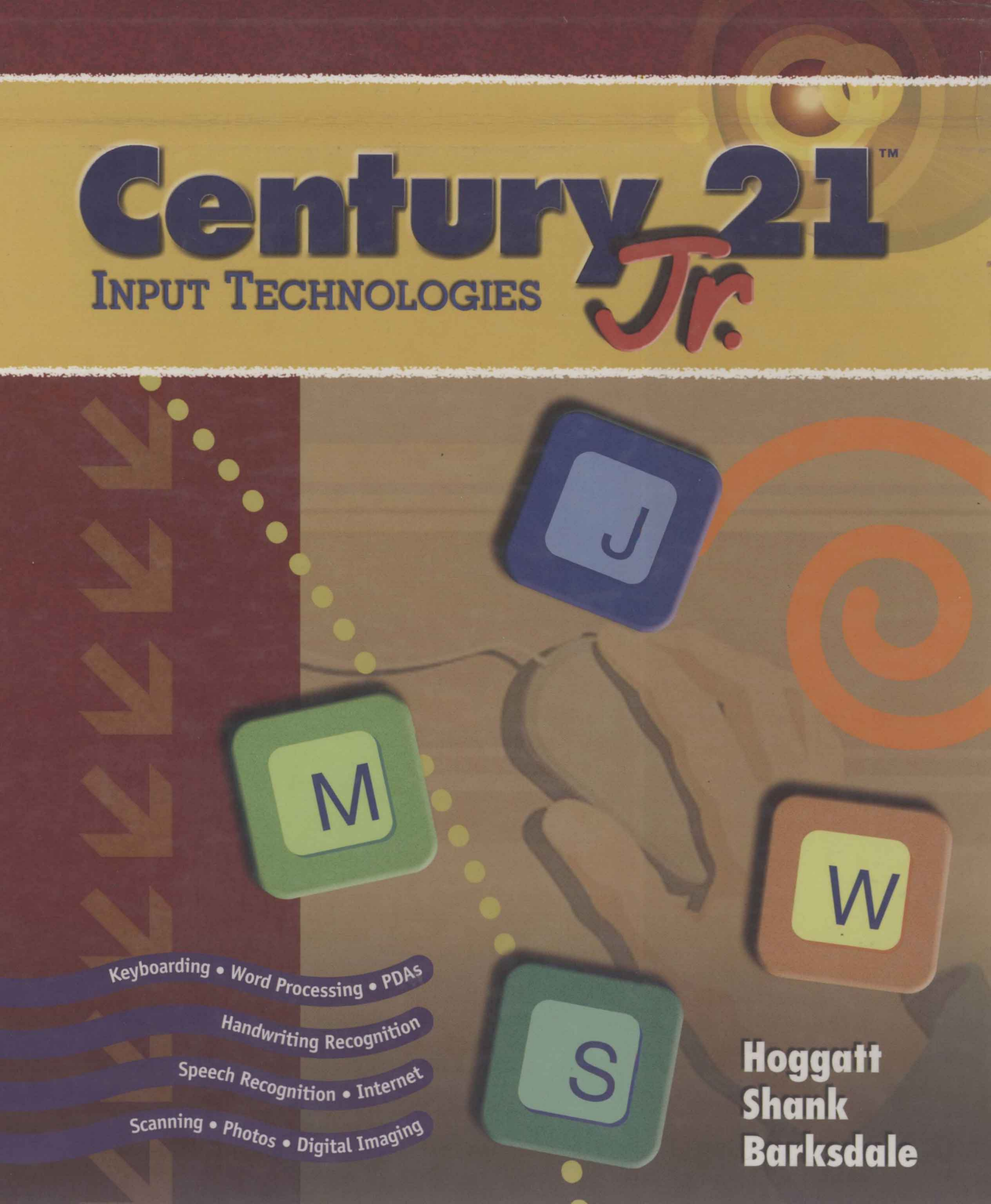
Century 21™ Jr.

