Making Everything Easier!™

2nd Edition

PCs Just the Steps™ FOR DUMMIES®

- Pick the task,
- Find it fast,
- Get it DONE!

Nancy Muir

Cool PCs Lingo

access point: A device used to set up a wireless network.

attribute: Characteristics of a file, including Read-Only, Hidden, Compressed, or Encrypted.

browser: A software program, such as Internet Explorer, that you use to navigate the World Wide Web.

desktop: The main view of Windows Vista, containing shortcuts to various programs and files on your computer as well as on the Windows Vista taskbar and Start menu.

device driver: The software that enables peripheral devices, such as a printer or modem, to interact with the operating system.

driver: A storage area on a computer CPU or on external media (such as a CD-ROM or DVD) designated with a drive letter (such as C or F).

Ethernet: A wired cable connection used to set up a network between two or more computers.

firewall: A software program that protects your computer by preventing unauthorized online access to your system.

flash drive: A storage device that connects to your computer via a USB port. Also referred to as a USB stick. See also *USB*.

network: A group of computers and other devices that are connected via a wired or wireless connection so that they can interact with one another and exchange or share data.

operating system: A software program, such as Windows Vista or Linux, that enables your PC to run software programs and hardware devices.

peripheral: A hardware device attached to a computer, such as a printer, monitor, or scanner. Peripherals are controlled by the computer to which they are attached.

Plug and Play: A set of specifications that enables peripherals to be instantly recognized and configured when connected to a computer.

restore point: A moment in time when all settings and configurations on your computer are saved. You can use a restore point to put your computer settings back to the way they were at that point in time in order to fix a problem introduced by a change in settings. See also *System Restore*.

screen resolution: The amount of data displayed on your monitor. Resolution is measured in pixels. Common settings include 1024 x 768 and 1280 x 800 pixels. You set the screen resolution in the Windows Control Panel.

System Restore: The Windows Vista feature used to keep track of changes on your computer by creating restore points either automatically or manually. See also *restore point*.

USB (Universal Serial Bus) port: A type of port on your computer used to connect Plug and Play devices, such as printers and digital cameras, or Flash drives. See also *flash drive*.

wireless: Use of infrared light or wireless technology such as Bluetooth to transmit data between computers and other devices without the need for plugging in cables.

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by Nancy Muir

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Nancy Muir has written over 50 books on technology and business topics including *Microsoft Office Project 2007 For Dummies* and *Staying Safe Online For Seniors For Dummies* (both by Wiley Publishing, Inc.). Nancy has taught Internet safety and technical writing at the university level and holds a certificate in distance learning design from The University of Washington. She is currently the Director of Content Development for LOOK**BOTH**WAYS, Inc., an Internet safety company.

Dedication

To my fantastic husband Earl for all his love and support. And to my late father-in-law Dick Boysen, who was a wonderful example of how to live life to the fullest.

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We're proud of this book; please send us your comments through our online registration form located at `http://dummies.custhelp.com`. For other comments, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002.

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Contents at a Glance

Computers have come a long way in just 20 years or so. They're now at the heart of the way many people communicate, shop, and learn. They provide useful tools for tracking information, organizing finances, and being creative.

Whether you're a young person just getting your first computer, or a senior who is finally getting around to discovering all that computers can enable you to do, or anybody in between, this book will ease you into the world of computers quickly and painlessly.

About This Book

This book is for people who are new to using a computer and want to discover the basics of making settings, working with files and folders, getting on the Internet, and maintaining and protecting a Windows Vista–based computer. *Just the Steps* books provide just that: just the steps you need to complete common computer procedures quickly without a lot of explanation to slow you down.

Foolish Assumptions

This book is organized by sets of tasks. These tasks start from the very beginning, assuming you know little about computers, and they guide you through from the most basic steps in easy-to-understand language. Because I assume you're new to computers, the book provides explanations or definitions of technical terms to help you out.

Introduction

Conventions used in this book

- When you have to type something in a text box, I put it in **bold** type. Whenever I mention a Web site address, I put it in another font, `like this`.
- For menu commands, I use the ➪ symbol to separate menu choices. For example, choose Tools➪Internet Options. The ➪ symbol is just my way of saying "Open the Tools menu and then click Internet Options."
- Callouts for figures draw your attention to an action you need to perform. In some cases, points of interest in a figure might be circled. The text tells you what to look for, the circle makes it easy to find.

