

Buying a Mac

Shopping for a Mac can leave you dazzled by a long list of features, functions, acronyms, and assorted hooah. This chapter is here to help explain *what* to look for, and *why*, while you're shopping for a Mac.

The best part? I wrote it in common English, with the least amount of technobabble possible. (That's my job!)

In this chapter, I show you

- ➡ Tasks and work that your Mac can perform
- ➡ Differences between hardware and software
- ➡ Differences between the models in Apple's Mac computer line
- ➡ Features you should look for while shopping for a monitor
- ➡ Specifications you should look for when comparing the central processing unit (also known as CPU — the computer's brain) and memory
- ➡ Reasons that ordering online may save you money

Chapter 1

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Know What Your Mac Can Do

I would bet that you already know why you want a computer — you have an idea what you want to do with a Mac. But you may not know all the things you can do with a computer.

To help get you excited about owning a Mac, here's a (very) short list of only a few of the more popular uses for a computer these days. See whether any of these uses reflects what you want to do and whether you see any tasks that you want to learn more about:

- ➡ **The Internet:** (You knew I would start with the Web and e-mail.) Now you can also add online games, chat rooms, and Internet radio to the mix. The Internet literally expands in front of your eyes, and your Mac can be your doorway to the online world.
- ➡ **Digital media:** Whether your interest is in photography, video, or music (making it or listening to it), your Mac comes with everything you need to get started.
- ➡ **Data collection:** Just in case genealogy is your passion — or collecting baseball cards or cataloging your DVD library — your Mac can help you enter, organize, and present your data.
- ➡ **Productivity stuff:** Oh, yes — your Mac can work hard as well, with productivity programs such as Microsoft Office and iWork. Compose documents, create spreadsheets, and build professional-looking presentations on your Mac with ease.

As I said, this list offers only a few high points — the more time you invest in learning about your Mac and the software that's available, the more you get out of it.

Understand Hardware and Software

First-time computer owners often become confused about what constitutes hardware and what should rightly be called software. It's time to clear things up!

In the computing world, *hardware* is any piece of circuitry or any component of your Mac that has a physical structure. For example, your Mac's monitor is a piece of hardware, as is your keyboard. Even the components you normally can't see or touch — the ones buried inside the case — are considered hardware too, such as your Mac's motherboard and power supply. (Yes, your computer's case is technically a piece of hardware, although it's not electrical.)

Figure 1-1 illustrates a common piece of hardware — in this case, an Internet router that shares your DSL or cable Internet connection with your home network.



An Internet router is a piece of hardware.

Figure 1-1

Part I: Buying and Getting Started with Your Mac

The other side of the computing coin is the software you use. *Software* refers to programs you interact with on-screen. Examples include a word processing program that displays your typing or a chess program that enables you to move pieces around on the screen. **Figure 1-2** shows Apple's Aperture image editor, a photo editing program that helps you see and organize digital photos.



Apple's Aperture image editor is a software program.

Figure 1-2

Essentially, computer hardware and software work together so that you can do various tasks on your computer.



When you hear folks discussing a software *upgrade*, *patch*, or *update*, they're talking about (you guessed it) *another* piece of software! However, the upgrade-patch-update program isn't designed to be run more

than once; rather, its job is to apply the latest features, bug fixes, and data files to a piece of software that's already installed and running on your Mac, to update it to a new *version*. (Virtually all software developers refer to successive editions of their software, such as Version 1.5 or Version 3; the later the version, the more features the software includes.) In Chapter 17, you find out how to maintain your Mac with updates.

Choose a Desktop or Laptop

First, let me give you a definition of terms: A *desktop* Mac is designed to sit permanently on your desktop and uses a separate monitor, keyboard, and mouse. (Examples are the iMac, the Mac mini, and the Mac Pro.) On the other hand, a *laptop* Mac is designed to be portable — you can carry it along with you because it has a built-in keyboard, pointing device, and monitor. (MacBooks are laptop computers.)

This leads us to the question “Should I buy a desktop or a laptop Mac?” Naturally, if the portability of a MacBook laptop is a requirement for you — if your job or your lifestyle demands plenty of travel every year — you really have no other choice than a MacBook. Luckily, today's laptops are as powerful as most of the Mac desktop line: MacBooks offer features such as high-resolution graphics, 17-inch wide-screen displays, larger hard drives, and DVD recording.

However, if you're sitting on the fence and portability is a lesser requirement, I generally recommend a Mac desktop system, for these three reasons:

- ➡ **MacBooks aren't as expandable as desktops.**
Although you can hang plenty of *peripheral* (external) devices, such as printers and scanners, from a MacBook, using USB and FireWire ports, the high-end Mac desktops are just plain easier to *upgrade* by adding newer, more powerful hardware inside your computer. For example, you might upgrade the graphics card on a Mac Pro, which is impossible to swap on a laptop.