Input Technologies



Keyboarding • Word Processing • PDAs

Handwriting Recognition

Speech Recognition • Internet

Scanning • Photos • Digital Imaging

Hoggatt
Shank
Barksdale

Century 21™ Jr.

Input Technologies

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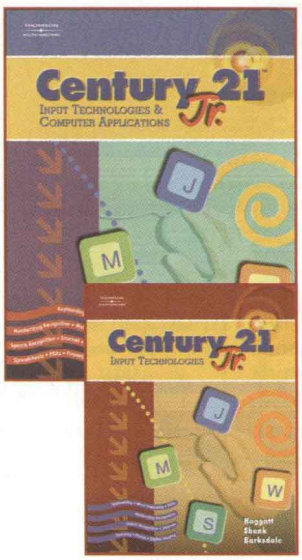
Mission Information Guide

Use this Mission Information Guide to help you travel through the various features of *Century 21™ Jr.* Launch your middle school students into a new galaxy of computer instruction ....

Century ....5, 4, 3, 21 Jr. Lift off!



Perfect for your introductory course in middle school, ***Century 21 Jr. Input Technologies & Computer Applications*** is a much-anticipated arrival that brings lots to celebrate! This exciting new book introduces keyboarding, computer basics, the Internet, and computer applications. Students are also introduced to new grade-level-appropriate computer skills based on the National Educational Technology Standards (NETS).

This is the first book for middle school students that addresses an array of new input technologies. Coverage of the latest input technologies includes handwriting recognition, speech recognition, Tablet PCs, Personal Digital Assistants (PDAs), scanning, electronic photos, and digital imaging.

Computer applications instruction prepares students to work with word processing, spreadsheets, presentations, databases, file maintenance, Windows, computer concepts, ethics, programming, and Web sites.

Also available is ***Century 21 Jr. Input Technologies*** for a shorter course when applications have already been covered.

Century 21 Jr. Input Technologies & Computer Applications
Student text for 2-semesters
(Top-Bound, 640 pgs, 4-color) 0-538-44265-4

Century 21 Jr. Input Technologies
Student text for 1-semester
(Top-Bound, 368 pgs, 4-color) 0-538-44263-8

Wrap-around Teacher's Edition for *Century 21 Jr. Input Technologies & Computer Applications*
(Top-Spiral Bound, 672 pgs, 4-color) 0-538-44264-6

Teacher's Manual for *Century 21 Jr. Input Technologies*
(Soft cover, 192 pgs, 1-color) 0-538-44262-X

Instructor's Resource CD-ROM
- For *Century 21 Jr. Input Technologies & Computer Applications* 0-538-44260-3
- For *Century 21 Jr. Input Technologies* 0-538-44259-X

ExamView® Electronic Testing Software CD-ROM
0-538-44261-1

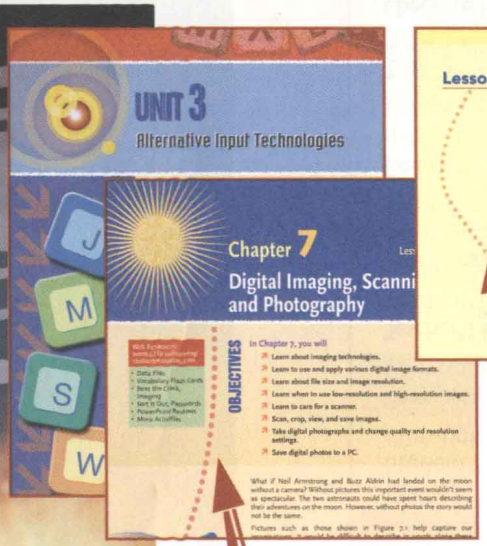
Adobe® eBook
- For *Century 21 Jr. Input Technologies & Computer Applications* 0-538-44255-7
- For *Century 21 Jr. Input Technologies* 0-538-44266-2

