Computers are your future

Chapter 1

computers and you

# Answers to End-of-Chapter Questions

Matching

\_**\_h**\_\_\_ 1. Program “Understanding the Computer: Basic Definitions”

\_\_**a**\_\_\_ 2. Netbook “Computers for Individuals”

\_\_**g**\_\_\_ 3. Digital piracy “Take Ethics Seriously”

\_\_**j**\_\_\_ 4. Bug “Recognizing the Risks of Using Flawed Software”

\_\_**i**\_\_\_ 5. Data “Understanding the Computer: Basic Definitions”

\_\_**f**\_\_\_ 6. Tablet PC “Computers for Individuals”

\_\_**d**\_\_\_ 7. Professional ­workstation “Computers for Individuals”

\_\_**c**\_\_\_8. All-in-one computer “Computers, Society, & You”

\_\_**e**\_\_\_ 9. Computer ethics “Take Ethics Seriously”

\_\_**b**\_\_\_10. Information “Understanding the Computer: Basic Definitions”

\_\_**o**\_\_\_ 11. Network interface card “Communications: Moving Data between Computers”

\_\_**k**\_\_ 12. Ergonomics “Become Comfortable with Hardware”

\_\_**m**\_\_13. Random access memory “Processing: Transforming Data into the Computer”

\_\_**l**\_\_\_14. Communications “Computers, Society, & You”

\_\_**n**\_\_ 15. Information ­processing cycle “The Information-Processing Cycle in Action”

Multiple Choice

1. Which of the following is a common input device?

**a. mouse** “Input: Getting Data into the Computer”

b. printer

c. disk drive

d. speaker

2. Which of the following is *not* an example of application software?

a. word processor

b. spreadsheet

**c. operating system** “Understanding the Computer: Basic Definitions”

d. photo editor

3. What part of the system unit processes the input data?

a. read-alone memory

**b. CPU** “Processing: Transforming Data into the Computer”

c. random access memory

d. NIC

4. What component of a computer is located in the system unit and contains the circuitry to connect the computer to a network?

a. RAM

b. node

c. CPU

**d. NIC** “Communications: Moving Data between Computers”

5. Which is an example of an e-book reader?

a. wiki

b. NIC

**c. Kindle 2** “Societal Impacts of Computer Use”

d. Tweeter

6. What is the sending of portions of a job to a third party to reduce cost, time, and energy called?

**a. outsourcing** “The Effects of Computers on Employment”

b. automation

c. digital piracy

d. structural unemployment

7. What is the feeling of anxiety experienced when people are presented with more information than they can handle?

a. technology overload

b. technology meltdown

c. processing overload

**d. information overload** “Advantages and Disadvantages of Using Computers”

8. Which of the following computers is *not* designed for portability or use while traveling?

**a. all-in-one** “Computers for Individuals”

b. notebook

c. tablet PC

d. ultraportable

9. Which of the following is a computer used by government agencies and large corporations like airlines and banks?

a. workstation

**b. mainframe** “Computers for Organizations”

c. supercomputer

d. all-in-one

10. What is the name given to unemployment caused by technology making an entire job category obsolete?

a. technological unemployment

b. corporate unemployment

**c. structural unemployment** “The Effects of Computers on Employment”

d. automated unemployment

Fill-In

1. The mouse and keyboard are \_\_\_\_\_\_\_\_\_\_\_ devices.

**input** “The Information-Processing Cycle in Action”

2. Monitors, printers, and speakers are \_\_\_\_\_\_\_\_\_\_\_ devices.

**output** “The Information-Processing Cycle in Action”

3. Hard drives, DVD drives, and USB drives are examples of \_\_\_\_\_\_\_\_\_\_\_\_\_ devices.

**storage** “The Information-Processing Cycle in Action”

4. The operating system and antivirus software are part of the software group called \_\_\_\_\_\_\_\_\_\_.

**system software** “Understanding the Computer: Basic Definitions”

5. \_\_\_\_\_\_\_\_\_\_\_\_\_ is a social messaging utility that allows posting of up to 140 characters that take the form of short questions and answers.

**Twitter** “Computers, Society, & You”

6. Obsolete computer equipment is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**e-waste** “Being a Responsible Computer User”

7. Facebook and LinkedIn are examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**social network sites** “Computers, Society, & You”

8. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_ is an onscreen touch-activated keyboard.

