

VISTA 2007

LESSON 1 Protect Your Computer, Lesson Opener, p.1

☞ **21st Century Skills** Answers will vary. Students should identify an example of an ambiguity or an ambiguous situation. Encourage students to share their ideas with the class.

LESSON 1 Reading Guide, p. 2

☞ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines**>**Research-Based Classroom Solutions**.

EXERCISE 1-1 Manage Windows Firewall, p. 3

NCLB/Language Arts (NCTE 5) Be sure students understand that a system's *resources* refers to the hardware and software installed on their computer. Encourage them to open **System Information** to learn more about their system's resources by choosing the **Start >All Programs**>**Accessories**, clicking **System Tools**, and then clicking **System Information**.

EXERCISE 1-1 Manage Windows Firewall (Continued), p. 4

Step-by-Step Tip In Step 6, if the **Windows Firewall** is not on, have students click **Turn Windows Firewall on or off** in the left pane.

Step-By-Step Tip In Steps 9 and 11, have students click the blue links at the of the dialog box to learn more about **Windows Firewall** and the risks of turning off the firewall.

EXERCISE 1-6 Lock the Computer p. 10

NCLB/Language Arts (NCTE 5) Reinforce the importance of selecting a good password. Be sure students understand that a good password should be easy to remember and difficult to figure out. To reinforce this idea, have students create a list of DOs and DON'Ts for creating passwords (such as using numbers and letters, randomly capitalizing letters, avoiding personal names of family or friends, or using different passwords for different accounts). Ask students to share their DOs and DON'Ts. Then, ask them why it is important to change passwords every three to six months.

EXERCISE 1-7 Change Screen Saver Settings, p. 11

Teaching Tip Point out to students that they can also open the **Screen Saver Settings** dialog box from the Vista desktop by right-clicking a blank area of the desktop, choosing **Personalize** from the drop-down menu, and clicking **Screen Saver**.

EXERCISE 1-8 Configure Windows Internet Explorer Security Settings, p. 12

Step-By-Step Tip In Step 5, Point out to students that the Internet address used in this example is incorrect, so it will not be trusted after adding it as a Trusted site.

NCLB/Language Arts (NCTE 4) Reinforce the importance of proper syntax by having students rearrange the following sentence: “Minnesota’s high court on Friday overturned the felony conviction of a woman who dropped a bowling ball from a highway overpass onto an Interstate because jurors were given improper information.” Encourage students to share their examples with the class. Ask students to explain why the original sentence was written in the wrong order.

EXERCISE 1-9 Configure History and Temporary Internet Files Settings, p. 13

NCLB/Math (Measurement) Point out to students that a *megabyte*, or MB, is a unit of information or computer storage that equals 1,000,000 bytes. A *kilobyte*, or kB, is equal to 1,000 bytes. Have students convert 102,45 MB into kilobytes. Then, have them convert 60 MB to kB. Ask them to share their answers with a classmate.

EXERCISE 1-13 Create a Standard Password-Protected Local User Account, p. 17

Step-by-Step Tip In Step 2, **User Accounts and Family Safety** may be named **User Accounts**. This varies based on which version of Vista is installed. The subsequent steps remain the same.

Troubleshooter In Step 7, make sure students select the **Standard user** option and not the **Administrator** option.

NCLB/Language Arts (NCTE 5) To reinforce the importance of choosing a password that is easy to remember and difficult for other people to guess, have students come up with a phrase that is easy to remember that uses numbers somewhere in it. For example, “**I go to bed late and never get up before 8:00.**” Then, have students use the first letter of each word, including the numbers, to create the password. Encourage students to use capitals for emphasis. This sentence would result in the following password: **IgtblaNgub800**. Then, ask them to come up with examples of other ways to remember passwords. Have them share their passwords and examples with the class.

EXERCISE 1-14 Disable a Standard Local User Account, p. 19

In Step 1, point out to students that in order to view the **Computer Management** window, they should right-click on the **Computer** option in the **Start Menu’s** right pane.

LESSON 1, After Your Read, p. 21

Review Vocabulary

1. The [**Phishing Filter**] blocks websites that attempt to gather personal information from your computer. (p. 15)
2. The only user account allowed to add or remove software from the computer is a(n) [**administrator**] account. (p. 18)
3. The [**screen saver**] can be set to lock the computer automatically. (p. 11)
4. A(n) [**firewall**] controls how programs send information into and out of a computer. (p. 3)
5. In order to keep Vista current you must occasionally [**update**] the system. (p. 8)

Answer to Vocabulary Activity Student answers will depend on the definitions they use. You may want to collect the flash cards and use the definitions as an oral review or basis for a quiz game for students.

Review Key Concepts

7. You can disable a standard local account from which window? (p. 19)
 - A. Account Management
 - B. Security Options
 - [C. Computer Management]**
 - D. Windows Update
8. You can update Windows Vista by using which application? (p. 8)
 - A. Windows Defender
 - [B. Windows Update]**
 - C. Windows Firewall
 - D. Phishing Filter
9. Windows Defender will place suspicious programs in what area? (p. 6)
 - A. firewall
 - B. cookie
 - [C. quarantine]**
 - D. standard account
10. Which tool allows you to lock the computer automatically? (p. 11)
 - A. Control Panel
 - [B. Screen saver settings]**
 - C. Desktop
 - D. Start Menu

LESSON 1 PRACTICE IT ACTIVITIES

1. Lock the Computer, p. 22

Solution Use **Figure 1.38** as a solution file for the first part of this activity (Lock this computer). Students should show you that they have unlocked their screens by keying a password into the password box.

2. Change Screen Saver Settings, p. 23

Solution Ask students to show you that they have set their screen saver settings to **Wait 15** minutes and **On resume, display logon screen**.

3. Configure History and Temporary Internet File Settings, p. 24

Solution Students should delete their browsing history and cookies and change the **Temporary Internet Files and History Settings** to use up 65 MB of disk space and keep pages in the history box for 10 days.

LESSON 1 You Try It Activities

4. Add New Account to Your Computer, p. 25

Solution Use **Figure 1.44** as a solution file for the first part of this activity (Create a new account). Students should show you that they have created a new password for the account.

5. Have New Employee Create Password on First Login, p. 26

Solution Use **Figure 1.46** as a solution file for this activity. You may want to have students logon as Annie Borden and change their passwords.

Critical Thinking Activities, p. 27

Beyond the Classroom Activity Students' documents should list the three news sites that they assigned as **Trusted** sites and include a paragraph that explains why they think the news sites are trustworthy.

NCLB/Language Arts (NCTE 5) Be sure students understand the meaning of *trustworthy*. To reinforce its meaning, have them define each word separately. Then, ask them to explain why they can *trust* the news sites they chose, and why the sites are *worthy*. Have students come up share their answers with the class.

Standards at Work Activity Students should download and install an update. After installing the update, they should go into update history and print out the details of the update that they installed.

21st Century Skills Activity Students' documents will vary depending on whether **Windows Defender** found any malicious programs on their machine. If **Windows Defender** encountered any malicious programs, students should describe the program(s), as well as the action **Windows Defender** took. Students' documents should explain why updating Vista regularly can help to keep unauthorized software off their machine, and clearly identify why it is important to perform scans on a regular basis.

Challenge Yourself Projects, p. 28

9. Configure New User Accounts

LEVEL This is an intermediate level project.

Solution Students' documents should include a brief note to employees that explains how to access their accounts and how to change their passwords.

10. Configure Privacy Settings

LEVEL This is an intermediate level project.

Solution Students' documents should include a paragraph that explains what types of Internet research an employee might be asked to complete in the workplace.

NCLB/Language Arts (NCTE 4) Reinforce language arts skills by allowing students to share their paragraphs with the class.

11. Personalize the Desktop

LEVEL This is an advanced level project.

