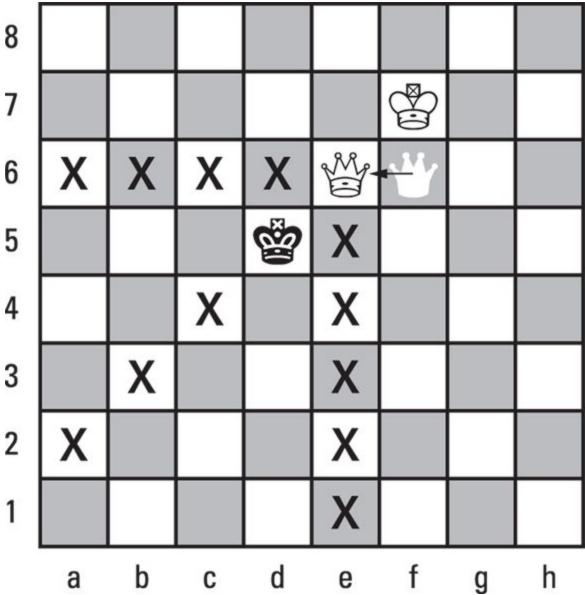
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FIGURE 19-6: The white king gets in on the action, and the black king refuses to back down.



REMEMBER Keep in mind that the best defense against checkmate is to stay as far away from the edges of the board as possible.

By moving even closer to the black king (3. Qe6+), the white queen can cut off even more squares, as shown in <u>Figure 19-7</u>. (The Xs in <u>Figure 19-7</u> show the squares that are cut off.) The queen is checking the black king in this figure (I discuss checking earlier in this chapter), but the real objective is to cut off more squares.



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FIGURE 19-7: When the white queen attacks, the black king has only two squares to which he can move.

By comparing the setup shown in <u>Figure 19-7</u> to the one in <u>Figure 19-4</u>, you can see how white is shrinking the number of squares available to black's king.

» In <u>Figure 19-4</u>, the sides of the greater square within which black resides are a1 to a6, a6 to g6, g6 to g1, and g1 back to a1.

» In <u>Figure 19-7</u> the square is smaller, and the sides are a1 to a6, a6 to e6, e6 to e1, and e1 to a1.



warning Chess players sometimes call this sequence *shrinking the square*. If you cut off too many squares, however, you run the risk of giving stalemate — so be careful and make sure that if the king isn't in check, he has at least one square to which he can move.

As black has no other choice in <u>Figure 19-7</u> but to move away from the queen to one of the open squares, white can continue to cut off squares by chasing after the black king until he's forced to the edge of the board. By then bringing the king to his queen's side for support, white secures an inevitable checkmate, as shown in <u>Figure 19-8a</u>.

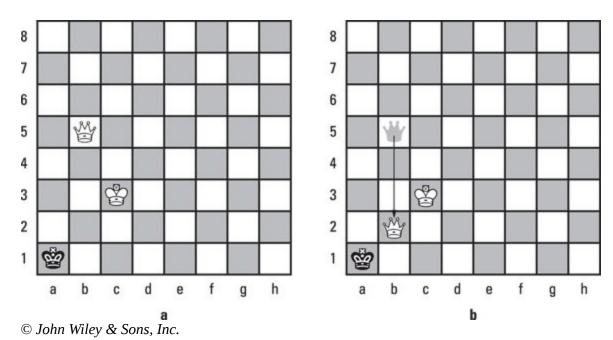


FIGURE 19-8: The black king finds himself backed into a corner and succumbs to checkmate.



Notice that the safest way to avoid stalemate is to force the opposing king to the edge of the board, use your queen to keep it

trapped there, and then advance your king. Keep the queen at a safe distance from the opposing king, let your king stroll up to lend support, and then deliver checkmate with the queen, as shown in <u>Figure 19-8b</u>.

Checkmating with the king and the rook

Achieving checkmate with the king and rook follows the same general principle as that of using the king and queen (described in the preceding section); however, this method takes longer to achieve because the rook isn't as powerful as the queen. Although the steps are long and tedious, they're essential to know if you want to be able to checkmate your opponent; the figures throughout this section demonstrate how to force the opposing king to the side of the board by using your rook and king.



REMEMBER The king and rook must be used in tandem in order to force the enemy king away from the center and toward an edge of the board. You use the edge of a board the way a cornerback uses the out-of-bounds line in football to help defend against a wide receiver.

Step 1: Advance the king to help cut off squares

With the rook cutting off squares, the first step of this type of checkmate is to advance the king to help cut off more squares. With the white king at his back, the white rook in <u>Figure 19-9a</u> is cutting off squares from the black king. (In this position, the white king is supporting the rook so that black can't capture it.) The black king is forced to retreat, in this case to c5 (1.... Kc5); see <u>Figure 19-9b</u>.

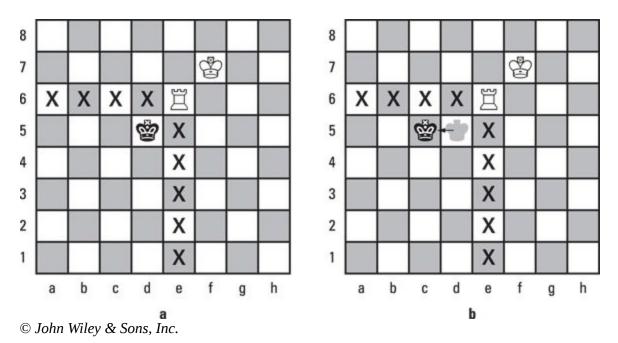


FIGURE 19-9: The white rook limits black's choices, so black responds accordingly.