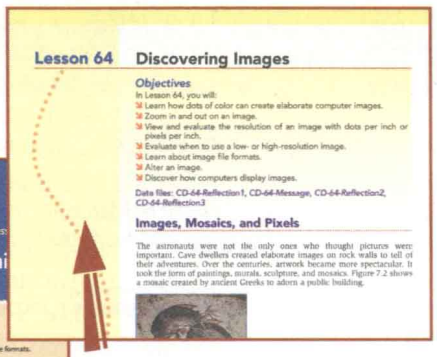
CheckPro for *Century 21 Jr.*
- Windows site license CD, User's Guide 0-538-44269-7

Technology Bundle
- *MicroType™ 4 & CheckPro for Century 21 Jr.* Windows Site Licenses 0-538-44327-8

(Macintosh version of MicroType 3.0 is also available.)

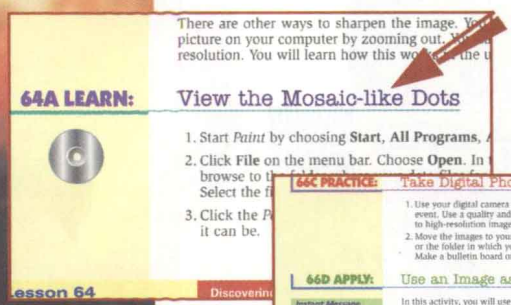
Out of This World Features!



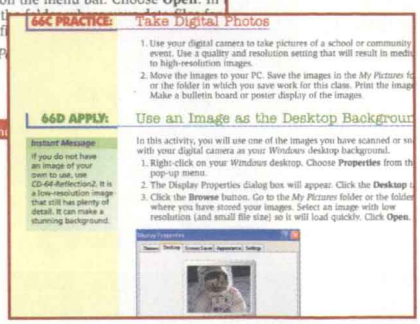


Units are divided into chapters, which are then divided into daily lessons for learning segments that progress at your students' pace.

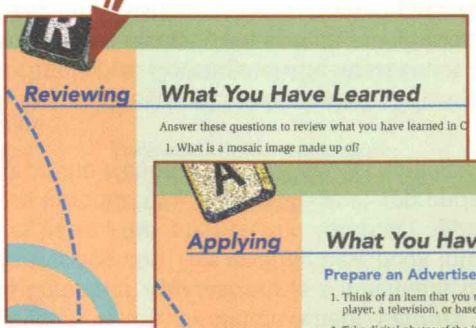
The **Web Resources** provided on the chapter openers direct students to specific learning support including games, review activities, flash cards, and much more on the text's dedicated support Web site.

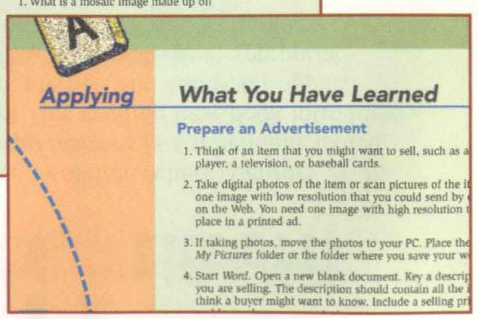


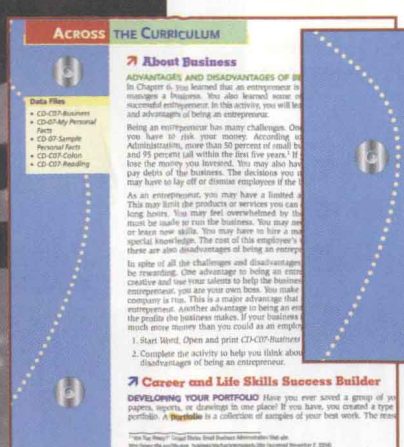
Step-by-step instructional design teaches students concepts and then encourages them to practice and apply the concepts to real-life situations.

