

Unit 1 Digital Communication Tools

Unit Objectives

Discuss the Unit 1 objectives with students:

- Learn basic information about computers and how they work.
- Learn to find and manage data using computers.
- Learn about some of the effects computers have on society.

Chapter Review Activities

Note that activities provided at the end of each chapter in this unit will help students:

- Review the concepts they have learned
- Apply the software skills they have learned
- Learn about business trends and issues
- Improve math and communication skills
- Develop career-related skills

Chapter 1 Applying Computer Basics

Chapter Objectives

Discuss the Chapter 1 objectives with students:

- Learn how computers communicate with machines, people, and groups.
- Explore hardware and software.
- Explore and use a computer's operating system.
- Use a login name and password.
- Open and close programs and save files.
- Use Help to find information about software.
- Use basic commands and enter text in *Microsoft Word*.
- Apply acceptable use rules.

Web Resources

Review the activities for Chapter 1 that are found on the Web site. Decide whether you wish to have students complete the games and activities.

- Data Files
- Vocabulary Flash Cards
- Beat the Clock, Computer Basics
- Sort It Out, Passwords
- *PowerPoint* Reviews
- More Activities
 - Chapter 1 Supplemental Activity, Change Your Password
 - Chapter 1 Supplemental Activity, Finding Help for Keyboard Shortcuts

Slides

Preview the *PowerPoint* slides for Chapter 1 found on the IRCD. Decide which ones you will use for your presentations and demonstrations.

Assessment

ExamView test for Chapter 1

Lesson 1 Computer Hardware and Software

Lesson Objectives

Discuss the Lesson 1 objectives with students:

- Discover various types of hardware.
- Identify three types of software.
- Learn the five steps of information processing.
- Discuss the use of computers.

Data Files

- *DF 1A 1B 1C Hardware and Software*

Software Features

No software features are introduced in Lesson 1.

Document Formats

No document formats are taught in this lesson.

Vocabulary Terms

The vocabulary terms from Lesson 1 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

| | |
|-------------------------------|---|
| computer | A machine that follows a set of instructions and makes calculations |
| hardware | Physical parts of a computer |
| microprocessor | Small circuit board that controls all work done by the computer |
| processor | Another name for microprocessor |
| digital | A device that calculates with two digits—0 and 1 |
| DigiTools | Digital communication tools |
| personal computer (PC) | A small computer designed for an individual user |
| central processing unit (CPU) | The microprocessor of a computer |
| peripherals | Devices that can work with a computer |
| software | Programs that give instructions to a computer |

| | |
|-------------------------|---|
| operating systems (OSs) | Software that controls basic operations of the computer |
| applications | Software that helps users perform tasks |
| online apps | Applications that run over the Internet inside a web browser |
| information processing | Interacting with a computer using a five-step process; puts data into forms we can use and understand |
| data | Words, pictures, and numbers |
| input | Refers to the way you give data to a computer |
| processing | Refers to how data is changed or used |
| output | Refers to the way you get data from a computer |
| distribution | Refers to sharing information with the people who need it |
| storage | Refers to saving the data for later use |

Teaching Strategies

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher's Edition* for each section and activity listed below.

1. Have students read Lesson 1.
2. Discuss the *Sizing Up Hardware*, *Personal Computers*, and *Peripherals* sections with students. Have them complete activity *1A Apply: Comment on Computers and Communication*.
3. Discuss the *Software* section with students. Have them complete activity *1B Apply: Software Suggestions*.
4. Discuss the *Information Processing* section with students. Have them complete activity *1C Apply: Information Processing and Photo Editing*.

Lesson 2 Login and Operating System Basics

Lesson Objectives

Discuss the Lesson 2 objectives with students:

- Harness the power of an operating system.
- Log in to your computer.
- Set your password.
- Study the typical desktop.
- Sharpen your mouse and mouse safety skills.
- Turn off or restart your computer.

Data Files

None

Software Features

The following software features are introduced in Lesson 2:

- *Windows* Login
- Create a password
- *Windows* Turn Off Computer
- Mouse skills

Document Formats

No document formats are taught in this lesson.

Vocabulary Terms

The vocabulary terms from Lesson 2 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

| | |
|--------------------------------|---|
| login name | A series of letters and/or numbers that identify the user to the computer |
| password | A secure series of letters and/or numbers the user keys to gain access to a computer |
| user interface (UI) | The means by which users get information and give commands to the computer |
| graphical user interface (GUI) | A user interface in which icons represent applications, files, and commands |
| icons | Pictures that represent applications, files, and commands on a GUI |
| desktop | An on-screen work area on which windows, icons, menus, and dialog boxes appear |
| memory | Where the OS, applications, and data are store inside a computer |
| Random Access Memory (RAM) | A type of computer data storage |
| flash memory | A rewritable memory chip that retains its data without a power supply |
| DDR2 SDRAM | Double Data Rate 2 Synchronous Dynamic Random Access Memory; a type of RAM built for today's high-speed computers |

Teaching Strategies

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher's Edition* for each section and activity listed below.