This icon points out insights or helpful suggestions related to the tasks in the step list.

All computers are run by software called an *operating system*, such as Windows. Because Microsoft Windows–based personal computers (PCs) are the most common type, the book focuses mostly on Windows functionality and specifically on the latest version of Windows, Windows Vista.

Why You Need This Book

Working with computers can be a daunting prospect to people who have little experience with them. One-thousand-page reference books could send you running for the hills. However, with the simple step-by-step approach of this book, you can get up to speed with computers and overcome any technophobia you might have experienced.

You can work through this book from beginning to end or simply open up a chapter to solve a problem or help you learn a new skill whenever you need it. The steps in each task get you where you want to go quickly, without a lot of technical explanation. In no time, you'll start picking up the skills you need to become a confident computer user.

After you've finished this book, you'll know your way around a PC and you'll probably want to start using some specific applications. For that, I recommend other *For Dummies* books such as *Word 2007 For Dummies* by Dan Gookin, *Microsoft Office Project 2007 For Dummies* (by yours truly), or *Quicken 2009 For Dummies* by Stephen L. Nelson (all by Wiley Publishing, Inc.).

How This Book Is Organized

This book is conveniently divided into several handy parts to help you find what you need.

- **Part I: Setting Up Your Computer:** If you need to get started with the basics of using a computer, this part is for you. These chapters help you understand all the parts and technologies that make up your computer, and explore how to set up your computer out of the box, including hooking it up to devices such as a printer and working with settings for input devices like your mouse and keyboard. These chapters provide information for exploring the Windows desktop when you first turn on your computer, and working with your mouse, keyboard, monitor, and disc drives. Finally, I provide information on setting up accessibility features that help you if you need to adapt Windows to work better for you if you have a visual, hearing, or hand strength issue (like arthritis).
- **Part II: Getting to Know Windows:** Here's where you start working with the Windows Vista operating system. You deal with basic settings such as your computer's date and time setting, set up a password to protect your data, explore the Windows desktop, and discover how to get help when you need it. This is also the part where you find out how to customize the look of Windows.

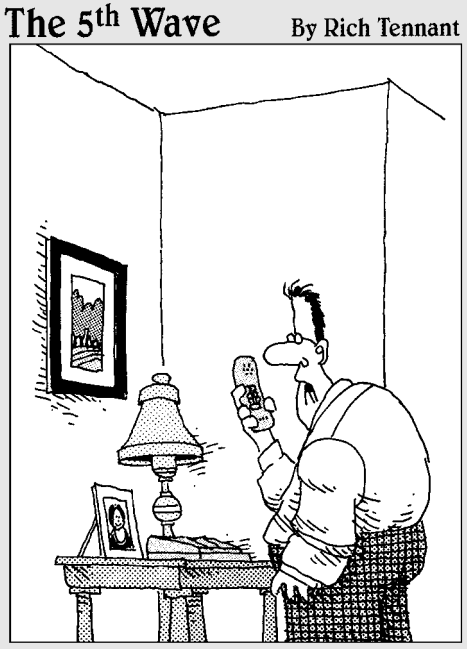
- **Part III: Getting to Work:** Windows allows you to organize the data you create in files and folders, and the first chapter in this part gets you up to speed on file and folder management. Next you explore the world of software, even practicing a bit with some built-in Windows software to write a document and edit a picture. This is the part where you find out about network basics, in case you want to set up your own home network to enable two or more computers to access devices such as a printer or to get on the Internet. Chapters in this part also introduce you to some multimedia devices and settings so you can work with sounds and images, and set up peripherals — devices such as printers, scanners, and faxes that help you share information in your computer with others.
- **Part IV: Going Online:** It's time to get online! The chapters in this part help you understand what the Internet is and what tools and functions it makes available to you. Find out how to explore the Internet with a Web browser; how to stay in touch with people via e-mail, instant messaging, chat, blogs; and even how to make Internet phone calls.
- **Part V: Computer Maintenance and Security:** Now that you have a computer, you have certain responsibilities towards it (just like having a child or puppy!). In this case, you need to protect the data on your computer, which you can do using a program called Windows Defender. In addition, you need to perform some routine maintenance tasks to keep your hard drive uncluttered and virus free.

Get Going!

Whether you need to start from square one and set up your computer or you're ready to just start enjoying the tools and toys your current computer makes available, it's time to get going, get online, and get computer savvy.