The white king advances to f6 (2. Kf6) in preparation to help cut off more squares, as shown in <u>Figure 19-10a</u>. The black king moves back to his original post in the center of the board (2.... Kd5), trying to stay as far away from the edge as possible (see <u>Figure 19-10b</u>).

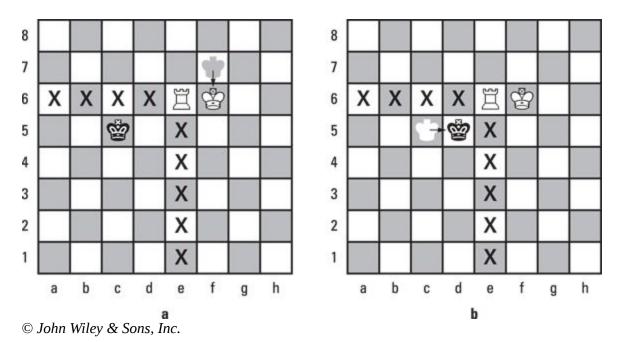


FIGURE 19-10: The white king prepares to cut off squares, and black steps back from the edge.

The white king advances again, this time to f5 (3. Kf5); see <u>Figure 19-11a</u>, and the black king is once again forced to retreat, again to c5 (3.... Kc5); see <u>Figure 19-11b</u>. (Black could have moved to d4, of course, but the principle of cutting off squares remains the same.)

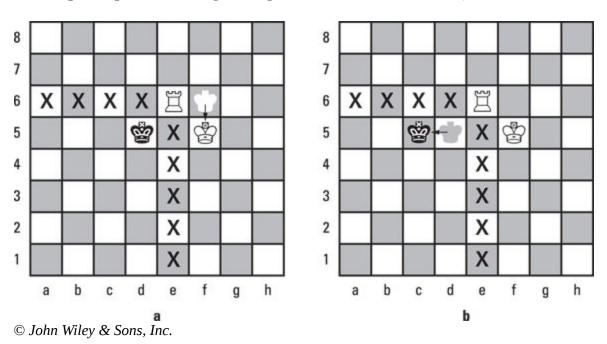


FIGURE 19-11: White inches toward black, increasing pressure.

In <u>Figure 19-12a</u>, notice how the white king has moved to e4 (4. Ke4) and is now cutting off squares d3, d4, and d5. An important part of this strategy is to advance the king off to the enemy king's side, not in front of it. The reason for this course of action becomes clear in the next step, which I detail in the following section. The black king responds by moving to c4 (4.... Kc4), trying to stay as far away from the edge of the board as the white pieces allow (see <u>Figure 19-12b</u>). Now, however, the white king has advanced far enough to move onto phase two of the operation.

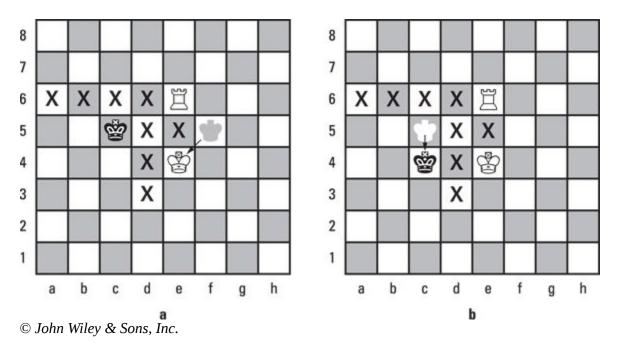


FIGURE 19-12: The white king gets in on the attack.

Step 2: Force the enemy king toward the edge

In phase two of the checkmating operation, the white rook and king combine forces to drive the black king closer to the edge of the board. The rook checks the black king by moving to the c-file (5. Rc6+), as <u>Figure 19-13a</u> shows, forcing black to move closer to the edge. The black king moves to b5 (5.... Kb5), which is closer to the edge, but in turn he attacks the undefended rook — see <u>Figure 19-13b</u>.

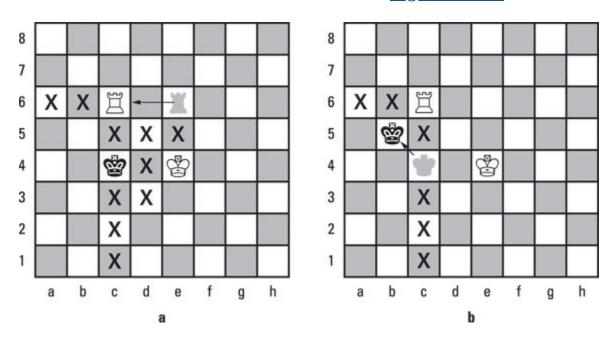


FIGURE 19-13: White checks black and forces him near the edge, but black retaliates.

The white king advances to d5 (6. Kd5) in order to defend the attacked rook and continue to help cut off squares, as shown in <u>Figure 19-14a</u>. As a result, the black king is forced yet again to give ground. To maintain a little space from the edge, black moves straight down to b4 (6.... Kb4); see <u>Figure 19-14b</u>.

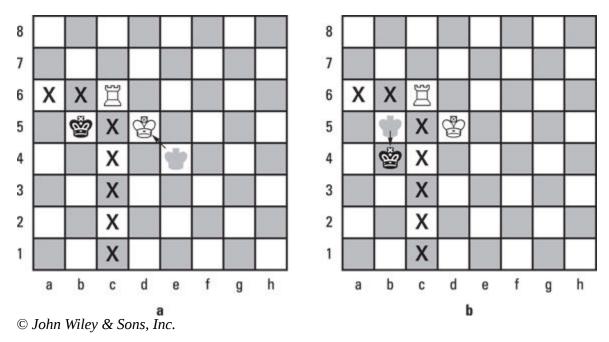


FIGURE 19-14: The white king comes to the rescue, and black has to back off.