Solution Students' documents will vary, but should include two or three paragraphs that explain how the screen saver's auto-lock feature can help to keep the information on a computer secure.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at **glencoe.com**. You may want to download the rubrics and make them available to students as they complete each project.

VISTA 2007

LESSON 2 Manage Mobile and Remote Computing, Lesson Opener, p.29

☛ **21st Century Skills** Answers will vary. Students should identify how they can take a more active role in meeting their goals. Encourage students to share their ideas with each other.

LESSON 1 Reading Guide, p. 30

☛ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines>Research-Based Classroom Solutions**.

EXERCISE 2-1 Configure Power Settings and Options (Continued), p. 31

Teaching Tip The screen shots in this lesson were taken on a laptop computer. If students are working on desktop computers, they will not see the **On Battery** and **Plugged In** columns (see Figures 2.3 and 2.4).

Step-By-Step Tip In Step 12, let students know that they set their monitor display to turn off after 40 minutes.

EXERCISE 2-2 Use Sleep and Hibernation Mode, p. 33

Teaching Tip The screen shots in this lesson were taken on a laptop computer. If students are working on desktop computers, they will not see the **On Battery** and **Plugged In** columns (see Figure 2.5).

Step-By-Step Tip In Step 8, if students do not have Internet access, have students select a different program from their desktops.

EXERCISE 2-2 Use Sleep and Hibernation Mode (Continued), p. 34

Step-By-Step Tip In Step 11, provide students with a password if they do not have their own.

Step-By-Step Tip If students have a default home page set up in Internet Explorer, that page will appear in Step 12.

EXERCISE 2-3 Choose a Network Connection, p. 35

Troubleshooting In Exercise 2-3, students must have a network connection available. In order for the steps to work as written, student computers will need to be disconnected from the network when students start the exercise.

NCLB/Language Arts (NCTE 3) To reinforce the definition of *network*, let students know that there are two basic types of networks. First, a LAN, or Local Area Network, is a connected group of computers that are close to each other (a connected group of computers in a home or in an office, for example). Second, a WAN, or Wide Area Network, is a connected group of computers that are not connected to each other, such as the Internet. A WAN provides users with access to large amounts of information.

EXERCISE 2-4 Connect and Check the Status of a Wireless Network, p. 36

Troubleshooting In Exercise 2-4, students must have a wireless network available to them. In order for the steps to work as written, student computers will need to be disconnected from the network when students start the exercise.

EXERCISE 2-5 Remotely Connect to a Network at a Workplace (Computer), p. 37

Troubleshooting Students must have a Virtual Private Network available to them in order to complete the steps as they are written.

Teaching Tip The **Next** button is not active in Figure 2.14 because the Internet address has not been entered. Let students know that as soon as they key the correct Internet address, the **Next** button will become active.

Step-By-Step Tip In Step 6, provide students with an IP address to key into the Internet address box so that they can set up the remote connection.

EXERCISE 2-6 Use a Remote Desktop Connection, p. 39

NCLB/Language Arts (NCTE 3) Be sure students know what the term *PC* stands for. Ask students if they know the difference between a personal computer or Macintosh, and a mainframe. Then, ask them which type of computer might be used by a large company and why.

NCLB/Language Arts (NCTE 3) Make sure students know that this exercise uses the term *desktop* to refer to the visual representation of the file system on a computer once the computer is turned on. Ask students to locate another definition for the term *desktop* in this lesson. To reinforce how the term is used in this exercise, have students list three parts of the Vista desktop. Then, ask them to make a sketch of their desktop. On the sketch, have them label the following items: Start button, Taskbar, Desktop icon, and Notification area. Ask students where the Control Panel is located. Have students share their sketches with the class.

Step-By-Step Tip In Step 9, provide students with the name they need to key into the **Enter the object names** pane so that they can set up the remote desktop user that connect to their computer.

EXERCISE 2-6 Use a Remote Desktop Connection (Continued), p. 40

Step-By-Step Tip In Steps 16 and 18, provide students with the name of the computer to key into the **Remote Desktop Connection** dialog box, and a user name and password to key into the credentials box.

EXERCISE 2-8 Connect to a Network Computer by Mapping a Drive, p. 42

Troubleshooting Students must have their **Network Discovery** setting on in order to do this exercise. Students can turn this on by right-clicking **Network**, selecting **Properties**, and opening the **Network and Sharing** window. Under **Sharing and Discovery**, students can click **Network Discovery**, click the radio button next to **Turn on Network Discovery** and select **Apply**.

Step-By-Step Tip In Step 4, students will need to select a shared folder network folder to map to set up a shared network folder that students can use in this exercise.

NCLB/Language Arts (NCTE 3) To reinforce that mapping a network drive is creating a shortcut to a shared folder, computer, or drive, have students use the Internet to find the definition of the term *shortcut*. Have them write a paragraph in which they explain how a shortcut works to someone who has never seen one before. Ask them to mention at least three examples of other resources on a computer that people use often and how a shortcut could save them time.

EXERCISE 2-9 Connect to a Network Computer by Browsing a Network, p. 43

Teaching Tip In Exercises 2-9, 2-10, and 2-11, let students know what computers to select.

NCLB/Language Arts (NCTE 3) Use a map of the United States to explain how television networks relay a signal from a central location to stations across the nation. Show students that a computer network operates in a similar manner.

EXERCISE 2-14 Make a Web Site Available Offline, p. 48

Step-By-Step Tip If students have a default home page set up in Internet Explorer, that page will appear in Step 1.

Step-By-Step Tip In Steps 3 and 4 provide students with a Web site address that they can save offline and the location of the folder where they will save the Web page.

Step-By-Step Tip In Step 7, students may not have the menu bar open in their Windows Explorer window. Have students right-click the tabs bar, and select Menu Bar.

EXERCISE 2-17 Join an Existing Local Collaboration Session, p. 52

Teaching Tip Before starting this exercise, set up a board meeting that students can join in **Windows Meeting Space**.

NCLB/Language Arts (NCTE 5) Reinforce the importance of proper spelling. A password with errors will keep students from joining a meeting.

NCLB/Language Arts (NCTE 12) Reinforce to students that an online collaboration session is not always the best way to communicate if visuals are part of the project. Sometimes a presentation or meeting may be more effective.

EXERCISE 2-19 Display Information on an External Display Device, p. 55

Step-By-Step Tip In Step 4, tell students what network projector they should connect to.

LESSON 1, After You Read, p. 56

Review Vocabulary

1. You can access a workplace network remotely through a **[Virtual Private Network]**. (p. 37)
2. Creating a shortcut to a network resource is called **[mapping]** the drive. (p. 42)
3. You can connect to a(n) **[wireless network]** without having to connect cables. (p. 36)
4. Vista enables you to **[synchronize]** network files with files on your computer. (p. 45)
5. Synchronizing the files on your computer with network files can resolve a **[conflict]**. (p. 46)

Teaching Tip For the **Vocabulary Activity**, encourage students to arrange their crossword puzzle's with half of vocabulary terms laid out horizontally left-to-right, and the other half laid out vertically top-to-bottom. Ask students to trade crosswords with a classmate to solve the puzzles.

Answer to Vocabulary Activity Students' crossword puzzles will vary but should include all the vocabulary words in this lesson. You may want to collect the puzzles and use the definitions as an oral review or basis for a quiz game for students.

Review Key Concepts

7. Where would you go to create synchronized files on your computer? (p. 45)

A. Control Panel>Network and Internet>Shared Files.

[B. Control Panel>Network and Internet>Offline Files].