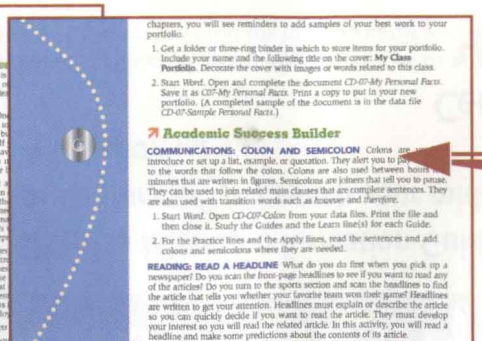


Reviewing What You Have Learned questions at the end of the chapter test students' understanding of the material covered. **Applying What You Have Learned** exercises provide activities for reinforcing content from the chapter.









About Business features at the end of each chapter address entrepreneurship, economics, ethics, and workplace trends and issues.

Career and Life Skills Success Builders at the end of each chapter provide activities focused on careers, leadership, and teamwork.

Academic Success Builders at the end of each chapter cover math review, communication and reading review, personal finance, and youth organizations.

TEAMWORK

Provide opportunities for students to work in groups.

SOFTWARE TIP

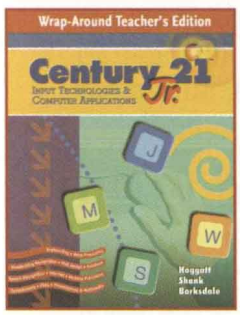
Provide valuable insights and pointers to help students maximize their keyboarding and computer skills.

INTERNET

Give teachers opportunities to incorporate on-line research into student activities.

Mission Control Center

Thomson South-Western provides all the tools necessary for a rewarding classroom experience.



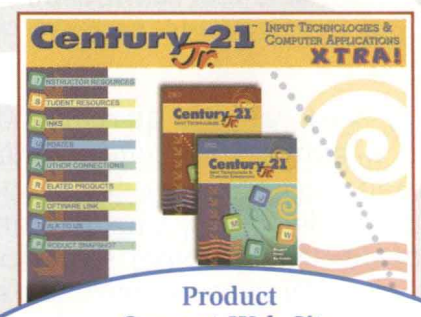
Wrap-around Teacher's Edition for ***Century 21 Jr. Input Technologies & Computer Applications***—Reduced pages from the student text are surrounded with teaching comments and invaluable teaching tips and resources.

Teacher's Manual for ***Century 21 Jr. Input Technologies***—The Teacher Manual contains teaching notes and printed solutions.

Bring a Universe of Technology to Your Classroom

Instructor's Resource CD
This CD includes student data files, unit tests, solution files, chapter tests, PowerPoint presentations, and teaching notes all in one place for easy access.

ExamView® Electronic Testing Software
Create printed or online quizzes, study guides, and tests easily and quickly with this computerized testing tool. Ideal for building tests, worksheets, and study guides (practice tests), this assessment solution also saves grading time and improves student results by focusing on specific learning objectives.



Adobe eBooks for Century 21 Jr.
Take learning to a new level with this dynamic, interactive text material available digitally.

Product Support Web Site
Discover teaching and learning resources that you won't find anywhere else when you adopt Century 21 Jr. The password-protected Teacher Resources Center includes a wealth of downloadable solutions, files, and teaching resources. The Student Resource Center offers supplemental materials, activities, games, enrichment materials, and much more. Visit **www.c21jr.swlearning.com** to see for yourself.

MicroType
This engaging, easy-to-use program teaches new-key learning and skill building, with lessons that correlate to the Century 21 Jr. texts. MicroType features 3-D animations, videos, and fun, interactive games.

CheckPro for Century 21 Jr.
Save time as you instantly check documents keyed from the text! This new software works with Microsoft Word and Excel for Windows and can even check completion of PowerPoint activities. The Web reporting feature allows students to provide their results to the instructor using the Internet.

Preface

Step into the Future

You are about to use some very high-tech computer tools. Learning them is essential to your success in school and at work. You may be wondering whether or not you will be able to learn these tools. Don't worry. Instead, think about this: At first, no one was sure if scientists could build spaceships safe enough for travel to the moon. These space pioneers gave their best efforts and worked through problems step-by-step. Eventually, the United States succeeded in landing people on the moon. This is one of the greatest accomplishments in history.