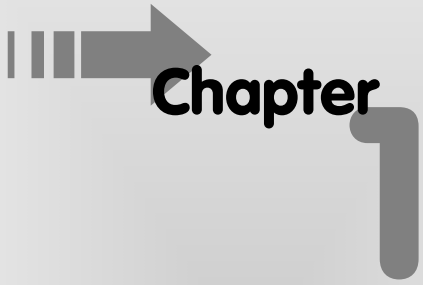
Part I

Setting Up Your Computer



"I'm ordering our new PC. Do you want it left-brain or right-brain oriented?"

Getting to Know Computer Basics



Using a computer is actually pretty simple, but understanding the various technologies that make up a computer is a little harder. You don't have to know how to build a computer, but to choose the right computer for your needs or talk intelligently with the clerk in the computer store or technical support, it helps to have a basic understanding.

In this chapter, you educate yourself about

- How data is stored on your hard drive
- What an operating system does
- Various computer configurations available such as desktops and laptops
- The value of wireless capability in your computer to keep you connected
- The various features offered in monitors that may make your computing life easier on the eyes
- Various options for storing your data
- What, exactly, a microprocessor is and which is the best one for you

Get ready to . . .

Examine Your Hard Drive

Your computer can have several drives. All but the hard drive are external and typically plug into your computer via a USB port. The hard drive is also called a hard disk. It's essentially a platter inside your computer where your computer stores programs and data.

Here are some important-to-know facts about your hard drive:

- **A hard drive uses magnetic recording to store data.** This is similar to old-style recording tape. You can write data to your hard drive as a series of bytes, use that data, and erase it. However, be aware that the magnetic pattern on your hard drive can retain erased data even after you've erased it.
- **Your hard drive is divided into *sectors* that include several tracks.** Every sector contains a set number of bytes. Typical sectors are 256 or 512 bytes. Formatting a hard drive creates this sector and track structure, along with a file allocation table that helps your computer retrieve data.
- **Similar to an old record player's stylus, a computer hard drive works with an arm containing read/write heads.** These heads move over the hard drive as it spins to locate various bytes of information.
- **Hard drives come with different capacities for storing data.** Today most are measured in gigabytes (GB). The higher the gigabytes, the more data your computer can store, so check computer manufacturer specs (see Figure 1-1) before you buy.

Figure 1-1: Manufacturer specs for memory and hard drive capacity

If you're not sure what capacity your hard drive has you can check your computer manufacturer's specifications. You'll find these in your user manual or go to the manufacturer's Web site and search for your model. You can also choose Start⇨Control Panel⇨System and Maintenance and click the View Amount of RAM and Processor Speed link to see your model name, RAM, and processor speed.

Understand Operating Systems

Operating systems (OSes) are software programs, such as Windows or the Macintosh OS, that run your computer. Your computer comes with an operating system pre-installed. An operating system runs your applications and allows you to manage files on your computer and protect your data.

Here are some things you should know about operating systems:

- **Tools:** Operating systems often come with extra tools and features to help you get your work done, such as calculators (see Figure 1-2), games, tools to help users with vision or hearing disabilities, and programs to protect your computer from viruses.
- **Incompatibilities:** Today, many operating systems allow you to use files created with other operating systems seamlessly, but there are still some incompatibilities. You may need to download converters to be able to open files created on a computer using one operating system on a computer using another.
- **Upgrades:** Over time new operating systems come out and you may reach a point where you want to upgrade your OS. Most offer frequent interim updates you can download for free, but when a new version of the product is released, you'll have to buy an upgrade package to begin using the newest features.

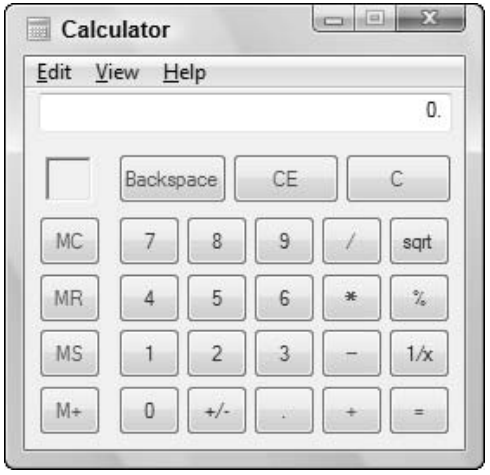


Figure 1-2: Windows' Calculator

Security features of operating systems such as Windows Defender are getting more and more robust, and it's important that you take advantage of them to protect your data. However in many cases you have to enable these features for them to do any good. See Chapter 20 for more about computer security.