C. Control Panel>Internet Options>Offline Files.

D. Start Menu.

8. Remote Desktop Connection allows you to access which programs? (p. 39)

A. Only the programs on the taskbar.

[B. All the programs on the remote computer]

C. Internet Explorer.

D. Windows Explorer.

9. Where would you set up an external display? (p. 53)

[A. Windows Mobility Center]

B. Mobile PC

C. Appearance and Personalization

D. Ease of Access

10. Where would you configure power settings? (p. 31, 32)

A. Control Panel>System and Maintenance>System

B. Screen saver settings

C. Desktop

[D. Control Panel>System and Maintenance>Power Options]

LESSON 2 PRACTICE IT ACTIVITIES

1 Configure Power Settings, p. 57

Solution Figure 2.52 can be used as solution files for this activity.

2 Choose a Network Connection, p. 58

Step-By-Step Tip In Step 4, let students know what network connection to select.

Solution Figure 2.54 can be used as solution files for this activity.

3 Prepare a Computer for Presenting Information, p. 59

Solution Figure 2.56 can be used as solution files for this activity.

LESSON 2 You Try It Activities

4. Remotely Connect to a Network at a Workplace, p. 60

Step-By-Step Tip In Steps 6 and 7 provide students with an IP address and a user name and password.

Solution Figure 2.58 can be used as solution files for this activity.

5. Use Remote Desktop Connection, p. 61

Step-By-Step Tip In Steps 5 and 7, provide students with the name of the computer to key into the **Remote Desktop Connection** dialog box, and a user name and password to key into the credentials box.

Solution Figure 2.60 can be used as solution files for this activity.

Critical Thinking Activities, p. 62

Beyond the Classroom Activity Students should make a folder available offline and disable their network connection. With the connection disabled, they should make two changes to the files in the folder, and print out a hard copy of those changes. Then, students should reconnect to the network, synchronize the files, and resolve any conflicts. Students' documents will vary but should include a list of the steps they took to disable the network connection. The document should also include a paragraph describing some advantages to working with offline files.

Standards at Work Activity Students' documents should list the three trustworthy news sites they added to the favorites on their machine. The document should also include a short paragraph describing the reasoning behind their choices and why the sites are trustworthy.

NCLB/Language Arts NCTE (12) To reinforce the importance of using reliable, and trustworthy resources, ask students to share their trustworthy sites with the class.

21st Century Skills Activity Students should set up a meeting using **Microsoft Meeting Space**. Students' e-mails will vary, but should include three recipients and request a follow up e-mail from each recipient that includes one reason why being courteous is important in the business world. Students should accept at least one invitation to join a classmate's meeting.

Challenge Yourself Projects, p. 63

9. Make Files Available Offline

LEVEL This is an intermediate level project.

Solution Students should locate the appropriate folder and make it available offline. Then, students should map the folder and synchronize the files in the folder. Students' documents will vary, but should include a paragraph that describes how working with offline files can increase efficiency and protect files against network outages.

10. Connect to a Wireless Network

LEVEL This is an intermediate level project.

Solution Students should activate a wireless connection and check the status of the wireless connection. Students' documents will vary, but should include a paragraph that compares and contrasts the advantages and disadvantages of wireless networks.

NCLB/Language Arts (NCTE 3) To reinforce how wireless technology has changed what we as users are capable of, ask students to think of three businesses that they think use wireless networks to help make business easier. Ask them to write down the type of business and then describe how a wireless network could help that type of business. Have them share their answers with the class.

11. Use a Remote Connection

LEVEL This is an advanced level project.

Solution Using **Remote Desktop Connection**, students should double the screen saver time, change the desktop background, and configure the power settings for maximum performance. Students' documents will vary, but should identify how being able to connect to a work computer from home is beneficial to business.

NCLB/Language Arts (NCTE 4) Reinforce language arts skills by allowing students to read their paragraphs to the class.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at **glencoe.com**. You may want to download the rubrics and make them available to students as they complete each project.

VISTA LESSON 3 2007

LESSON 3 Manage Software, Disks, and Devices, p.64

☛ **21st Century Skills** Answers will vary. Students should identify how asking questions can help them accomplish a task. Encourage students to share their ideas with each other.

LESSON 1 Reading Guide, p. 65

☛ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines>Research-Based Classroom Solutions**.

EXERCISE 3-1 Create a Restore Point, p. 66

Teaching Tip The programs, ports, drivers, and printers used throughout this lesson are for reference only. Encourage students to follow your instructions before they make selections in each exercise. Or, assign or provide students with the resources they need to complete each exercise.

NCLB/Language Arts (NCTE 3) Explain to students that if they save a file and work in it for awhile without saving, their *restore point* is the saved file.

EXERCISE 3-2 Install and Uninstall a Software Program, p. 67

Step-By-Step Tip In Step 5 of this exercise, students uninstall a program. Have students select the program that you want them to uninstall from the list. You may want to have students reinstall the program when they are finished. Or, first direct students to install a program and then have them uninstall the program in this exercise.

Teaching Tip Point out to students that most programs have their own set of instructions for installation. Tell students that Vista's autoplay feature can be used to install programs from a disc. Have them insert a disc in the drive and show them how Vista will automatically start the installation process. If you wish, demonstrate how to install a program downloaded from the Internet. Explain that they must double-click the downloaded file to start the installation.

EXERCISE 3-3 Install Software Update, p. 68

Troubleshooting This process may interfere with your school's computer use policies. Your students may not be authorized to make software updates.

Step-By-Step Tip In Step 6 of this exercise, students install an update. Have students select the update that you want them to install from the list. If students cannot access updates, you may wish to demonstrate this on another computer for the entire class.

EXERCISE 3-4 Configure a Program to Use Compatibility Mode, p. 69

Teaching Tip For this exercise, **Notepad** was selected to run in compatibility mode. You may wish to select a different program for students to configure to use compatibility mode if Notepad is not installed on students' computers. Check the program that you wish to use before assigning this to students. Some programs may come up with a message that "Compatibility modes cannot be set on this program because it is a part of this version of Windows." If that is the case, select another program.

EXERCISE 3-5 Analyze the Space Available on a Hard Disk, p. 70

NCTM/Math (Measurement) Students should use a calculator to figure out how many bytes of free space their PC has left. Answers will vary, but should be calculated by multiplying the number of free gigabytes by 1,000,000,000. For example, the answer for the computer shown in Figure 3.10 is $40.8 \times 1,000,000,000$, or 40,800,000,000 bytes. If students' calculators can not handle numbers this large, have them click Start>All Programs>Accessories>Calculator.

EXERCISE 3-6 Determine if a Hard Disk Is Partitioned, p. 71

NCTM/Math (Measurement) The answer is six. Encourage students to fold the paper in different ways. Point out to the students that the more parts the paper is divided into, the smaller each part becomes.

EXERCISE 3-7 Check the Hard Disk for Problems, p. 72

Step-By-Step Tip In Step 3, select a drive other than the **C:** or **OS** drive. If you wish, you may want to create dummy drives for these exercises because a disk that is in use cannot be checked.

EXERCISE 3-7 Check the Hard Disk for Problems (Continued), p. 73

Step-By-Step Tip In Step 9, explain to students that they can automatically repair problems with files and folders when they select **Automatically fix file system errors** check box. Otherwise, the disk check will report problems but not fix them. To perform a thorough disk check, they must select the **Scan for and attempt recovery of bad sectors** check box, which will find and repair physical errors on the hard disk itself. However, to check for both file errors and physical errors, they should select both check boxes.

Teaching Tip If the scan shows any errors that need attention, give students instructions to check in with you before moving on to the next exercise.

NCLB/Language Arts (NCTE 5) Students should write a paragraph instructing a classmate how to maintain a machine. Students may choose a wide variety of machines. Ask students to consider the different complex machines they use on a regular basis – such as bikes, cars, iPods, cell phones, etc.

EXERCISE 3-8 Enable and Disable Devices, p. 74

Troubleshooting In order to complete this exercise and Exercise 3-9 and 3-10 as written, student PCs will need to be connected to a printer.