Step 3: Cut off more squares

Now that white has accomplished the preliminary objective of forcing the black king to retreat toward the edge of the board, white must return to the idea of cutting off squares in order to drive the enemy king farther back. In <u>Figure 19-15a</u>, white advances the rook to c5 (7. Rc5) in order to cut off more squares. In <u>Figure 19-15b</u>, the black king retreats to b3 (7.... Kb3), continuing to stay away from the edge of the board.

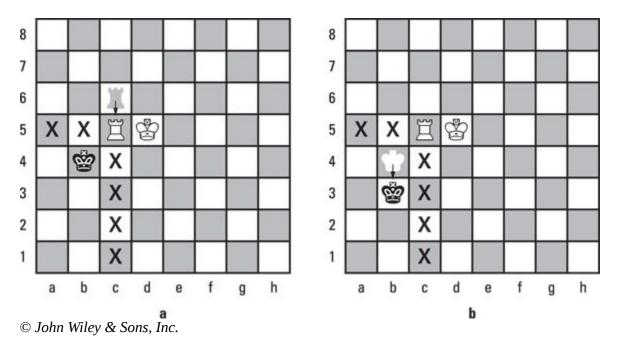


FIGURE 19-15: White continues to cut off squares, and black continues to stay away from the edge.

Next, white uses the rook once more to cut off additional squares by moving it to c4 (8. Rc4), as shown in <u>Figure 19-16a</u>. The black king again retreats down the b-file (8.... Kb2); see <u>Figure 19-16b</u>. See a pattern yet? Notice how the white rook is cutting off the black king's access to all the squares except for the three in the lower-left corner.

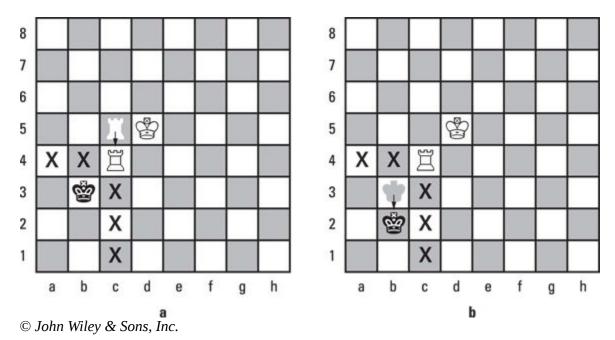


FIGURE 19-16: The pursuit and retreat continue.

Step 4: Advance the king and cut off even more squares

Now that additional squares are cut off, white returns to the theme of advancing the king, alternating between the two themes of advancing and cutting off squares. This step is simple: You cut off squares when you can and advance the king when you can't.

In <u>Figure 19-17a</u>, the white king advances to d4 (9. Kd4) so he can stand beside the rook. This approach demonstrates why it takes so long to actually achieve the checkmate. The process itself is fairly simple; the aggressor makes the same kind of moves over and over again, but because the king is needed to force a checkmate (and the king moves only one square at a time) and because the rook is less powerful than the queen, it takes quite a number of moves in order to execute the plan. In <u>Figure 19-17b</u>, black moves the king to b3 (9.... Kb3) to attack the rook. However, because the white king is protecting the rook, the attack is meaningless. Still, black has nothing better to do — white is guiding him through a slow and painful death.

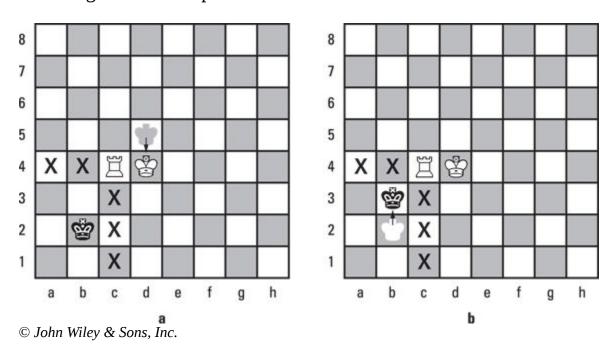


FIGURE 19-17: The white king inches his way to the future crime scene, and black scrambles.

In <u>Figure 19-18a</u>, the white king continues to advance toward the lower-left corner by moving to d3 (10. Kd3). In Figure 19-18b, the black king

is forced to retreat as usual. He moves to the only other square away from the edge, b2 (10.... Kb2).

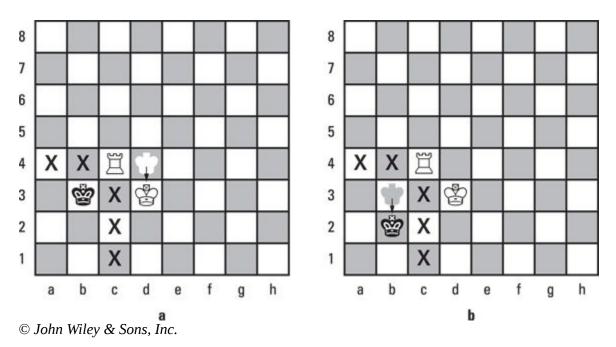


FIGURE 19-18: The saga continues: The white king advances, and black shies away.

In <u>Figure 19-19a</u>, white returns to the theme of using the rook to cut off squares by moving to c3 (11. Rc3), finally forcing the black king to the edge of the board (11.... Kb1); see <u>Figure 19-19b</u>.