- ➡ **MacBooks are more expensive than desktop Macs of similar capability.** My friend, you pay dearly for that portability. If you don't need it, jump to the desktop side of the fence. It's as simple as that.
- ➡ **Laptops cost much more to repair.** Part of the MacBook portability stems from the Apple practice of shoehorning all hardware onto one circuit board to save space. So, if one piece malfunctions, you have to take apart the whole thing, which isn't an easy task.

If portability isn't important, I would opt for a Mac mini, iMac, or Mac Pro, depending on the power you need, as described in the following section.

Know How Much Power Is Too Much

Take a moment to consider which tasks your Mac will be used for — not only now but also a year or two down the road. If you plan to try your hand at any of the following tasks, feel free to label yourself as a power user:

- ➡ **High-resolution photography or video editing:** If you want to try your hand at editing today's highest-resolution digital photography (images from a 10-megapixel camera, for example) or any type of video editing, you need a Mac with more horsepower. (Think of serious hobbyists or professional photographers or videographers.)
- ➡ **Running expensive software:** Examples include Adobe Photoshop and Illustrator, which are programs you use to work with high-resolution images and which usually demand the highest level of horsepower your Mac can deliver.

If the preceding points apply to you, you need a more powerful iMac desktop, Mac Pro desktop, or MacBook Pro laptop.



If you're going to run specific programs, check the requirements for that software on the manufacturer's Web site or directly from the side of the box at your local Apple Store. That way, you gain a better idea of whether you need to make the investment in a Mac Pro or MacBook Pro.

On the other side of the coin, these activities require less power:

- ➡ Surfing the Web
- ➡ Sending and receiving e-mail
- ➡ Keeping track of a large, digital music library
- ➡ Using programs such as Microsoft Office, iWork, and iLife for tasks such as creating documents
- ➡ Storing and sharing digital photos of friends, family, and more taken with a point-and-shoot digital camera

If the preceding tasks are more your speed, any Mac in the current product line would suit you, including the basic iMac, the Mac mini, or the standard MacBook.

Choose a Price Range

If you're working on a limited budget and you want a new Mac computer (rather than have to search eBay for a used machine), your choice becomes simpler. The least expensive Mac — the Mac mini — is no pushover, and it handles the Office, iLife, and iWork suite programs that I mention in the previous section (with aplomb, even). The least expensive iMac also fits into a smaller budget, and it includes a built-in monitor. On the laptop side, the standard-issue MacBook provides plenty of punch for those same productivity programs.



Part of the reason that the Mac mini is inexpensive is that it doesn't come with a keyboard, mouse, or monitor. You have to buy those items separately. Or if you're lucky, you can scavenge a flat-panel monitor, keyboard, and mouse from an old computer or from a friend who has spare computer hardware on hand.

Power users have no choice either: If you're going to run top-of-the-line software that requires top-of-the-line performance, you're limited to the most expensive iMac, Mac Pro, or MacBook Pro. 'Nuff said.

Apple controls its hardware prices quite closely, so you don't find a huge price difference between ordering directly from Apple.com (or an Apple Store) and from an online company.

Table 1-1 illustrates price ranges for each model in the Apple line at the time this chapter was written.

Table 1-1 **Macintosh Computer Price Ranges**

<i>Computer Model</i>	<i>Best Suited For</i>	<i>Low Price</i>	<i>High Price</i>
Mac mini desktop	Entry level to typical home computing; no monitor or keyboard	\$600	\$800
iMac desktop	Midrange to power user; built-in monitor	\$1200	\$2200
Power Mac desktop	Power user; no monitor	\$2800	\$19700
MacBook laptop	Entry level to typical home computing	\$1000	\$1600
MacBook Pro laptop	Midrange to power user	\$2000	\$2800
MacBook Air laptop	Typical home computing; no built-in DVD drive	\$1800	\$2500



When you order a Mac from Apple.com, you can tweak these prices by a significant amount by using the Configure feature. For example, you might save \$200 on the price of an iMac by opting for a smaller-capacity hard drive. (On the other hand, if you're looking to improve the performance of your pick, you might decide to spend more on a faster video card than the standard model sports.) See the later section "Compare Processors, Memory, and Hard Drives" for more information about these options.