EXERCISE 3-9 Update a Device Driver, p. 75

Troubleshooting If students do not have printer ports on their PCs, they can update the keyboard or mouse drivers.

EXERCISE 3-10 Change a Driver to a Previous Version, p. 76

Step-By-Step Tip In Step 6, students must select a driver that has already been updated. If they do not, the **Roll Back Driver** option will not appear.

EXERCISE 3-11 Remove PC Cards and USB Devices, p. 77

Troubleshooting Students will need an external storage device to complete this exercise.

NCLB/Language Arts (NCTE 1) For this exercise, make sure students know that *PC (personal computer) cards* and *USB (universal serial bus) devices*, are small devices used to store information. They plug into the computer so that you can copy information to or from them, which makes it easy to share and transport information. Encourage students to go online to learn more about PC cards and USB devices.

EXERCISE 3-12 Adjust Display Resolution and Color Depth and Display Refresh Rate, p. 78

Teaching Tip Let students know in computer graphics, *screen refresh rate* refers to the frequency at which the screen is redrawn. They should also know that *color depth* refers to the number of color values that can be assigned to an individual dot of color in an image. Color depth ranges from 1 bit (black and white) to 32 bits (over 16.7 million colors). A *bit*, which is short for *binary digit* is the smallest unit of storage in digital computing and communications systems. If you wish, have students go online to find more information about all three terms.

Teaching Tip Default settings in these dialog boxes will vary greatly depending on the size and type of monitors being used. Caution students not to pick a setting that their monitors cannot handle. Encourage them to find the settings that are most comfortable to them.

Troubleshooting Student dialog boxes may look different from Figure 3.26. Students may not have the screen refresh rate drop down arrow. Students can still complete the rest of the steps.

Step By Step Tip In Step 8, point out to students that they can click **Apply** if they want to keep the dialog box open to make additional changes. If they want to keep the display settings, tell students to click **Yes** in the settings confirmation dialog box. Otherwise, tell them to click **No**.

Step By Step Tip In Step 9, show students how the changes they have selected look on the monitor. If you wish, ask students to click **Yes** in the **Display Settings** box and then have them repeat the steps to restore the original settings. Ask students how these changes could help improve the computer's accessibility.

EXERCISE 3-13 Adjust Icon Size, p. 79

NCTM/Math (Measurement) To reinforce the definition of pixels and how to determine the number of pixels in a screen resolution ask students to calculate the number of pixels in an 800 × 600 display? Then, ask them to calculate how many pixels are in a 1280 × 1024 display.

EXERCISE 3-14 Adjust Monitor Resolution on a Secondary Monitor, p. 80

If you wish, show students how to determine if their video card supports multiple monitors by looking at the back of a computer to see if the card has two video ports for connecting monitors. Tell students that they know the make and model of the video card that their computer has, they can also check the video card manufacturer's Web site to determine if the card supports multiple monitors. Some video cards might also include a special cable that splits a single connector into two.

EXERCISE 3-15 Extend Monitor Resolution onto a Secondary Monitor, p. 81

Step-By-Step Tip In Step 7, let students know what monitor to select as their primary monitor.

EXERCISE 3-16 Install a Local Printer, p. 82

Step-By-Step Tip For Step 6, tell students what printer port to select. In Step 8, tell students what printer driver to install.

EXERCISE 3-17 Install a Network Printer, p. 84

Troubleshooting Students must be connected to a network to do this exercise.

Teaching Tip For this exercise, tell students what printers to select, and provide a Printer name for students in Step 6.

EXERCISE 3-18 Share a Printer on a Network, p. 85

Teaching Tip For this exercise, tell students what printers to select, and provide a name for students to key into the Share name box in Step 9.

EXERCISE 3-19 Make Printer Drivers Available for Other Operating Systems, p. 86

Teaching Tip For this exercise, tell students what drivers in Step 7.

After You Read, p. 87

Review Vocabulary

1. You can remove PC cards and USB devices while your computer is running by using the **[Safely Remove Hardware]** feature. (p. 77)
2. Programs that were designed for older versions of Windows can be run in **[compatibility mode]**. (p. 69)
3. Use the display settings dialog box to select a(n) **[primary]** monitor. (p. 80)
4. A(n) **[Driver]** allows your devices to work with your computer's operating system. (p. 75)
5. You can enable or disable devices in the **[Device Manager]**. (p. 74)

Answer to Vocabulary Activity Students should create a document that lists all the vocabulary terms called *terms* and copy it to the *Terms* folder on the the network. Students' definitions will vary, but they should also create a document that contains only the vocabulary definitions of the (called *definitions*) and copy it to the *Definitions* folder on the network. Students should follow your instructions for synchronizing a classmate's files.

Review Key Concepts

7. What can you do if an updated driver causes system problems? (p. 76)
 - A. Scan the hard disk.
 - B. Download an updated driver with Windows Update.
 - C. Nothing.

[D. Roll back the driver].

8. Where would find out if your hard disk is partitioned? (p. 71)
 - A. In the Computer Management folder.
 - B. In the Device Manager.

[C. In the Disk Management folder].

- D. Windows Explorer.

9. Where would you set the display's color depth? (p. 78)

[A. Display Settings dialog box]

- B. Device Manager
- C. Appearance and Personalization
- D. Monitors folder

10. Windows Vista is what kind of software? (p. 66)

- A. Windows compliant
 - B. An office suite
- [C. An operating system]**
- D. A device driver

LESSON 3 PRACTICE IT ACTIVITIES

1. Create a Restore Point, p. 88

Troubleshooting Select a device that will install a driver that requires the computer to be restarted. That will ensure that students can complete the activity.

Solution Students should have created a restore point names Second Maunal Restore Point.

2. Configure a Program for Compatibility Mode, p. 89

Solution The solution file for this activity is **Figure 3.46**.

3. Update a Device Driver, p. 90

Teaching Tip Assign students a device so that they can update the driver software.

Solution Solutions will vary. Students should have updated the driver software for a device on their PCs.

LESSON 3 YOU TRY IT ACTIVITIES

4. Install a Local Printer, p. 91

Teaching Tip For this activity, tell students what port and printers to select.

Solution The solution file for this activity is **Figure 3.50**.

5. Change the Default Printer, p. 92

Solution The solution file for this activity is **Figure 3.52**.

Critical Thinking Activities, p. 93

Beyond the Classroom Activity Students' displays will vary, but they should make adjustments so that the desktop display is more comfortable for them. If you wish, have students take a screen shot of their computer screen to show their customized desktop. Students' documents will vary, but should include a paragraph that describes the changes they made and why the settings are the most optimal for their use.

Standards at Work Activity Students' documents will vary, but should include the number of hard disks on their machine, the number of volumes each disk has, how much free space is in each volume, and the total amount of free space on the hard disks.

21st Century Skills Activity Students' scan results will vary, but they should share the results of with you. If you wish, have them open a Word document and list any errors that were found.

Challenge Yourself Projects, p. 94

9. Look Ahead

LEVEL This is an intermediate level project.

Teaching Tip Before starting the activity, provide students with a viewer program to install. If you wish, have students uninstall the program when they are finished with the activity.

Solution Students should determine the size of the program, check the free space on the hard disk, and install the program. Students' documents will vary, but should include a paragraph explaining why it is important to find out what is taking up space on your hard drive before installing any programs and what could happen if you did not.

10. Configure Compatibility

LEVEL This is an intermediate level project.

Solution Students should configure the viewer to run in compatibility mode for Windows XP. Students' documents will vary, but should include a paragraph that describes the steps they took to configure the program to work in compatibility mode.

NCLB/Language Arts (NCTE 5) Encourage students to go online or to use Microsoft Windows Vista Help to learn more about why compatibility between programs is important to businesses. Encourage them to explore why some compatibility problems might be caused by drivers. Then, ask students to share their answers with the class.