Choose the Right Computer

There are different styles of computers available. To help you choose the best computer for your needs, here are some styles to consider:

- **A desktop computer** (see Figure 1-3) is meant to stay at one location. It can take the form of a tower that you place on your desk or the floor with a separate monitor. Other models are designed so the monitor contains the guts of the computer, as with some Macintosh models.
- **A laptop or notebook computer** (see Figure 1-4) is more portable than a desktop, though these currently run the gamut from four pounds or so to heftier desktop models weighing in at nine pounds or more. With a laptop, the monitor is built into a chassis that also contains the keyboard and a built-in mouse that usually takes the form of a touch pad or touch button.
- **A Tablet PC** is a Windows computer that allows you to interact with the computer by "writing" on the screen or making choices using a stylus. Tablet PCs can lay flat, allowing you to use them like a pad or tablet.

Netbooks are like laptops, except that they have limited functionality. Essentially they allow you to surf the Internet and retrieve e-mail but not run other software programs. Because of their limited feature set, they aren't really considered PCs.

Figure 1-3: Desktops take up more space

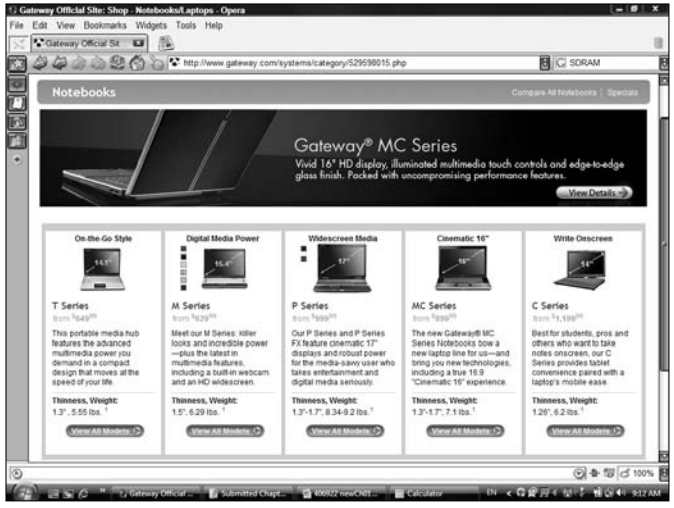


Figure 1-4: Laptops are portable

Look at Wireless Capabilities

If you own a computer with wireless capabilities, you can connect to the Internet without plugging your computer into a cable connection or phone line. You can go online using a wireless card or device in your computer and an Internet access point in your home network or even use access points in many public locations such as airports and hotels.

Here are the basics about wireless connections:

- **Subscriptions:** You can subscribe to a Wireless Wide Area Network offered by companies such as Verizon (see Figure 1-5) and then pick up their signal as you move around.
- **Hotspots:** You can pick up public connections called *hotspots* (see Figure 1-6) at locations such as hotels and coffee shops. Some public locations charge a fee, but many others offer a wireless connection (also called Wi-Fi) for free.
- **Wireless home networks:** You can set up a wireless network in your home and access it from several computers located throughout your house after you've configured them to access the network.
- **Wireless protocols:** Check your computer's specifications to see what wireless protocol it uses. A popular wireless protocol is Bluetooth, referred to as 802.11, which you'll see associated with letters such as a, b, g, and n. Wireless version n is the latest and boosts your reception range significantly over earlier versions.

Figure 1-5: Verizon's broadband access map

Figure 1-6: Find directories of hotspots online

Select a Monitor

Your monitor displays your operating system environment, online documents, files and folders, and various applications you use to get your work done. Because you may look at your monitor many hours a day, it's important that you understand how monitor size and display quality affect your viewing experience.

- **Sizes:** Monitors come in sizes ranging from very small 8.6-inch netbooks (see Figure 1-7) to huge 24-inch desktop models (see Figure 1-8).
- **Displays:** Monitor displays use various technologies that afford different image quality. Some monitors use LCD (liquid crystal display) technologies and others use TFT (thin film transfer) liquid crystal display. One of the variables in display quality is how well it keeps crisp images no matter what the lighting around it.
- **Screen resolutions:** Screen resolution relates to the crispness of the image on your monitor screen. The higher the resolution numbers, the sharper your display image.