Select a Monitor

No matter how powerful your Mac may be, if it's hooked up to a low-quality monitor, you see chunky, slow graphics. Hence this section, where I tell The Truth about the two most important specifications you should consider while shopping for an LCD flat-panel monitor: resolution and size:



If you decided on an iMac or a MacBook laptop, you can skip this section — those computers have built-in monitors. However, keep in mind that you can hook up external (add-on) monitors to any Mac, so if you expand your system, you may want to return here.



Resolution: Your video system's resolution is expressed in the number of pixels displayed horizontally and also the number of lines displayed vertically. (A pixel is a single dot on your monitor.) For example, a 1024 x 768 resolution means that the monitor displays 1024 pixels horizontally across the screen and 768 pixels vertically. (Any resolution lower than 1024 x 768 is barely usable these days. Higher resolutions are 1280 x 1024 and 1600 x 1200.) The more pixels, the higher the resolution.

And the higher the resolution, the more information you can fit on the screen, and the smaller that stuff appears, which I find strains my older (read: wiser and more mature) eyes. But higher resolutions also make graphics look crisper. Only you can determine the best display resolution. The decision is completely personal, like choosing a keyboard that feels “just right.” While shopping for a monitor, try a wide range of resolutions to see which one suits your optic nerves.

- ➡ **Size:** You can buy a monitor in one of several different sizes, starting at approximately 17 inches. (All monitors are measured diagonally, just like TVs are.) You can easily find larger monitors, at 24 inches and even larger.

In general, the larger the monitor, the easier it is on your eyes. At the same resolution, a 19-inch monitor displays the same images as a 17-inch model, but the image is physically bigger and the details stand out more clearly.

For general home use, a 17-inch monitor is fine. If you prefer to view larger text and graphics, if you plan to do graphics-intensive work for several hours at a time, or if you’re a hard-core gamer, I would point you toward a 19-inch monitor at minimum.

Compare Processors, Memory, and Hard Drives

When you hear Mac owners talk about the speed and performance of their computers, they’re typically talking about one of four different components (or all these components as a group):

- ➡ **System memory, or random access memory (RAM):** The more memory your Mac has (and the faster that memory is), the better your computer performs — especially Mac OS X.
- ➡ **Central processing unit (CPU):** Macs now use either an Intel Core 2 or its faster cousin, the Xeon. The speed of your processor is measured in gigahertz — and, of course, the faster the speed of your processor, the faster your Mac performs.



Each core that's built-in to your processor provides a significant performance boost, so a quad-core processor is faster than a dual-core processor.

- ➡ **Hard drive space:** The higher your hard drive capacity, the more documents, programs, songs, and movies you can store and use.
- ➡ **Graphics processing unit (GPU):** This item is the graphics chip used on your Mac's video hardware. The more memory allotted to your video chip and the faster it is, the smoother and more realistic your 3D graphics.

For a typical home Mac owner, a minimum of 1GB of RAM and a Core 2 Duo processor should provide all the power you need. Power users shouldn't settle for less than 2GB of RAM and the fastest dual- or quad-core processor that Apple offers for your specific model.

Decide Which Software You Want

When you buy a Mac directly from Apple, you also can immediately purchase a few Apple programs and extras for your new system. These add-ons include the ones in this list:

- ➡ **iWork:** The Apple productivity suite includes Pages, for word processing; Numbers, for spreadsheets; and Keynote, for creating presentations. I discuss Pages in Chapter 8 and Numbers in Chapter 9.
- ➡ **MobileMe:** The Apple MobileMe Internet subscriber service includes e-mail and Web site hosting in addition to iDisk (for remote file storage) and the ability to synchronize your data between multiple Macs. You can find more information about MobileMe in Chapter 13.
- ➡ **AppleCare:** AppleCare is the Apple extended warranty and service plan. I recommend AppleCare for any MacBook owner because your laptop tends to endure quite a bit of road warrior treatment while you're traveling.

Buy Online or at the Apple Store

Should you spend your money online? In my opinion, the short answer is Yes — because of three important advantages to online shopping:

- ➡ **You may save sales tax.** Depending on your location (and the location of the online store), you may not have to pay any sales tax on your Mac purchase, and that's a hefty advantage.
- ➡ **You don't need a nearby Apple Store.** Some of us aren't lucky enough to live within easy driving distance of an Apple Store or Apple reseller — but Apple.com is open 24/7.

- ➡ **Apple.com is a premiere Web store:** You can not only configure your Mac while browsing to save money or increase performance (as I mention earlier in this chapter) but also rest assured that Apple follows a strict privacy statement and offers secure encrypted shopping. That means your credit card information is safe.

You gain two major advantages by shopping in person, however: You can ask questions and receive answers from a trained salesperson before you buy, and you can drive away with that fancy box in your trunk (without having to wait a week).

