

Technology In Action, Complete, 14e (Evans et al.)

Chapter 2 Looking at Computers: Understanding the Parts

1) What is the difference between data and information?

- A) Data represents a fact. Information is data that has been organized.
- B) They are essentially the same thing.
- C) Data is numbers. Information is words.
- D) Data represents a process. Information is the stored data.

Answer: A

Diff: 1

Objective: 2.01 Describe the four main functions of a computer system and how they interact with data and information

2) Computers use a _____ language consisting of 0s and 1s.

- A) symbol
- B) binary
- C) byte
- D) system

Answer: B

Diff: 1

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

3) In binary language, each letter of the alphabet, each number, and each special symbol is made up of a unique combination of eight _____.

- A) bytes
- B) kilobytes
- C) characters
- D) bits

Answer: D

Diff: 2

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

4) Which of the following is the smallest unit of measure?

- A) Megabyte
- B) Gigabyte
- C) Petabyte
- D) Terabyte

Answer: A

Diff: 2

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

5) Apple's macOS and Microsoft Windows are examples of _____ software.

- A) utility
- B) application
- C) operating system
- D) communication

Answer: C

Diff: 2

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

6) An Apple iPad and a Microsoft Surface are examples of _____ computers.

- A) tablet
- B) netbook
- C) desktop
- D) laptop

Answer: A

Diff: 1

Objective: 2.03 List common types of computers, and discuss their main features

7) Which of the following computers is large, expensive, and is designed to execute a few programs as fast as possible?

- A) Desktop computer
- B) Supercomputer
- C) Mainframe computer
- D) Embedded computer

Answer: B

Diff: 2

Objective: 2.03 List common types of computers, and discuss their main features

8) _____ computers are specially designed computer chips that reside inside other devices, such as a car.

- A) Tablet
- B) Desktop
- C) Embedded
- D) Netbook

Answer: C

Diff: 2

Objective: 2.03 List common types of computers, and discuss their main features

9) A keyboard and touch screen are the most common of _____ devices.

- A) output
- B) processing
- C) input
- D) storage

Answer: C

Diff: 1

Objective: 2.04 Identify the main types of keyboards and touch screens

10) A(n) _____ is an input device that looks like a pen.

- A) joystick
- B) e-rod
- C) pointer
- D) stylus

Answer: D

Diff: 1

Objective: 2.04 Identify the main types of keyboards and touch screens

11) Each of these is a basic type of a touch screen, EXCEPT _____.

- A) resistive
- B) reflective
- C) capacitive
- D) surface acoustic wave

Answer: B

Diff: 3

Objective: 2.04 Identify the main types of keyboards and touch screens

12) The number of pixels displayed on the screen is known as _____.

- A) contrast ratio
- B) aspect ratio
- C) brightness resolution
- D) screen resolution

Answer: D

Diff: 2

Objective: 2.07 Describe options for outputting images and audio from computing devices

13) The most common type of monitor for laptops and desktop computers is a(n) _____.

- A) liquid crystal display (LCD)
- B) light-emitting diode (LED)
- C) organic light-emitting diode (OLED)
- D) cathode ray tube (CRT)

Answer: A

Diff: 2

Objective: 2.07 Describe options for outputting images and audio from computing devices

14) The two main categories of home and office printers are _____ and laser printers.

- A) inkjet
- B) large format
- C) cloud-based
- D) thermal

Answer: A

Diff: 2

Objective: 2.08 Describe various types of printers, and explain when you would use them

15) _____ printers use static electricity and toner and heat set the image on the page very quickly.

- A) Inkjet
- B) Thermal
- C) Nonimpact
- D) Laser

Answer: D

Diff: 1

Objective: 2.08 Describe various types of printers, and explain when you would use them

16) The _____ contains the central electronic components of the computer.

- A) motherboard
- B) arithmetic/logic unit
- C) peripheral unit
- D) input unit

Answer: A

Diff: 1

Objective: 2.09 Describe the functions of the motherboard and RAM

17) A _____ enables your computer to connect to other computers or to the Internet.

- A) video card
- B) network interface card (NIC)
- C) sound card
- D) controller card

Answer: B

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

18) The computer stores currently used programs and data in _____.

- A) ROM
- B) CPU
- C) RAM
- D) USB

Answer: C

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

19) RAM is a _____ storage location.

- A) permanent
- B) peripheral
- C) volatile
- D) nonvolatile

Answer: C

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

20) The area that holds all the startup instructions the computer needs to start is _____.

- A) RAM
- B) ROM
- C) USB
- D) CPU

Answer: B

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

21) A(n) _____ CPU has two processing paths, allowing it to process more than one instruction at a time.

- A) all-in-one
- B) bimodal
- C) dual-core
- D) dual-mode

Answer: C

Diff: 3

Objective: 2.10 Explain the main functions of the CPU

22) Which of the following is NOT an example of nonvolatile storage?