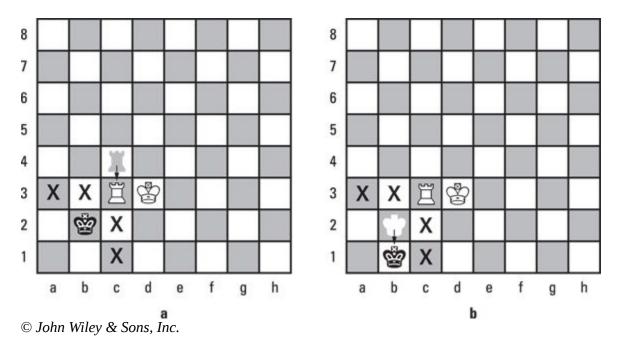


FIGURE 19-19: The rook takes his turn at cutting off squares, backing the black king against the wall.

By advancing the rook to c2 (12. Rc2), white traps the black king on the edge of the board (see <u>Figure 19-20a</u>). The process of cutting off squares is complete, and white can now take the final steps toward delivering checkmate. All black can do is shuffle back and forth in the lower-left corner (12.... Ka1); see <u>Figure 19-20b</u>.

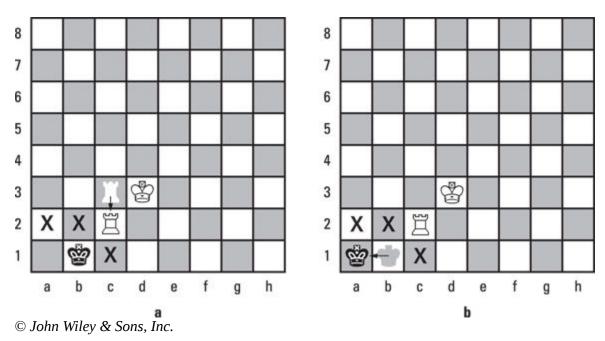


FIGURE 19-20: The white rook cramps the black king's space.

Step 5: Deliver checkmate!

To deliver checkmate, white simply needs to move the king into the proper position to relieve the rook of the task of cutting off squares along the second rank. To head for that goal, the white king marches to c3 (13. Kc3), as shown in <u>Figure 19-21a</u>. Black still has no choice but to shuffle back and forth, so he scoots to b1 (13.... Kb1); see <u>Figure 19-21b</u>.

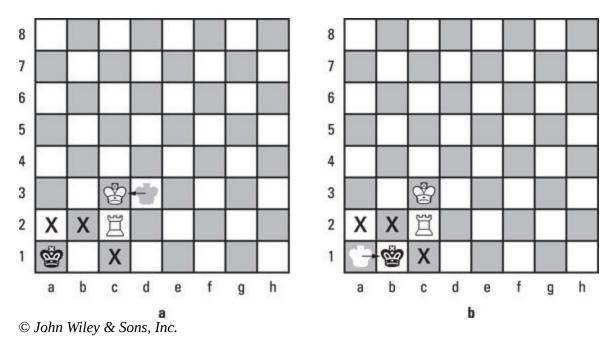


FIGURE 19-21: The white king approaches his final destination, and black bides his time.

White continues the march of the king in <u>Figure 19-22a</u> by moving to b3 (14. Kb3), but the black king can only move back into the corner (14.... Ka1) and await his fate (see <u>Figure 19-22b</u>).

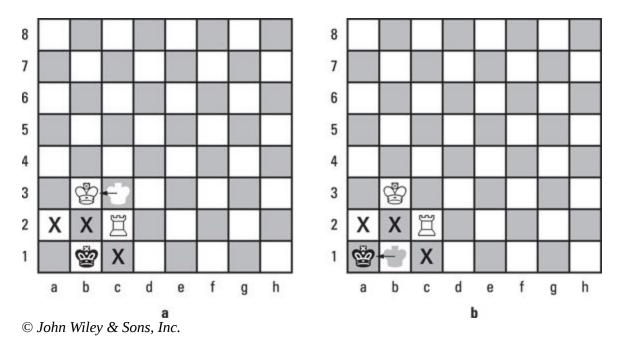
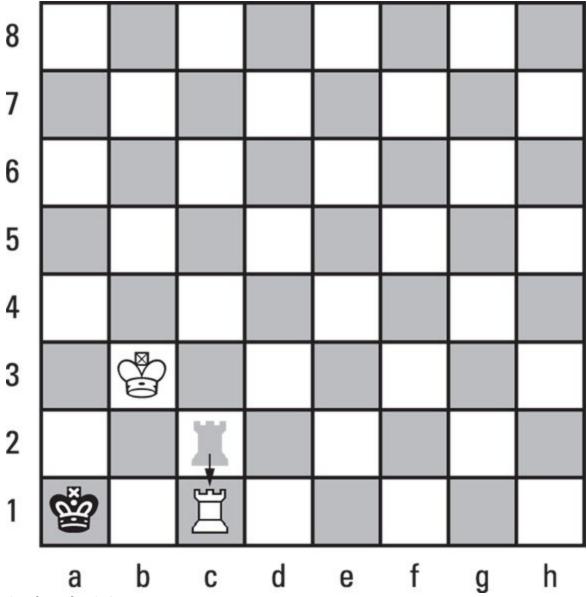


FIGURE 19-22: The white king gets to the opportune position, and black makes his only move.

The time has come to deliver checkmate — finally! The rook moves to c1 (15. Rc1#), and black can't move anywhere without being captured

(see <u>Figure 19-23</u>).



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FIGURE 19-23: Time for a victory lap: White seals checkmate.



REMEMBER Keep in mind that the preceding series of moves is much easier to play than to explain. But you must practice this elementary rookand-king checkmate until you understand it entirely.