By taking small, steady steps, space scientists took a giant leap forward, creating technologies that helped all mankind. Just like the space scientists of the past, you must always take the next step forward. They never gave up. Don't you give up, either. Learn a lesson from their example. If you give your best efforts and take things one step at a time, you, too, can accomplish great things.

About This Textbook

Units in the Textbook

This textbook is organized in three units that contain nine chapters. The chapters have several lessons that will take you step-by-step along many computer adventures. The lessons have examples and activities to make learning fun, interesting, and exciting. The units in the textbook are described below.

Unit 1 Digital Communication Tools

Any digital device used to communicate with others is a digital communications tool. These devices are also called *DigiTools*. You will begin by learning some of the history of DigiTools and how they work. You will learn how computers are changing the way we live, work, and play. You will learn to use the basic features of programs such as *Microsoft Word*, *Windows Explorer*, and *Internet Explorer* in this unit.

Unit 2 Keyboarding

You may already know how to key properly by touch, or you may be a beginner. In either case, you can improve your touch keyboarding techniques, speed, and control to input letters, figures, and symbols. The

better your keying skills are, the more quickly you will be able to input information into your computer. After all, you don't want to spend any more time than is needed to key documents, such as a short story for school. You will use *Microsoft Word* in this unit to learn or improve keying skills.

Unit 3 Alternative Input Technologies

In this unit, you will learn some new ways to input information into a computer. Using speech recognition, you can talk and have your computer type for you. In many instances, you can dictate faster than you can key. You will find that speech recognition is an important input skill to learn, practice, and apply. Handwriting recognition, another important input skill, will allow you to input data simply by using your own handwriting. You can also take notes and draw using handwriting tools. Other input technologies, such as scanners and digital cameras, are covered in this unit. You will also learn about handheld computers, called PDAs, and smart phones in this unit.

Chapter Organization

Each chapter contains chapter objectives, an introduction that tells you what the chapter is about, lessons with illustrations and activities, and end-of-chapter activities. Each lesson also contains objectives to guide your learning.

In some lessons, you will use data files. Data files contain additional instructions or documents that you are to complete. All data files needed for a lesson are listed at the beginning of the lesson.

Activities are placed throughout the lessons to help you learn, practice, and apply the concepts presented in the chapter. New learning is presented with step-by-step instructions in the *Learn* activities. Practice of new learning, with some detailed instructions or reminders, is provided in the *Practice* activities. In the *Apply* activities, only general instructions are provided. These activities allow you to apply the skills and knowledge you have learned.

Various message boxes, Help Words, and icons appear along the left side of pages in the textbook. Instant Messages and Software Tips provide information related to the lesson. Help Words are words or terms that you can enter into the Help search feature of a software program. This lets you find additional information provided by the program's Help feature. Technique Tips and Spacing Tips appear along the left side of the page in lessons or activities that relate to keyboarding. These tips give you important information and reminders. Icons alert you to watch for certain instructions in an activity.

The disc icon tells you that you will need to use data files to complete an activity.

The Internet icon tells you that you will need to access the Internet to complete an activity.

The teamwork icon tells you that you will work in a team to complete an activity.

Learning to work with others in a team is an important skill.

At the end of each chapter, you will apply what you have learned by answering review questions and completing additional activities. Beginning in Chapter 6, you will build keyboarding skill by completing drills and timed writings. At the end of each chapter, you will also study some important topics in sections titled:

- About Business
- Career and Life Skills Success Builder
- Academic Success Builder

A Web site related to this textbook is available at http://c21jr.swlearning.com. On this site, you can access data files, vocabulary flash cards, games, and slides that review chapter concepts, supplemental activities, reference materials, and links to other Web sites. The items available for each chapter are listed in the Web Resources box at the beginning of each chapter.