11. Set Up Printers

LEVEL This is an advanced level project.

Teaching Tip Give students the information about the printer location so they can install a network printer.

Solution Students should install a network printer, run the program, and print a sample document to check the program and printer connection. Students' documents will vary, but should include a paragraph that describes how installing additional drivers for a shared network printer might be important for business owners and employees.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at glencoe.com. You may want to download the rubrics and make them available to students as they complete each project.

VISTA 2007

LESSON 4 Manage Files and Folders, p.95

☛ **21st Century Skills** Answers will vary. Students should identify a decision that they made recently that showed good judgment. Encourage students to share their answers with the class.

LESSON 1 Reading Guide, p. 96

☛ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines**>**Research-Based Classroom Solutions**.

EXERCISE 4-1 Show and Hide File Extensions, p. 97

Troubleshooting For this Vista lesson, have students copy and paste the data files **Access file.accdb**, **Excel file.xlsx**, **Outlook file.pst**, **PowerPoint file.pptx**, and **Word file.docx** to the **Documents** folder on the **C:** drive. Check that students know how to locate their file folders and where to save their data files.

Teaching Tip Point out to students that Microsoft Office XP's **My Documents** folder has been replaced by the **Documents** folder in Vista. Make sure students know that there may be other files in their **Documents** folder.

NCLB/Language Arts (NCTE 8) Ask students to list the file extensions for the data files that they added to their computer in this exercise. Encourage students to go online or to use Microsoft Windows Vista Help to learn more about a file name extension helps them to understand what kind of information is in a file and what program will open it. Ask students why they think it is called an extension (it appears at the end of the file name). Ask students what the extension in the file name *myresearchreport.txt* tells them about the file (the file is a text file that can be opened by programs associated with that extension, such as WordPad or Notepad, and it is a research report).

EXERCISE 4-2 Show and Hide Protected Operating System Files, p. 98

Teaching Tip Direct students to look at the **Windows** folder in their **C:** drive to see the changes that occur when they opt to show the hidden protection operating system files. If you wish, point out the differences and show students what the Windows folder would look like if they went back to their original settings.

EXERCISE 4-3 Show Hidden Files and Folders, p. 99

Teaching Tip Direct students to look at the **Windows** folder in their **C:** drive to see the changes that occur when they opt not to show the hidden files and folders. If you wish, point out the differences and demonstrate what it would look like if they changed their settings to show hidden files and folders.

EXERCISE 4-4 Configure Windows Explorer Layouts, p. 100

Step-By-Step Tip In Step 1, when students open Windows Explorer, they will see the contents of their documents folder.

EXERCISE 4-9 Configure the NTFS Permissions of a Folder, p. 105

NCLB/Language Arts (NCTE 7) Let students know that *NTFS (New File Technology System)* is the standard file system used by Windows to format computer hard disks so they can store information. Encourage students to go online to find more information about the NTFS file system and about its predecessor, the FAT file system. Have them share their research with the class.

EXERCISE 4-9 Configure the NTFS Permissions of a Folder (Continued), p. 106

Step-By-Step Tip In Step 17, ask to students to note how the icon's appearance has changed.

EXERCISE 4-13 Search for Files and Folders using a Virtual Folder, p. 111

Teaching Tip The .jpg image that appears in Figure 4.30 is a sample picture included with Vista. If students do not have this file on their machine, provide them with a .jpg file of a tree and ask them to save it in their **Documents** folder with the other data files.

EXERCISE 4-14 Search for Files and Folders Using Wildcards, p. 112

Teaching Tip Make sure students know what the files and folders the *note.?* search will look for. Ask them what the **.jpg* search will look for.

Step-By-Step Tip In Steps 3 and 5, point out to students that as soon as they key text into the Search box, the current view of the folder is filtered to reflect what they have keyed in. They do not need to press Enter because the searching occurs automatically with each character they type.

Troubleshooting Tell students that their search results will be different from what they see in Figures 4.31 and 4.32 because they will have different files and folders saved on their computer.

EXERCISE 4-18 Change the Files and Folders Are Displayed within Folders, p.116

NCLB/Language Arts (NCTE 8) Ask students talk about why they may want to resize their icons. Encourage them to explain how this can help students with visual impairments identify their files. Encourage students to go online to find more information accessibility and about other Windows settings that can help users that are differently-abled. For example, Windows offers settings for using text or visual alternatives to replace sounds in many programs. Have them share their discoveries with the class.

EXERCISE 4-19 Display and Hide File and Folder Details, p. 118

Step-By-Step Tip In Step 2, explain to students that they should click the Views button, not the View menu. Views appears on the larger toolbar. The View menu is used in Step 3.

Step-By-Step Tip In Step 5, explain to students that a file or folder's attributes specify the way in which the file or folder is treated by the operating system. For example, a *Read-only* file attribute, tells you that the file or folder is read-only, which can help to protect a document from accidental changes in a multi-user or network environment. A *Hidden attribute* tells you that the file is hidden, or not included in the ordinary directory. The Hidden attribute is also used to protect files that you may not want deleted or modified. Other file and folder attributes include *Archive*, *System*, *Temporary*, and *Compressed*.

EXERCISE 4-20 Group, Sort, and Stack Files by Details, p.119

Teaching Tip Be sure students know that the **Stack By** command stacks, or piles, a collection of related files, or files that have common file properties on top of each other. For example, here the files are stacked by file name. Point out to students that they can also stack files by author, size, type, or tag.

Figure 4.47

EXERCISE 4-20 Group, Sort, and Stack Files by Details (Continued), p.120

Step-By-Step Tip In Step 11, point out to students that the Documents folder file list is sorted in descending order by file size.

EXERCISE 4-24 Copy Data Files to a CD or DVD, p. 124

Step-By-Step Tip In Step 5, if students do not have a Main User folder, have them select their own user folder.

Troubleshooting Students will need a CD/DVD writer and a CD or DVD to complete this exercise. Check that students know how to locate their CD/DVD drive and that they know which files to copy (especially if students have a lot of files in their **Documents** folder).

EXERCISE 4-24 Copy Data Files to a CD or DVD, p. 124

Troubleshooting Students must have shadow files for this exercise to work. If students do not have shadow files, have them create one.

EXERCISE 4-26 Schedule Backups, p. 126

Troubleshooting In order for students to be able to change the settings in the **Backup and Restore Center**, a backup has to have been run already. In Step 3, if students do not see **Change Settings** as an option, have them click **Back up files** and move on to Step 6.

After You Read, p. 131

Review Vocabulary

1. A DVD is an example of a removable **[medium]**. (p. 125)
2. A(n) **[wildcard]** is a character that can be used to represent any number or letter in a search. (p. 112)
3. You can use a **[folder shortcut]** to navigate directly to a specific folder from the Start menu. (p. 103)
4. You can restore individual files using backup copies or a **[shadow copy]**. (p. 130)
5. You can determine who has access to your shared folders by setting **[permissions]**. (p. 105)

Answer to Vocabulary Activity Students should create a folder labeled Vocabulary on their hard disk and set it to be a shared folder. Within the shared folder, students should create a folder for each vocabulary term and label it with that term. Students should navigate to their classmate's shared folder and create a separate Word file for each vocabulary word's definition.

Review Key Concepts

7. What is metadata? (p. 121)
 - A. Secret information embedded in a file.
 - [B. Information added to the properties of a file.]**
 - C. Information about a file's address.
 - D. Your name and personal information.
8. What is the folder called that displays your search results? (p. 111)
 - A. A shared folder
 - B. A Boolean operator
 - [C. A virtual folder]**
 - D. A search folder
9. Which of the following are file extensions? (p. 97)
 - A. Documents/Music files/Picture files/Video files
 - [B. .jpg/.mov/.mpg/.acddb]**
 - C. Documents/Music/Photos/Data
 - D. Documents/Pictures and Videos/Music Details/Music icons

LESSON 4 PRACTICE IT ACTIVITIES

1. Show and Hide File Extensions, p. 132

Solution If you wish, have students take a screen shot of their computer screen to show their hidden file extensions.