Chapter 20

Ten Fixes for Common Photo Flaws

IN THIS CHAPTER

Adjusting under- or overexposed photos

Achieving sharper focus

Removing or diminishing visual distractions

Dealing with lens distortion and tilting horizon lines

Trimming away extra background material

Coping with image noise

Eliminating unwanted color tints

Checking your photos for halos

When you return from a photo outing, don't be discouraged if you like only a handful of images out of the dozens of frames you shot. First, understand that a 100 percent good-to-garbage ratio is unrealistic, especially when you're photographing kids, wildlife, or other unpredictable subjects. Second, most photo-editing programs offer tools you can use to eliminate certain photo flaws — your camera may even have some of those tools built in. This chapter offers help on both counts, providing tips to help you avoid the most common picture problems and explaining how to apply a few basic retouching tools to cover up mistakes after the fact.

Correcting Exposure Problems

When you photograph a subject that's set against a very bright background, you may get a result similar to the one shown on the left in <u>Figure 20-1</u>, where the background looks fine but the subject is underexposed. On the flip side, if the background is much darker than the subject, the subject may be overexposed.





FIGURE 20-1: For a brighter picture, raise the Exposure Compensation value.

Here are two solutions that are available on most cameras and are easy to implement:

Apply Exposure Compensation for an all-over exposure change. This feature tells the camera's autoexposure system that you want a brighter or darker result on your next shot. Look for a button,

menu option, or touchscreen icon that looks like the plus/minus sign in the margin — it's the universal symbol for Exposure Compensation. The default setting is EV 0.0, which applies no adjustment. (EV stands for *exposure value*.) Raise the value for a brighter exposure. I set the value to EV +1.3 to brighten the foreground buildings for the second shot in the figure. Lower the value for a darker exposure.

The drawback to using this feature is that you can't limit the exposure change to only part of the frame. When you apply positive Exposure Compensation in a landscape, the skies may go from a lovely blue to a very pale blue, as in the figure. Some cameras have special shooting modes designed to work around this problem, such as automatic HDR (high dynamic range) mode, which merges multiple frames in a way that brings too-dark subjects out of the shadows without destroying highlight details. But if your camera doesn't provide such features, don't worry about it. If your subject is well-exposed, that's the best you can do.

» To brighten only your subject, try adding flash. Check the camera manual for details on how to enable flash in bright light; by default, most cameras are set to fire the flash only in dim lighting. Keep in mind that a built-in flash has a pretty limited range — usually about 10 to 15 feet from the camera. A flash will do you no good when shooting a scene like the one in the figure, because the buildings are too far away.

Fixing Focus Flubs

A blurry photograph can be caused by several different problems, each of which requires a different solution. Here's a quick recap (or introduction, depending on the order in which you're reading this book):

- **» Mount the camera on a tripod to avoid all-over blurring.** An image that's blurry throughout the whole frame is due to *camera shake* (movement of the camera during the time the picture is being exposed). If you don't have a tripod handy, try raising the shutter speed. A shorter exposure time increases the odds of a shake-free handheld shot because you don't have to hold the camera still as long. Also enable image stabilization, if your camera or lens offers that feature, which is designed to compensate for a little camera shake.
- **»** When using autofocusing, specify which part of the frame you want the camera to consider when it sets the focusing distance. Otherwise, most cameras focus on the object closest to the lens.
- work a fast shutter speed and continuous autofocusing to capture moving subjects without blur. How high you need to raise the shutter speed depends on how fast your subject is moving, so experiment to find the right setting. (If you can't control shutter speed on your camera, see whether it offers a Sports scene mode, which is designed to use the fastest shutter speed possible.)

 Continuous autofocusing tracks moving subjects and adjusts focus as necessary until you take the shot. Check your camera's user manual for help with this option; the specifics on putting it to work vary, depending on the camera.
- **» To make a slightly soft picture look a little more in focus, apply a** *sharpening filter* **in your photo editor.** This tool creates the illusion of sharper focus by increasing contrast along picture *edges* that is, the boundaries between light and dark objects. <u>Figure 20-2</u> shows before-and-after examples of this adjustment.

Some photo-editing programs also have a Clarity filter, which applies the contrast increase only to *midtones* (areas of medium brightness). With either filter, don't go too far or else you'll give the picture a rough texture.

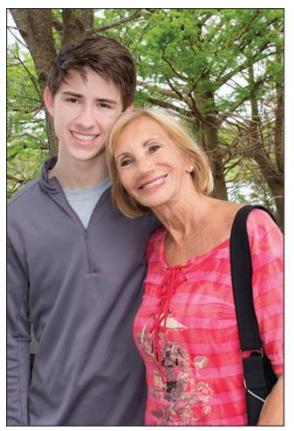




FIGURE 20-2: A slightly soft image (left) can be improved by applying a sharpening filter in your photo editor (right).

Eliminating Distractions

At first glance, the left photo in <u>Figure 20-3</u> looks like a winner. The exposure is fine, focus is sharp, and my subjects appear happy and relaxed. But on closer inspection, the astute portrait photographer notices two problematic issues: A tree appears to be growing out of the head of the male subject; and the black bag on the woman's shoulder draws the eye away from her face.



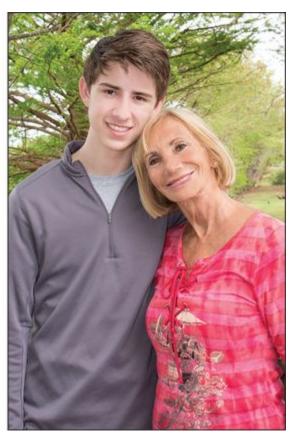


FIGURE 20-3: The tree directly behind the head of my male subject, along with the bag on the woman's shoulder, marred the left portrait; eliminating those distractions produced the better image on the right.