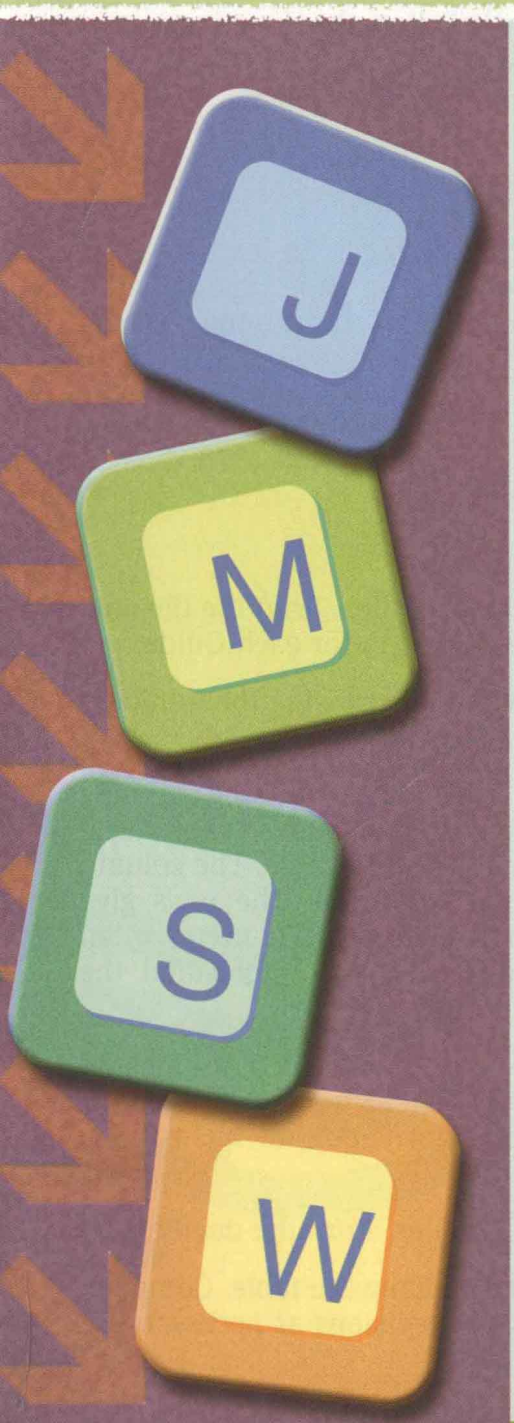
Begin Your Adventure

You may discover that you already know something about the technologies you will study. Share your knowledge with those around you so that everyone can succeed together. As you learn more, you will become more self-confident. You will soon be applying your new skills in exciting ways. Remember, always take the next step. Soon, you will be surprised at how much you have achieved and how far you have journeyed.

Contents

UNIT 1

Digital Communication Tools



Computers are an important part of the world around us. People use computers every day to get their work done. They are used to communicate with friends and family. They also play an important role in entertainment.

In Unit 1, you will learn basic information about computers and how they work. You will learn to find and manage data using computers. You will also learn about some of the effects computers have on society.

The activities provided at the end of each chapter will help you:

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

Chapter 1

Lessons 1–4

Computer Basics

Web Resources:
www.c21jr.swlearning.com/studentresources

- Data Files
- Vocabulary Flash Cards
- Beat the Clock, Computer Basics
- Sort It Out, Passwords
- *PowerPoint* Reviews
- More Activities

OBJECTIVES

In Chapter 1, you will:

- 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.

President John F. Kennedy had an idea. His dream would challenge everyone's imaginations. On May 25, 1961, he asked scientists to build a spacecraft. The ship had to carry people to the moon and bring them home safely.

Such a trip would require a computer. A **computer** is a machine that follows a set of instructions to change and store data. However, the computer needed to do the job didn't exist in 1961! It had to be invented. That computer cost $150,000 to make. However, it was far less powerful than today's cell phones. Would you trust your life to such a weak computer in deep space?

Digital image © 1996 CORBIS; Original image courtesy of NASA/CORBIS

This computer had important work to do. The *Apollo 11* spaceship would reach the moon on July 20, 1969. It would release a lunar module called the *Eagle*. The computer would need to land the *Eagle* within a few feet of a selected spot on the moon. The computer also had to calculate the use of fuel. The ship could not carry enough fuel for a second try. The landing was a success. With less than 30 seconds of fuel remaining, the *Eagle* landed.