**virtual keyboard** “Computers for Individuals”

9. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_ is a group of two or more ­connected computer systems that share devices and resources.

**network** “Communications: Moving Data between Computers”

10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a free Web-based word processor and spreadsheet that encourages collaboration by allowing group members to share and edit documents online.

**Google Docs** “Computers, Society, & You”

11. A centrally located and operated computer that makes programs and data available to people who are connected to a computer network is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**server** “Communications: Moving Data between Computers”

12. The replacement of human workers by machines is known as \_\_\_\_\_\_\_\_\_\_\_\_\_.

**automation** “The Effects of Computers on Employment”

13. The \_\_\_\_\_\_\_\_\_\_\_\_\_ is the circuit board located in the system unit that connects the CPU and other system components.

**mother board**  “Computer Fundamentals”

14. The \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ describes the disparity between groups who own computers and have Internet access and those who do not.

**digital divide** “Computers, Society, & You”

15. The use of computers and computer programs to replace teachers and time-specific learning is \_\_\_\_\_\_\_\_\_\_\_\_.

**e-learning** “Societal Impacts of Computer Use”

Short Answer

1. Explain the difference between hardware and software.

**A computer system’s hardware includes all the physical components of the computer and its related devices. The components consist of the system unit—the base unit of the computer that includes the plastic enclosure, motherboard, and its integrated peripherals. Software, on the other hand, is a collection of programs that directs the operation of a computer, and documentation that gives instructions on how to use them. Software can be divided into two categories: system software and application software.**

1. Provide a brief description of the similarities and differences between a desktop and an all-in-one computer.

**Both** desktop **and all-in-one system are computers designed for use at a desk or in an office environment. They run programs to help individuals accomplish their work more productively or to gain access to the Internet. The desktop has a monitor and separate system unit that is the size of an average printer and is not easily moved. The all-in-one computer reduces the surface space needed to hold the computer by combining the monitor and system unit into one unit.**

1. What are the differences among a notebook computer, a tablet PC, and a netbook?

**A** notebook computer (so called **because it is roughly the size of a notebook), is small enough to fit into a briefcase or backpack, making it ideal for mobile computing and popular with students and business people who travel frequently. A tablet PC, sometimes called a *convertible notebook*, can be used in two configurations.** Tablet PCs **­typically have a keyboard or a mouse for input and can be used like an ordinary notebook. However, the LCD screen on a tablet PC also swivels to lie flat over the keyboard. In this position, the user can write on it with a special-purpose pen, or stylus.** Netbooks **have the portability of a notebook but not the functionality. They are designed for wireless Internet access and are used primarily for Web browsing and e-mail.**

1. Define the terms *data* and *information.* Identify the steps in the information-processing cycle that is associated with each.

***Data*—or raw facts such as a list of numbers—is received by the computer during the input stage of the information-processing cycle.**

**Data is then converted into a meaningful form—called *information*—during the processing phase of the information processing cycle. Information is displayed during the output phase of the information-processing cycle.**

**The four basic operations performed by a computer make up the** information-processing cycle**.** *Input* **is the action of receiving the** data**, raw facts such as a list of numbers.** *Processing* **is the action done on the input to obtain** information**, which is data converted into a meaningful form.** *Output* **is the actual displaying of the processed data or information. *Output* is saved for later use by means of storage.**

1. List three examples of application software found on the computer systems in your home, school, or office.

**Some examples are word processing, spreadsheet, e-mail, image editor, presentation, database, and Web browser software.**

1. List three advantages and three disadvantages of computer use.

**A computer system provides certain advan­tages to its users, such as speed, memory for work in progress, storage for access later, hardware reliability, and accuracy. However, with these advantages come some disadvantages, including information overload, the expense of computer equipment, data inaccuracy, and an increasing dependence on unreliable software.**

1. List three to five characteristics of a responsible computer user.

**Some characteristics of a responsible computer user are:**

* **Being considerate of others who might be sharing the same connection**
* **Recycling paper, printer cartridges, and computer hardware**
* **Not talking on the phone or text messaging while driving**
* **Being aware of how computers and Internet use can affect one’s own well-being and personal relationships**
* **Staying informed about both the software and hardware advances in technology**