2. Change the Way Files Are Displayed within Folders, p. 133

Solution If you wish, have students take a screen shot of their computer screen to show icons.

3. Group, Sort, and Stack Files by Details, p. 134

Solution If you wish, have students take a screen shot of their computer screen to the changes that they made.

LESSON 4 You Try It Activities

4. Remove Properties and Personal Information from a File, p. 135

Solution If you wish, ask students to send the **Copy.docx file** to your e-mail address so that you can verify that the properties were removed.

5. Copy Data Files to a CD or DVD, p. 136

Solution Students' discs should contain the **Access file.accdb** data file.

Critical Thinking Activities, p. 137

Teaching Tip For the Beyond the Classroom Activity, let students know whether they should back up all their files to a network location or a CD or DVD.

Beyond the Classroom Activity Depending on how you ask them to back up files, students' files may be backed up to a network location or to a CD or DVD. Students' documents will vary, but should include a paragraph that describes why it is important to back up the files on a computer on a regular basis. Have students share their paragraphs with the class.

NCLB/Language Arts (NCTE 4) Reinforce language arts skills by allowing students to read their paragraphs to the class.

Standards at Work Activity Students should create a shortcut to the Vocabulary shared folder that they created in the lesson's Vocabulary Activity. Then, they should add the shortcut to the Start menu.

Teaching Tip For the 21st Century Skills Activity, assign each student three classmates so that they can set permissions for a shared folder.

21st Century Skills Activity Students should set the permission on their shared folder to allow you full, unrestricted access. They should allow the group of classmates assigned to them to view the contents of the folder. If you wish, ask students to access other classmates' folders.

Challenge Yourself Projects, p. 138

9. Protect Files

LEVEL This is an intermediate level project.

Teaching Tip For project 9, let students know where to backup their files to the network.

Solution Students should schedule an automatic backup of their **Documents** folder to a network location that you have specified. Students' documents will vary, but should list at least three examples of commonly used folders that a business might want easily accessible. Their document should also include a paragraph that describes how shortcuts to commonly used folders can increase productivity. Ask students to share their ideas with the class.

10. Set Permissions

LEVEL This is an intermediate level project.

Teaching Tip Students should set the folder they created in the Project 9 to permission only for you. Students' documents will vary, but should include a paragraph that describes how setting permissions helps to protect against unwanted changes and comments. Students should also identify three types of information a business might want to restrict access to in order for the business to remain successful.

NCLB/Language Arts (NCTE 5) To reinforce the importance of permissions, ask students to open a Word document and key a memo they would send to coworkers to explain why the company they work for wants to restrict access to these three types of information and what could happen if it did not. Encourage students to share their memos with the class.

11. Hide Files

LEVEL This is an advanced level project.

Teaching Tip Students should hide the files in the folder they created in the Project 9 and change the Windows Explorer settings so that they can view hidden files. Students' documents will vary, but should include a paragraph that explains why it is important to ensure that they are the only person who has the control to view hidden files.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at glencoe.com. You may want to download the rubrics and make them available to students as they complete each project.

VISTA 2007

LESSON 5 Customize Windows Vista, p.139

☛ **21st Century Skills** Answers will vary. Students should identify three valuable resources that they have access to at school or at work, and describe what would happen if they didn't have access to the resources. Encourage students to share their ideas with the class.

LESSON 1 Reading Guide, p. 140

☛ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines>Research-Based Classroom Solutions**.

EXERCISE 5-1 Customize the Start Menu, p. 141

Step-By-Step Tip In Step 7, point out to students the **Customize** button is only active for the selected **Start menu** style.

EXERCISE 5-2 Pin and Unpin Items in the Start Menu, p. 141

NCLB/Language Arts (NCTE 3) Ask students to consider the terms used to describe various computer functions. Use visual examples to show the metaphorical relationship between actual objects and their counterparts on student's computer screens. Student's answers may include such common computer terms as desktop, folder, file, window, and tools.

EXERCISE 5-8 Change the Appearance of a Computer, p. 150

Teaching Tip In Step 3, have students make note of the setting before they change the color scheme to Windows Standard. If you wish, have them write the setting down on a piece of paper.

EXERCISE 5-10 Change the Sound Settings, p. 152

Troubleshooting Students' computers will need a sound card in order to complete this exercise. If students' computers do not have a built-in sound card, you may want to have them install one.

Step-By-Step Tip In Step 6, point out to students that this is the sound that they will hear when a removable device, such as a USB device, mouse, PDA, or digital camera, is added or connects to the computer. Ask students why they think this feature might be helpful. If you wish, in Step 8, have students connect a device, such as a PDA, digital camera, or USB drive, so that they can hear the sound play in this exercise.

NCLB/Language Arts (NCTE 3) To reinforce the importance of accessibility and accessible technology, ask students to describe how this tool could be used to help people with difficulties and impairments. Have them share their answers with the class.

EXERCISE 5-12 Change the Mouse Settings, p.154

Step-By-Step Tip In Step 3, point out all the pointer options in the **Mouse Properties** dialog box.

Troubleshooting Let students know that the **Mouse Properties** dialog box may look different from what they see in Figure 5.28, depending on the mouse that they have installed on their machine.

Teaching Tip Ask students to describe how the **Visibility** change they made in this exercise can be a useful tool. Ask them to explain how **Mouse Properties** can be used to improve accessibility for visually impaired students. (See choices on Pointers tab.)

EXERCISE 5-13 Display and Configure the Windows Sidebar, p. 155

Troubleshooting Point out to students that most of the functions of the **Sidebar** can be controlled through the **Sidebar** icon in the **Notification area**. To remove the icon and shut down the **Sidebar**, show students that they would right-click the icon and select **Exit**. If the **Sidebar** is already running before students begin this exercise, have them shut it down using this method so that they can do the exercise.

EXERCISE 5-14 Download and Install a Gadget, p. 156

Teaching Tip In this exercise, students are directed to download and install a gadget from the Internet at **Microsoft Windows Live Gallery**.

EXERCISE 5-14 Download and Install a Gadget (Continued), p. 157

Troubleshooter If students do not download and install the **Picture Puzzle** gadget, let them know that their screen will look different than Figure 5.33.

NCLB/Language Arts (NCTE 7) Remind students that the ability to follow instructions is essential to being able to communicate effectively with others. Explain to students that following instructions will help them in school and in the business world as well. Ask students to think of three examples of when the ability to follow instructions could be vital to their success in school or in the business world. Have them share their answers with the class.

After You Read, p. 158

Review Vocabulary

1. A clock is an example of a(n) **[gadget]** that can be added to the Windows Sidebar. (p. 153)
2. You can configure a program to run automatically when Windows Vista starts by putting it into the **[Startup folder]**. (p. 144)
3. The **[Start menu]** is where the majority of the programs in Vista are launched. (p. 141)
4. You can **[pin]** applications to the Start menu in order to make them easily accessible. (p. 143)
5. You can **[associate]** a sound with an action, which will result in the sound being played when the action is performed. (p. 152)

Answer to Vocabulary Activity Word searches will vary, but all should include definitions and use eight of the vocabulary words from the lesson.

Review Key Concepts

7. How do you display the Quick Launch toolbar? (p. 145)

A. Start>Control Panel>Quick Launch

[B. Right-click the Taskbar and select Toolbars>Quick Launch]

C. Start>Control Panel>Personalize>Quick Launch

D. Select Quick Launch in the Start Menu

8. How do you move the Taskbar? (p. 147)

A. Control Panel>Personalization>Taskbar and Start Menu.

[B. Drag it to a new location.]