In this case, the fix was easy. Before taking the second shot, I asked my friend to put down her bag, and then I moved the pair a few feet to the right of the tree. Sometimes, though, you need to work a little harder to eliminate distracting elements. Look for a camera angle that doesn't include nearby objects, for example. Another option is to shoot with a telephoto lens, which includes less background than a wide-angle lens.

Sometimes, the element that distracts from your subject is not an object per se, but rather the intensity of its color. Such was the case for a color portrait of my nephew and his daughter, taken by my niece-in-law and shown in <u>Figure 20-4</u>. My nephew's bright red shirt draws the eye first, leading attention away from the eyes and smiles of father and baby. Converting the image to black-and-white removes that scene-stealer and makes the faces more prominent, as shown in <u>Figure 20-5</u>.



Courtesy of Mandy Holmes

FIGURE 20-4: In this image, the bright red shirt draws the eye first, spoiling an otherwise gorgeous portrait of father and daughter.



Courtesy of Mandy Holmes

FIGURE 20-5: A black-and-white rendition of the portrait restores emphasis to the subjects' eyes and smiles.



REMEMBER Even if you want the final image to be in black-and-white, shooting it in full color is a good idea. The black-and-white shooting modes found on most cameras tend to produce flat, low-contrast images, and you often can get better results by doing your color to black-and-white conversions in a photo editor that enables you to control which areas are emphasized in the black-and-white version.

Softening the Impact of a Busy Background

If you can't eliminate intrusive background objects, you can diminish their impact by using settings that throw the background out of focus — or, in photo terms, settings that produce a *shallow depth of field*. This tactic works because the eye is drawn more strongly to objects that are in focus than to those that are blurry.

The scene shown in Figure 20-6 offers an example. I wanted to photograph the paella pan because I thought the dish so colorful and interesting that it deserved at least a few frames. But with other dinner guests eager to dig in, I didn't have time to completely arrange the background objects to my liking. So, I used the shallowest possible depth of field to blur everything except the pan and its contents. The bread bowl and other dishes add some interest to the background, but because they're blurry, they don't compete with the star of the show.



FIGURE 20-6: A shallow depth of field blurs background objects, making them less visually intrusive.

You can reduce depth of field in one of three ways:

- **Select a lower f-stop (aperture) setting.** For example, an aperture setting of f/4 blurs the background more than f/11. If your camera doesn't offer control over aperture, find out whether it provides Portrait mode; that mode automatically chooses a low f-stop value.
- **»** Use a longer focal-length lens. A lens with a focal length of 100mm delivers a shallower depth of field than, say, a 50mm lens. So, if your camera offers a zoom lens, zoom to the longest focal length to achieve the shortest possible depth of field. If you don't have a zoom lens or an interchangeable lens camera, this method of manipulating depth of field is obviously not an option.
- **>> Get closer to your subject.** As you decrease the distance between the subject and the lens, depth of field is reduced. But note that every lens has a close-focusing limit; if you get too close, the camera can't focus.

Also remember that the farther you place your subject from the background, the more background blurring you can achieve when putting any of these three strategies to work.

Getting Rid of Lens Distortion

When you photograph buildings and other tall structures, you may discover that vertical structures appear to lean inward or outward from the left and right edges of the frame. You also may notice that structures seem to be leaning toward or falling away from the camera. The left image in Figure 20-7 offers an illustration. The fault here lies not with the photographer, but with the lens. With the exception of very expensive lenses designed for architectural photography, most lenses produce this type of result.





Courtesy of Kristen E. Holmes

FIGURE 20-7: If your architectural shots display distortion (left), you can straighten things out using a photo editor or in-camera tool.

In addition, some lenses create *barrel* distortion, which makes the object at the center of the frame appear larger and closer to the lens than it really is — imagine a face wrapped around the front of a barrel, and you get the idea. The opposite problem, known as *pincushion distortion*, pinches everything toward the center of the frame so that your subject appears smaller and farther from the lens.

When you shop for a new lens, read reviews carefully to find the lens that produces the least amount of distortion in your price range. (Less distortion usually means a higher-priced lens.) In the meantime, try these two inexpensive (and maybe even free) solutions to correct distortion:

» Check your camera's menus to find out whether you can enable automatic distortion correction. Usually, this feature is found only

on intermediate and advanced cameras and works best with the camera manufacturer's own lenses.

Eigure 20-8 shows the process of using the tools found in Adobe Photoshop Lightroom, for example. Understand, though, that these tools work their magic by distorting the original image, tugging the corners this way and that to get structures into proper alignment. The result is a nonrectangular image, with some pixels shifted outside the boundaries of the frame and some pushed toward the middle of the frame, leaving the edges empty, as in the figure. After you correct the distortion, you can crop the photo to eliminate those empty white borders. For an alternative, you may be able to *scale* the image (enlarge it) so that the new arrangement of pixels fills the frame.