1. Have students read Lesson 2.

2. Discuss the *Operating Systems* and *Login Names and Passwords* sections with students. Have them complete activity 2A *Learn: Log In and Create Your Password*.
3. Discuss the *The Windows User Interface (UI)* and *Mouse around Your OS* sections with students. Have them complete activity 2B *Learn: Guide Your Mouse around Your Desktop*.
4. Discuss the *Logging Out* section with students. Have them complete activity 2C *Practice: Turn Off Computer*.

Lesson 3 Windows OS Basics

Lesson Objectives

Discuss the Lesson 3 objectives with students:

- Learn the parts of a program window.
- Open applications with All Programs.
- Use the Start menu's search box to open applications.
- Minimize, maximize, restore, and resize windows.
- Switch between open programs.

Data Files

None

Software Features

The following software features are introduced in Lesson 3:

- Open a program
- Close a program
- Menu use
- Toolbar use
- Move program window
- Resize program window
- Minimize program window
- Restore program window
- Maximize program window
- Move between open program windows

Document Formats

No document formats are taught in this lesson.

Vocabulary Terms

No vocabulary terms are introduced in this lesson.

Teaching Strategies

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher's Edition* for each section and activity listed below.

1. Have students read Lesson 3.
2. Discuss the *Using Windows* and *Opening and Closing Applications* sections with students. Have students complete activity *3A Learn: Open Applications*.
3. Discuss the *Uncover the Clutter* section with students. Then have them complete activity *3B Learn: Scroll through Various Applications*.
4. Discuss the *Moving and Changing the Size of Windows* and *Minimize, Maximize, and Restore* sections with students. Have students complete activity *3C Practice: Minimize, Maximize, and Restore*.
5. Discuss the *A Few More Pointers* section with students. Have students complete the activity *3D Practice: Play with Paint*.

Lesson 4 Microsoft Word and Ribbon Basics

Lesson Objectives

Discuss the Lesson 4 objectives with students:

- Open, save, and close files.
- Key text in *Microsoft Word*.
- Format text quickly using the Ribbon's styles feature in *Word*.
- Print a document in *Word*.
- Discuss rules for acceptable computer use.

Data Files

- *DF 4C Microsoft and Google*

Software Features

The following software features are introduced in Lesson 4:

- Start *Word*
- *Word's* Ribbon
- Enter text in *Word*
- Open a *Word* document
- Save a *Word* document
- Formatting a *Word* document using the Styles group
- Automatic numbering
- Close a *Word* document
- Print in *Word*

Document Formats

No document formats are taught in this lesson.

Vocabulary Terms

The vocabulary terms from Lesson 4 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

| | |
|-------------------------|--|
| wordwrap | A feature that automatically moves text down to the next line when the current line becomes full |
| formatting | The application of design elements to a document |
| color schemes | A group of colors that look good together |
| bold | A style of type in which words and letters appear bigger and darker |
| italic | A style of type in which words and letters are slanted |
| dialog box | A window in a GUI that lists choices you can make |
| acceptable use policies | Rules regarding the use of the computers that are set by the school |

Teaching Strategies

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher's Edition* for each section and activity listed below.

1. Have students read Lesson 4.
2. Discuss the *Using Microsoft Word* section with students. Have them complete activity *4A Learn: Explore Microsoft Word's Ribbon*.
3. Discuss the *Entering Text in Microsoft Word* section with students. Have them complete activity *4B Apply: Key Text and Save with Microsoft Word*.
4. Discuss the *Open a Data File* section with students. Have them complete activity *4C Learn: Open and Save a Data File*. Make the data file needed for this activity available to students. Then have them complete activity *4D Practice: Open and Add to an Existing File*.
5. Discuss the *Quick Formatting in Word* section with students. Have them complete activity *4E Learn: Add Style to Reports*.
6. Discuss the *Printing Files* section with students. Have them complete activity *4F: Learn: Print a Word File*.
7. Discuss the *Following the Rules* and *Automatic Numbered Lists* sections with students. Have them complete activity *4G Practice: Discuss Acceptable Use Policies*. Students are to work in teams of three. Assign or let students choose teammates. Make the data file needed for this activity available to students.

Chapter Review

Data Files

- *DF C01 End Marks*

- *DF C01 Symbols*
- *DF C01 Business*
- *DF C01 Leadership Skills*

Vocabulary Terms

The vocabulary terms from the *Across the Curriculum* activities and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections.

| | |
|---------------------------------|---|
| income | Money a business receives for products or services |
| expenses | Items for which money is paid, such as rent, utilities, or labor |
| profit | The amount of income that remains after expenses are paid |
| limited liability company (LLC) | A type of business organization that offers the advantages of a corporation's liability protection with the simplicity of a partnership |
| leader | A person who guides, directs, or commands |

Teaching Strategies

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher's Edition* for each section and activity listed below.

1. Have students complete the *Reviewing What You Have Learned* questions.
2. Discuss the *Academic Connections, Communication and Reading: End Marks* and *Communication and Reading: Input Skills—Simple Symbols* sections with students. Have them follow the steps provided to complete the activity. Make the data files needed for these activities available to students.
3. Discuss the *About Business, Business Basics* section with students. Have them follow the steps provided to complete the activity. Students are to work in a team. Assign or let students choose teammates. Make the data file needed for this activity available to students.
4. Discuss the *Life Success Builder, Leadership Skills* section with students. Have them follow the steps provided to complete the activity. Make the data file needed for this activity available to students.