C. Right-click and drag the Taskbar to a new location.

D. Right-click and select Move Taskbar.

9. How do you change the screen saver? (p. 153)

[A. In the Personalization folder, click Screen Saver.]

B. In the Control Panel, click Screen Saver.

C. Right-click on the desktop and select Screen Saver.

D. Right-click the Taskbar and select Screen Saver.

LESSON 5 PRACTICE IT ACTIVITIES

1. Add a Toolbar to the Taskbar, p. 159

Solution If you wish, have students take a screen shot of their computer screen to show their **Links** toolbar. Use Figure 5.36 as a solution file.

2. Change the Appearance of your Screen, p. 160

Troubleshooting Remind students to make note of the original settings.

Solution If you wish, have students take a screen shot of their computer screen to show the Windows Classic appearance setting. Use Figure 5.38 as a solution file.

3. Change the Sound Settings, p. 161

Troubleshooting If students do not have the correct sound, have them substitute a different sound.

Solution If you wish, send each student an e-mail and then have them check their e-mail for new messages so that they can hear the changes they made to the **Sound** settings.

LESSON 4 You Try It Activities

4. Change the Screen Saver, p. 162

Solution If you wish, watch students click the Preview button so that you can verify that the Screen Saver was changed.

5. Change the Mouse Settings, p. 163

Solution If you wish, watch students in Steps 8 and 9 so that you can verify that the Mouse settings were changed.

Critical Thinking Activities, p. 164

Beyond the Classroom Activity Students' documents will vary, but should list the changes that were made to their desktop and describe why they made the changes and how the changes will increase their efficiency. Encourage students to take a screen shot of their desktop so that they can share their changes with the class.

Teaching Tip For the **Standards at Work Activity**, assign students a network folder location for their gadgets folder.

Standards at Work Activity Students should download and save three gadgets in a network folder. Students' documents will vary, but should include a paragraph that explains why the Gadgets Gallery might be useful in the newspaper business.

NCLB/Language Arts (NCTE 4) Reinforce language arts skills by allowing students to read their paragraphs to the class.

21st Century Skills Activity Students should set the mouse pointer options so the pointer is as visible as possible. Students should adjust the speed of the mouse to make it move as far as possible with the least amount of effort. If you wish, ask students to demonstrate the new settings for other classmates.

Challenge Yourself Projects, p. 165

9. Modify Quick Launch Toolbar

LEVEL This is an intermediate level project.

Solution Students' documents should discuss why the shortcuts are valuable in the workplace and why they think these three programs are used more often than others.

10. Configure Programs

LEVEL This is an intermediate level project.

Solution If you wish, ask students to take a screenshot of the desktop when **Windows Vista** starts. Students' documents will vary, but should include a paragraph that explains why checking e-mail and calendar appointments regularly is critical in today's workplace.

NCLB/Language Arts (NCTE 5) Encourage students to share their paragraphs with the class. To reinforce business etiquette, ask students to think about the impression they may have on someone who doesn't know them if they do not return e-mail or phone messages in a timely manner. Have them explain how this might affect a job opportunity. If you haven't read your e-mail messages, for example, you may be giving a potential employer the impression that you are no longer interested in a job that you interviewed for.

11. Convert Currency

LEVEL This is an advanced level project.

Teaching Tip Students should download and install a currency converter gadget. Students' documents should list the following conversions from cost in U.S. dollars to cost in Japanese yen.

NCTE/ Math (Measurement) To reinforce how to calculate the conversions of U.S. dollars to current foreign exchange rates, ask students to find the current foreign currency exchange rates for Australia, Russia, and Sweden. Ask students which currency is the closest to the U.S. dollar. Encourage them to find a fourth conversion for a country that they would like to visit. Have them share their rates with the class and explain why they picked the country.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at glencoe.com. You may want to download the rubrics and make them available to students as they complete each project.

VISTA 2007

LESSON 6 Optimize and Troubleshoot, p.166

☛ **21st Century Skills** Answers will vary. Students should explain how they know when they are using a reliable resource and describe how they find a valid resource on the Internet. Encourage students to share ideas.

LESSON 1 Reading Guide, p. 167

☛ For English Learner activity suggestions, visit the **Teacher Center** for this book at the **Online Learning Center**. Choose **Program Resources and Guidelines>Research-Based Classroom Solutions**.

EXERCISE 6-1 Use Windows ReadyBoost, p. 168

Teaching Tip Students will need some form of removable media to complete this exercise. Provide students with a CD, DVD, or removable memory card. Check that students know how to locate their CD/DVD drive or that they know how to use the removable memory card.

Troubleshooting If the **AutoPlay** dialog does not automatically open for students, have them reset the **AutoPlay** default settings. In the **Control Panel**, select **Hardware and Sound**. Click **AutoPlay**. Under **Choose what happens when you insert each type of media or device**, check **Use AutoPlay for all media and devices**. At the bottom of the window, click **Reset all defaults**. Click **Save**. Students will then be ready to connect the removable media and follow the steps.

Step-By-Step Tip In Step 2, point out to students the Secure Digital Device (F): drive shown in Figure 6.1. Explain to students that the letter of the drive that appears on their screen will depend on what kind of device they have and what port they plug into.

EXERCISE 6-2 Manually Defragment a Hard Disk, p. 169

Step-By-Step Tip In Step 5, students are required to have access to the administrator's log in to the computer. Students will need the Administrator password to enter into the User Account Control dialog box.

Step-By-Step Tip In Step 6, students may see a **Disk Defragmenter: Defragment Now** dialog box. If they do, have them select the proper disk and click **OK**. Students can then continue on with Step 6.

Teaching Tip Explain to students that they should not use their computer during the defragmentation process. Defragmentation can take several minutes to a few hours to complete, depending on the size and degree of fragmentation of the hard disk. You may opt to have students choose **Cancel** in Step 6, to avoid having them actually defragment the hard drive.

NCTM/Math (Measurement) If you wish, give a visual demonstration of how defragmenting can free up space without actually removing any content. Ask students to explain the difference between disk defragmentation and disk cleanup.

EXERCISE 6-4 Use Windows Help and Support and Knowledge Base, p. 171

Teaching Tip This exercise will send students online. Students need access to an Internet connection to complete this exercise.

Troubleshooter In Step 2, let students know that some computer manufacturers alter the appearance of this screen by adding their own logo and information.

Teaching Tip The **Windows Help and Support** dialog box may look different depending on the computer manufacturer's settings.

EXERCISE 6-5 Learn the CPU and Page File Usage of a Computer, p. 173

NCLB/Language Arts (NCTE 3) Point out to students that *page file memory* is virtual memory that can be used in addition to the physical RAM, or *Random Access Memory*, that exists on the computer's hard disk. Tell students that the RAM fills up with the code for both the applications running as well as the documents being edited. Not all of the data in RAM is actively being used, so the system can decide to set some temporarily "off to the side" until it needs it again. That data gets put out in the page file on hard disk. When the data or code is required again, it will be swapped out with something else.

Step-By-Step Tip If you wish, in Step 4, have students explore some of the advanced performance information tools by having click on the other Advanced Tools options.

Teaching Tip Show students that they can also open the **Task Manager** by pressing **CTRL + ALT + DELETE** and choosing **Start Task Manager**.

NCTM/Math (Measurement) Remind students that a *megabyte*, or MB, is a unit of information or computer storage that equals 1,000,000 bytes. Encourage students to share how much page file memory is in use on their computer.

EXERCISE 6-8 Learn the System Performance Rating of a Computer, p. 176

Troubleshooting Tell students that if their computer already has a Windows Experience Index base score, they can click **Update my score** in the **Rate and improve** screen to have their computer rated again. This option allows you to update the rating after a computer has been upgraded.