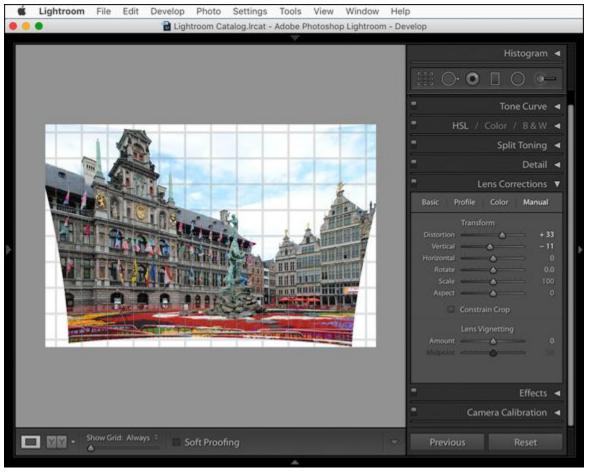


FIGURE 20-8: Adobe Photoshop Lightroom is one program that enables you to improve a photo that suffers from lens distortion.



warning Both solutions result in the loss of some original image area, although the in-camera lens-distortion filters rarely result in as drastic a change as what you see in Figure 20-8. When shooting this type of image, always include a large margin of background all around the edges of the frame. That way, when you do the distortion correction, critical parts of the subject don't get lost in the process.

Straightening a Tilting Horizon

For reasons I have given up trying to understand, I can never seem to keep my camera level when handholding shots like the one in <u>Figure 20-9</u>. In this case, the horizon line tilts noticeably downward to the right.



FIGURE 20-9: Either the ocean is sliding off the edge of the earth or I didn't hold the camera level when shooting the picture.

A fail-safe solution is to mount the camera on a tripod that has a built-in level. But here are two other options:

- **»** Enable a viewfinder or monitor alignment grid, if available on your camera. For example, <u>Figure 20-10</u> offers a look at a viewfinder grid. Check your camera manual to find out whether you have this feature and, if so, how to enable it.
- **» Apply a straighten tool in your photo-editing program.** Even most free programs offer this type of tool. In Windows Live Photo Gallery, shown in <u>Figure 20-11</u>, you simply click the Straighten button, for example, and the program automatically rotates the

horizon to a level position. In other programs, you drag the mouse across a line that should be horizontal (or vertical), and the software rotates the image as needed based on that input.

Q

Cameras that have built-in retouching tools sometimes offer a leveling tool as well. The adjustment is made to *a copy* of the original image so that the original is still available if you don't like the result of the correction.

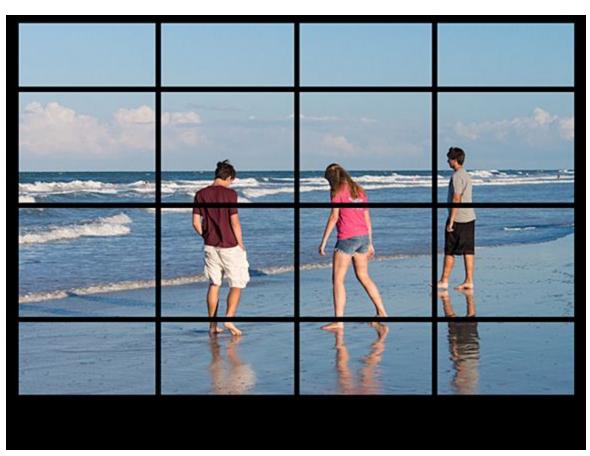


FIGURE 20-10: Some cameras enable you to display a grid in the viewfinder to help you frame your scene so that the horizon line is level.

Straighten tool



FIGURE 20-11: Windows Live Photo Gallery offers a one-click straightening tool.

<u>Figure 20-12</u> shows the corrected seaside scene. Notice that the resulting image contains slightly less image area than the original, which is a necessary outcome of the leveling process, as it is with the distortion corrections described in the preceding section. So again, framing the image a little loosely is a good idea when taking a shot in which the horizon line is prominent.



FIGURE 20-12: The straightened image contains slightly less image area than the original, which is an unavoidable result of the correction.

Cropping Away Excess Background

To *crop* an image simply means to trim away some of the perimeter of the photo. You may find cropping necessary when you can't get close enough to your subject to fill the frame, for example, or to produce a image that fits a particular frame size.

Some cameras have built-in tools that make a cropped copy of the original photo so that the original is left intact. If your camera doesn't have a crop tool, any photo editor should offer one. You can even find crop tools in most photo apps for phones and tablets. <u>Figure 20-13</u>, for example, shows the crop tool found in Photos, the photo-editing tool found on some iPhones, iPads, and other Mac devices. (Devices running older versions of the Mac operating system instead offer iPhoto, which also has a crop tool.)



FIGURE 20-13: After selecting the crop tool, adjust the boundaries of the crop box to control how much background to eliminate.

Notice the crop tool symbol labeled in the figure; this shape has become the standard crop-tool icon. It's designed to look like the mechanical

cropping tools used in film-printing darkrooms, in case you're wondering.

In the digital world, all crop tools operate pretty much the same way: Either the software displays an initial cropping frame, as shown in Figure 20-13, or you drag from one side of the image to the other to create the frame. You then can drag the edges or corners of the frame to adjust the size of the box. You may be able to limit the frame to a particular aspect ratio $(4 \times 6, 5 \times 7, \text{ square, and so on})$. When you execute the crop, all the areas outside the box are clipped away.



warning If you're using an app or a photo editor, save the cropped version of the photo under a new name, to avoid overwriting the original. If the photo also needs correction of lens distortion or a tilting horizon line, make those changes *before* you crop. You want to have all the original pixels available to make both corrections because they result in the loss of some image area.

Quieting Noise

Noise is a digital defect that has the appearance of small grains of sand, as shown in <u>Figure 20-14</u>. Noise can occur for two reasons: a high ISO (light sensitivity) setting and a long exposure time (slow shutter speed).