The monitor you choose depends on the type of computer you get (laptop where smaller size may be important for portability versus desktop); what activities you use your computer for (if you use lots of graphics applications or games, you might prefer a monitor with a higher-end graphics card); and any vision challenges you may face (in which case you might want a larger monitor).

Figure 1-7: Portable computers may sport very small monitors

Figure 1-8: A large display helps with games and graphics applications

Understand Data Storage

You can store data to your computer hard drive or store it on other media. In fact, it's a good idea to keep a copy of your important files on other media in case your computer hard drive gets damaged or wears out. Here are several types of data storage:

- **CDs and DVDS** are hard plastic disks that you can use to store data and read it. Your computer has a CD/DVD drive which looks like a slot that you slip the disk into.
- **Flash drives** are sticks, about the dimensions of a very thick piece of gum (see Figure 1-9), that slide into a USB (universal serial bus) slot. These have capacities up to and exceeding 8 gigabytes, so they can hold lots of files.
- **External hard drives** (see Figure 1-10) usually plug into a USB port in your computer. They range in size from a bit larger than a deck of cards to a paperback book, and essentially they give you a second hard drive to back up to.

Netbooks, which are very small laptops that are becoming popular for their portability, don't have CD/DVD drives. To access CD/DVD content for these consider downloading software from the Internet, sharing a CD/DVD drive of a larger computer over a network, or getting an external CD/DVD drive.

Figure 1-9: A USB stick

Figure 1-10: An external hard drive

Understand Microprocessors

Microprocessors, also simply called *processors,* are what enable your computer to run and process data. Microprocessors are computer chips which include integrated circuits.

Here are some things to consider about microprocessors when you're buying a new computer:

- **Brand:** The two key players in manufacturing processors today are Intel (see Figure 1-11) and AMD. When you buy a computer and you prefer one brand to another, check the models to see which they use.
- **Speed:** Microprocessor clock speed ratings, given in gigahertz, determine how fast your computer runs. You'll pay more for a faster microprocessor, but if you use your computer quite a bit, especially for applications such as graphics and games, the speed may be worth the price.
- **Power management:** Laptop computers have power management issues that make the choice of processor even more important. For example, the Core 2 Duo processor from Intel uses less power than its predecessors.

One other thing to think about is chip cores. In the latest chips the processor 'brain' is divided up into different logic sectors called cores. This helps speed up your computer by allowing it to perform multiple tasks at the same time. For example, you might buy a laptop Core2 Duo processor, which has two cores, or spring for a high end desktop with a Quad Core chip (4 cores).

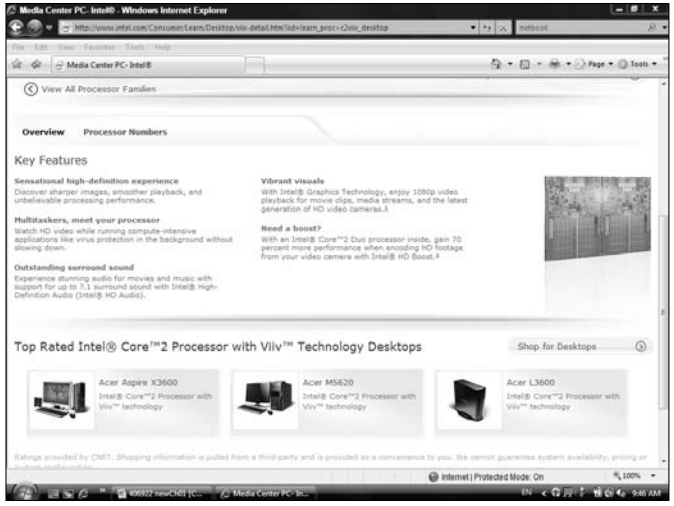


Figure 1-11: Intel's processors

Your PC Out of the Box

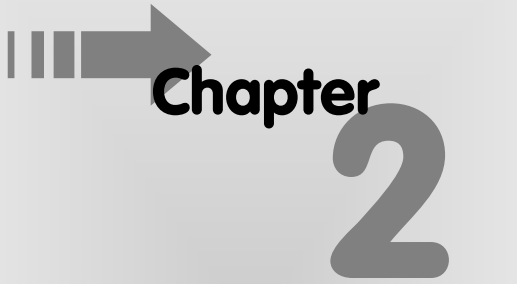
Your desktop computer might be housed in a big metal container (called a *tower*) that you keep on the floor under your desk, or it might be a single unit built into your monitor or even a portable laptop. It is likely to have multiple slots and places to plug in things (these are called *ports*) as well as indicator lights that tell you things like when the power is on or off.