EXERCISE 6-9 Find the IP Configuration of a Computer, p.177

NCLB/Language Arts (NCTE 8) To reinforce how an IP configuration works, encourage students use **Windows Help and Support** or have them visit <http://whatismyipaddress.com> to learn more about how an IP address works. Ask them to open a Word document and key a paragraph that explains why they might need to know their IP address. Ask them to include at least three examples. Have them share their paragraphs with the class. Ask students if they can explain why an IP address is sometimes called a *dotted quad*.

EXERCISE 6-10 Ping a Computer to Ascertain Connectivity Status, p. 178

Step-By-Step Tip In Step 3, provide students with an IP address to key into **Command Prompt** window so that they can ping a computer for connectivity status.

EXERCISE 6-12 Identify and Terminate Unresponsive Programs, p. 181

Step-By-Step Tip If students have a default home page set up in Internet Explorer, that page will appear in Step 2.

Teaching Tip Students may not have a program that is non-responsive during this exercise. If that is the case, students can still follow the steps to close a program that is running.

Teaching Tip Let students know that if a program stops responding and they have important work that they want to keep, it might be better to wait a few minutes and let Vista try to fix the problem first before ending the program with the **Task Manager**.

EXERCISE 6-13 Repair Software Installation, p. 182

Teaching Tip In Exercise 6-13, students repair a software installation. You may want to install a small program on students' machines before they begin the exercise. Or, you may wish to demonstrate this on another computer for the entire class.

EXERCISE 6-14 Check the Status of a printer, p. 182

Teaching Tip For this exercise, tell students what printer to select in Step 4.

EXERCISE 6-16 Restore a Computer to a Previous Point, p. 186

Teaching Tip Point out to students that **System Restore** will shut down the computer during the restore process and re-initialize files and settings. Remind students that they should not attempt to power up or use the computer during this process. Then, have students log on as they would normally when the system restarts.

EXERCISE 6-17 Repair the Windows Vista Installation, p. 187

Step-By-Step Tip In Step 5, make sure students know what password to key into the **Password** box.

EXERCISE 6-20 Repair the Windows Vista Installation, p. 190

Step-By-Step Tip In Step 7, let students know that clicking **Next** will automatically open the e-mail message in Outlook. The default invitation will appear. Students do not need to key anything into the body of the message.

EXERCISE 6-21 Disable Remote Assistance Invitations, p. 192

Troubleshooting Students must complete Exercise 6-20 immediately before completing Exercise 6-21.

Teaching Tip Assign students e-mail partners so they can send each other invitations in this exercise.

After You Read, p.193

Review Vocabulary

1. **[ReadyBoost]** helps to increase your computer's speed by temporarily storing files on a removable storage device. (p. 168)
2. The Task Manager can help you terminate programs that have become **[unresponsive]**. (p. 181)
3. Print jobs that have been sent from your computer but are not yet printed are in the **[print queue]**. (p. 183)
4. In order to have access to a network, you must first **[establish]** a connection to the network. (p. 179)
5. You can request help with your computer from specific individuals by sending a(n) **[Remote Assistance Invitation]**. (p. 188)

Answer to Vocabulary Activity Students' documents will vary, but should include the abbreviations for CPU (Central Processing Unit), IP (Internet Protocol), and RAM (Random Access Memory), and the definition of each term. They should also find eight other vocabulary terms that have abbreviations and write them out the same way as the original three, including their definitions.

Review Key Concepts

7. What utility would you use to request remote help? (p. 188)
 - A. Remote Control Settings
 - B. Remote User Assistance
 - [C. Remote Assistance Invitation]**
 - D. Remote Desktop Connection
8. Where would you terminate nonresponsive programs? (p. 181)
 - A. User Account Control
 - [B. Task Manager]**
 - C. Device Manager
 - D. Windows Explorer
9. Where would you enter the command to ping a computer? (p. 178)
 - A. Network and Sharing Center
 - B. Command window
 - C. System and Maintenance
 - [D. Command prompt]**
10. How do you start Vista in Safe Mode? (p. 185)
 - [A. Press [F8] at startup]**
 - B. Select Advanced Boot Options in Start Menu
 - C. Restart in Task Manager
 - D. Select Safe Mode in System folder

LESSON 6 PRACTICE IT ACTIVITIES

1. Learn the CPU and Page File Use of a Computer, p. 194

Solution If you wish, have students take a screen shot of their computer screen to show their CPU and **Page File** usage. Or, have students open a Word document and key the usage figures.

2. Display the Amount of RAM and the Processor Speed, p. 195

Solution If you wish, have students take a screen shot of their computer screen to show their amount of **RAM** and **Processor** speed. Or, have students key the figures into the Word document that they created for Practice Activity 1.

3. Discover the Status of a Printer, p. 196

Teaching Tip For this activity, tell students what printer to select in Step 4.

Solution If you wish, have students take a screen shot of their computer screen to display the status of their printer. Or, use Figure 6.56 as a solution file.

LESSON 4 You Try It Activities

4. Enable and Disable a Network Connection, p. 197

Teaching Tip For this activity, tell students what network connection to select in Step 5.

Solution If you wish, watch students in Steps 6 and 7 so that you can verify that they enabled the connection. Or, use Figure 6.58 as a solution file.

5. Ping a Computer to Check Connectivity, p. 198

Teaching Tip Assign students a partner so they can ping each others computers in this activity. Or, provide each student with an IP address to ping.

Solution If you wish, watch students in Steps 3 and 4 so that you can verify that they pinged a computer successfully.

Critical Thinking Activities, p. 199

Teaching Tip For the **Beyond the Classroom Activity**, pair students so that they can send Remote Assistance Invitations to each other.

Beyond the Classroom Activity Students' documents will vary, but should list the processor speed, amount of RAM, and IP address of their assigned partner's computer. Students' documents should also include a paragraph that defines each of the bulleted items in this activity.

Standards at Work Activity Students should find the system performance rating of their computer and then search the Internet for software that meets the rating number that suggests that it will work properly with their system. Students' documents should list the titles of at least three compatible programs and their ratings numbers.

21st Century Skills Activity Students should use the Internet to find three tips or criteria for evaluating a Web page. Students' Word documents will vary, but should include a paragraph about what they learned about finding resources on the Internet. If you wish, ask students to share their answers with the class.

NCLB/Language Arts (NCTE 4) Reinforce language arts skills by allowing students to read their paragraphs to the class.

NCLB/Language Arts (NCTE 8) Have students share the tips that learned about finding reliable resources. Ask them to list Web sites that meet the criteria. Demonstrate Web sites that fall short of the criteria.

Challenge Yourself Projects, p. 200

9. Protect Company Resources

LEVEL This is an intermediate level project.

Solution Students' documents will vary, but should discuss why it is important to back up their system and files regularly.

10. Repair Your Computer

LEVEL This is an intermediate level project.

Solution Students' documents should list at least three hardware failures that **Startup Repair** cannot fix. Encourage students to use the Internet or Windows Vista Help and Support to help gather the information.

11. Recover Information

LEVEL This is an advanced level project.

Teaching Tip Students' documents will vary, but should list at least three types of files that **System Restore** does not affect when using restore points to return their system to an earlier point in time and explain why it is important to back up these types of files.

NCLB/Language Arts (NCTE 3) To reinforce how **System Restore** works and how it can save time, ask students to describe how **System Restore** is like a big **Undo** button for Windows Vista. Encourage students to come up with at least two examples for why restore points may be useful to a business. Have them to share their answers with the class.

Answers Rubrics for each Challenge Yourself Project and the Before You Begin questions are available at glencoe.com. You may want to download the rubrics and make them available to students as they complete each project.