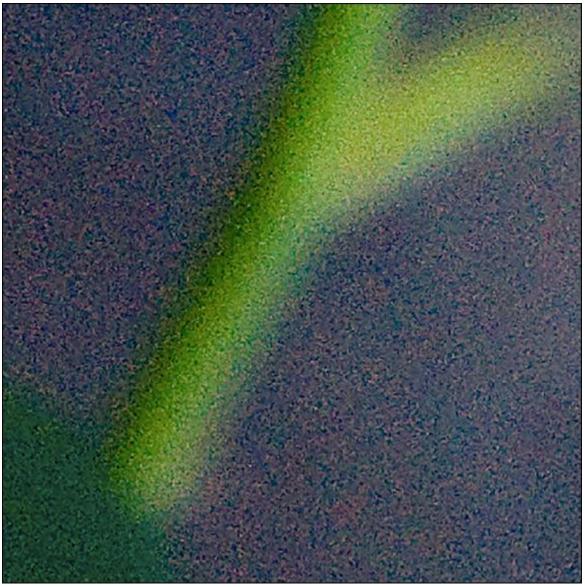


FIGURE 20-14: Here's a look at image noise, which can be caused by a high ISO setting, long exposure time, or both.

To lessen the chances of noise, then, shoot with the lowest ISO setting and the fastest shutter speed that enable you to expose the picture given the lighting conditions and the aperture (f-stop setting) you want to use. Of course, sometimes you need a long exposure in order to create motion blur effects — for example, to make the water in a waterfall appear misty.

If you notice a problematic level of noise in your pictures, find out whether your camera offers built-in noise removal filters. Most intermediate and advanced cameras offer one filter aimed at softening the type of noise attributed to a high ISO setting and another geared to reducing long-exposure noise. You also can find noise-reducing filters in many photo-editing programs.

Be aware, too, that with some new cameras designed to provide noise-free, high ISO shooting — an awesome development for photographers who need to shoot in dimly lit environments — noise actually occurs more at the low end of the ISO scale. If you're in the market for a camera that specializes in low-light photography, read reviews to find out how it performs at both high and low ISO settings.

Solving Color Miscues

When image colors are off base, the most common cause is an incorrect White Balance setting. If your camera is set to the Auto White Balance (AWB) setting, try changing to one of the other options. You usually can choose from a variety of settings that are geared to specific light sources — incandescent, sunlight, cloudy, flash, or fluorescent, for example. (With fluorescent, you may even be able to specify which type of bulb in the lights.) Choose the setting that matches the most prominent light source.



Otherwise, you may wind up with extremely out-of-whack hues. If the camera is set to the Incandescent White Balance setting, for example, and you shoot a picture in bright sunlight, the result is a strong blue tint, as shown on the left in Figure 20-15. The blue tint occurs because the camera adds some blue to compensate for the warm light that incandescent bulbs emit, but midday sun is actually fairly neutral in color. For this image, changing the setting to the Sunny setting fixed things, as shown on the right.





FIGURE 20-15: The strong blue cast is an indication of an incorrect White Balance setting (left); switching the camera to Auto mode (AWB) solved the problem (right).

With many cameras, the Auto setting works quite well except when your subject is lit by multiple light sources, each adding its own color cast to

the scene. But the reliability of automatic white-balancing systems varies from camera to camera, so take some test shots to find out how well your camera performs this function. You may find that you can leave the camera in AWB mode much of the time, or you may decide that you need to step in and provide an assist by selecting a specific setting.

Avoiding Weird Halos

<u>Figure 20-16</u> displays a defect that I see more and more these days: Large halos of white along the borders between light and dark areas of the photo —in this case, the areas where the palm fronds meet the sky.

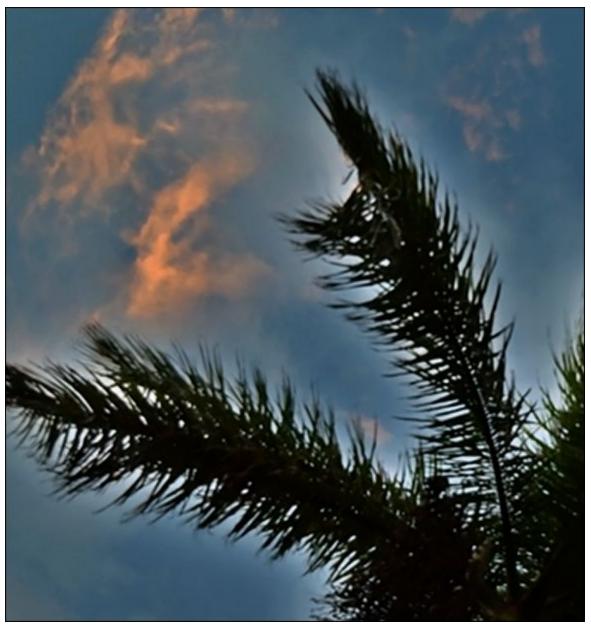


FIGURE 20-16: The white halos around the palm branches are the result of applying an excessive amount of shadow recovery to the photo.

These halos sometimes occur when you use *shadow recovery* tools, which lighten the darkest areas of your photos without also making highlights brighter. Haloing can also be a side-effect of applying HDR (high dynamic range) tools, which try to capture a larger-than-normal range of brightness values, giving you more detail in both shadows and highlights. With HDR, you may see dark halos as well as light ones.

Some cameras have these tools built in; you also can find similar tools in many photo-editing programs. Either way, you usually can specify how much shadow recovery or HDR adjustment you want the camera or software to apply. Experiment with different settings to find the point at which the solution becomes worse than the problem.

As for the blurred edges of the palm fronds in the sample photo, that issue is partly due to the haloing defect and partly due to the fact that my shutter speed (1/200 second) was too slow. There was just enough of a breeze blowing that morning to blur the waving palm fronds at that shutter speed.

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