The *Eagle* had a very primitive computer. Still, it helped fulfill President Kennedy's dream of landing on the moon. Imagine what today's powerful computers can do for your ideas and dreams!

Lesson 1

Computers as Digital Communication Tools

Objectives

In Lesson 1, you will:

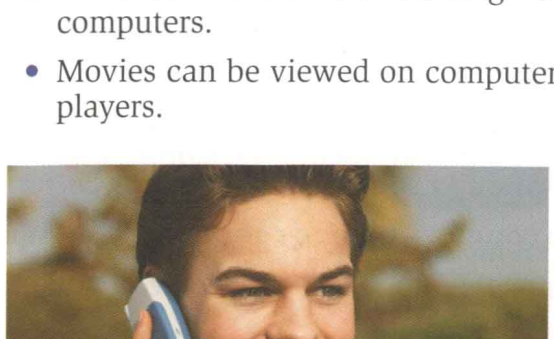
- Learn how computers help us communicate with machines, each other, and groups.
- Learn about the main parts of information processing.
- Explore and discuss hardware.
- Learn about two types of software.

Communicating with Computers

Learning to use computers can help you share information with others. Computer skills can help you work with imagination. They will also help you with your schoolwork. If you need to create or share a message, chances are a computer can help!

Computers help people communicate with machines, with another person, and with groups. The list below gives some examples:

- Computers guide vehicles that explore the land on Mars.
- Computers control lighting, air-conditioning, and security systems in buildings.
- Cell phones have computers that allow users to make calls, store phone numbers, and send text messages.
- Musicians use computers to share music with fans.
- Animated films such as *Finding Nemo* and *Shrek* are created using computers.
- Movies can be viewed on computers, video game consoles, or DVD players.



Stockdisc

Figure 1.1 Computers in cell phones make them powerful DigiTools.

1A APPLY: Discuss Computers and Communication

Discuss with your class or team how people use computers. How do they use computers to communicate with machines? with individuals? with groups? List three examples of each.

DigiTools

Computers are digital communication tools—called DigiTools for short. **Digital devices** are those that share data in electronic form (streams of the digits 1 and 0). The physical parts of a computer are called **hardware**. The computer case, keyboard, mouse, and monitor are examples of hardware.

Software gives instructions to a computer. Word processing and drawing programs are examples of software. Software is also called *programs* or *applications*. The hardware and software work together to allow you to process data and to communicate.

Information Processing

A primary use of computers is processing information. **Information processing** means putting facts or numbers into a meaningful form. Information processing has five main parts: input, processing, output, distribution, and storage.

- **Input** refers to the way you give data to a computer. You might use a keyboard or drawing tablet to input data.
- **Processing** refers to how data is changed or used. You might add numbers, sort a list of names, or change the color of a drawing. These are all examples of processing.
- **Output** refers to the way you get data from a computer. You might print a letter or view photos on a monitor.
- **Distribution** refers to sending information to the people who need it. For example, you might post information about a school event on the school web site.
- **Storage** refers to saving the data for later use. You might store data on a floppy disk, on a CD, or on the computer's hard drive.

1B APPLY: Relate Information Processing to E-mail

When you create and send an e-mail message, you may do all the steps of information processing described. Match the tasks listed below with the information processing steps.

a. input	___	1. Viewing the message you have created on the screen
b. processing	___	2. Keying the message
c. output	___	3. Saving a copy of the message in your Sent folder
d. distribution	___	4. Using the Send feature to send the message
e. storage	___	5. Formatting the message in a large type size

CHECK POINT Exchange papers with a classmate and discuss your answers.

Hardware

Only in the last 10 to 15 years have computers become part of our daily lives. Early computers were too large and expensive to be used by most people. Early computers were also very slow compared to modern computers. Today, computers come in a variety of shapes and sizes. Figure 1.2 shows six very different DigiTools in different styles.

Figure 1.2 DigiTools come in a variety of sizes.