When you get your PC and take it out of the box, there's likely to be a handy piece of paper that tells you what to plug in where so you can connect your monitor, keyboard, and mouse. Most computers come with color-coded plugs to make it easy to spot where a particular item plugs in. Still, a basic overview of what's on your PC, how you turn your computer on and off, and how you get around the Windows Vista desktop (the central command center of Windows) may be helpful.

Although computer models differ somewhat, the information and illustrations in this chapter can help you locate various switches and connectors on your own computer.

If you've never worked with a PC before, use the tasks in this chapter to do the following:

- **Locate connections on the front and back of your computer:** You use these connections to attach a power plug, your monitor, printer, mouse, keyboard, and more to your central processing unit (CPU in computer speak).
- **Turn on your computer, work with the Start menu, get around the Windows Vista desktop, and turn off your computer:** This is your first introduction to booting up, using, and logging off of your computer.



Get ready to . . .

Locate Switches and Plug In Things

Use this table in tandem with Figure 2-1 to locate device-to-PC connector ports. Note that many devices use a USB connector these days; so, for example, if you have a mouse with a USB connector, just plug it into one of your USB ports.

Connection	Location	What It's Good For
Mouse	1	Connect your wired mouse
Video Connection	2	Connect your non-USB monitor
Keyboard	3	Connect your wired keyboard
USB ports	4	Connect any USB device
Parallel port	5	Connect to a non-USB printer
Audio	6	Connect speakers

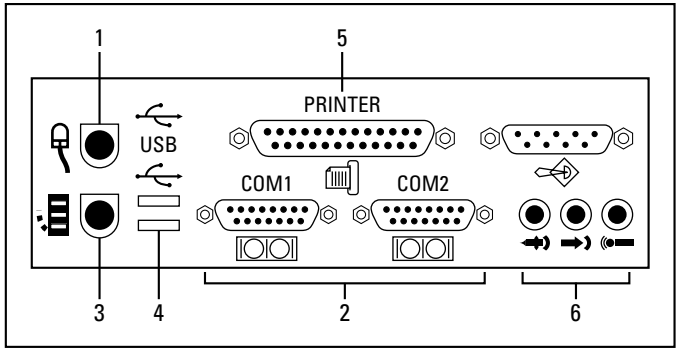


Figure 2-1: Various places to plug things into your PC

Not every computer will have the same number or type of ports. For example, newer computers use USB ports for connecting a wide variety of devices, from printers to digital cameras or a wireless mouse. Older computers have fewer USB ports available, but newer ones are likely to offer 4 or 5.

Note that some monitors and laptop computers have built-in speakers so you don't have to connect separate speakers through the audio port. Discover more about working with sound settings in Chapter 14.

Turn On Your Computer and Log On to Windows

1. With your computer set up, you're ready to turn it on. Start by pressing the power button on your computer to begin the Windows Vista start-up sequence.
2. If this is the first time you've started your computer, you see a screen that guides you through initial setup, which usually includes items such as specifying your country, date and time, and username. Also, your computer manufacturer might have added further setup steps, such as registering your computer via the Internet.
3. In the following Windows Vista Welcome screen, all user accounts are represented by labeled picture icons. Click the account you want to access.
4. In the following screen, enter your password if you have assigned one and then click the arrow button (or click the Switch User button to return to the previous screen and choose another user to log on as). Windows Vista verifies your password and displays the Windows Vista desktop, as shown in Figure 2-2.

If you haven't set up the password protection feature when you click an account icon on the Welcome screen, you're taken directly to the Windows Vista desktop. You can find out more about adding and changing passwords in Chapter 7.

Figure 2-2: The Windows Vista desktop

To log out from one user account and log in with another, choose Start⇨Log Off. This takes you to the Log Off screen, where you can click any other user's icon to log on through that account.

If this is the very first time you've turned on a new computer, your manufacturer may have included an introductory series of screens to make certain settings for how your computer will work. See your computer documentation for an explanation of these options.