- A) Hard drive
- B) DVD
- C) RAM
- D) Flash drive

Answer: C

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

23) Dropbox is an example of _____.

- A) SSD technology
- B) cloud storage
- C) optical storage
- D) Bluetooth technology

Answer: B

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

24) All of the following are names for a flash drive EXCEPT _____ drive.

- A) jump
- B) USB
- C) thumb
- D) hard

Answer: D

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

25) Flash drives plug into a(n) _____.

- A) USB port
- B) serial port
- C) expansion slot
- D) drive bay

Answer: A

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

26) Which of the following optical storage media has the greatest storage capacity?

- A) DVD DL
- B) DVD
- C) CD
- D) Blu-ray

Answer: D

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

27) Which port is the most common port used to connect input and output devices to a computer?

- A) Universal serial bus (USB)
- B) Parallel
- C) FireWire
- D) Ethernet

Answer: A

Diff: 2

Objective: 2.12 Describe common types of ports used today

28) To connect a peripheral device to a computer to exchange data, find the appropriate _____ for the device.

- A) port
- B) drive
- C) slot
- D) expansion bus

Answer: A

Diff: 2

Objective: 2.12 Describe common types of ports used today

29) Which computer port transmits audio and video without the need for compression?

- A) VGA
- B) USB
- C) HDMI
- D) RGA

Answer: C

Diff: 2

Objective: 2.12 Describe common types of ports used today

30) Which of the following is NOT a goal of green IT?

- A) Cleaning waterways with repurposed computers
- B) Reduce use of electricity
- C) Use technology to reduce travel
- D) Use technology as long as possible

Answer: A

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

31) All of the following are ways to avoid injuries when working on computers EXCEPT _____.

- A) placing a monitor at least 12" from the eyes
- B) purchasing an adjustable chair
- C) ensuring proper lighting
- D) taking breaks

Answer: A

Diff: 3

Objective: 2.14 Define ergonomics, and discuss the ideal physical setup for using computing devices

32) A _____ is the biggest power consumer on a computer.

- A) display
- B) hard drive
- C) memory module
- D) CPU

Answer: A

Diff: 1

Objective: 2.13 Describe how to manage power consumption on computing devices

33) _____ is concerned with the design and arrangement of machines and furniture to avoid uncomfortable or unsafe experiences.

- A) Ergonomics
- B) Positioning
- C) Occupational safety
- D) Repetitive strain prevention

Answer: A

Diff: 2

Objective: 2.14 Define ergonomics, and discuss the ideal physical setup for using computing devices

34) _____ is a representation of a fact, a figure, or an idea and can be a number, a word, a picture, or even a recording of sound.

Answer: Data

Diff: 1

Objective: 2.01 Describe the four main functions of a computer system and how they interact with data and information

35) _____ is the set of computer programs that allows the hardware to perform different tasks.

Answer: Software

Diff: 1

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

36) A(n) _____ is a computer that is designed to execute a few programs extremely rapidly.

Answer: supercomputer

Diff: 2

Objective: 2.03 List common types of computers, and discuss their main features

37) A(n) _____ device is a component, such as a keyboard, that connects to the computer.

Answer: peripheral

Diff: 2

Objective: 2.03 List common types of computers, and discuss their main features

38) A _____ is approximately 1000 bytes.

Answer: kilobyte; KB

Diff: 3

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

39) Microphones and scanners are examples of _____ devices.

Answer: input; peripheral

Diff: 1

Objective: 2.06 Explain how images, sounds, and sensor data are input into computing devices

40) _____ is a wireless transmission standard that lets you connect mobile computing devices to peripheral devices over short distances.

Answer: Bluetooth; Bluetooth technology; WiFi; wireless; wi-fi; wi fi

Diff: 2

Objective: 2.04 Identify the main types of keyboards and touch screens

41) Display screens that respond to commands initiated with your finger or a stylus are called _____ screens.

Answer: touch

Diff: 1

Objective: 2.04 Identify the main types of keyboards and touch screens

42) A desktop computer's _____ is the case that houses the main components of the computer and where peripheral devices connect.

Answer: system unit; tower

Diff: 2

Objective: 2.03 List common types of computers, and discuss their main features

43) The _____ keyboard layout gets its name from the first six letters in the top-left row of alphabetic keys on the keyboard and is the most common English-language keyboard layout.

Answer: QWERTY

Diff: 2

Objective: 2.04 Identify the main types of keyboards and touch screens

44) Joysticks and steering wheels are examples of _____ controllers.

Answer: game

Diff: 1

Objective: 2.05 Describe the main types of mice and pointing devices

45) A(n) _____ is a small video camera that sits on top of a monitor or is built into a laptop and can be used to transmit live video.

Answer: webcam

Diff: 2

Objective: 2.06 Explain how images, sounds, and sensor data are input into computing devices

46) A(n) _____ microphone picks up sounds coming from all directions at once and is well suited for conference calls.

Answer: omnidirectional

Diff: 3

Objective: 2.06 Explain how images, sounds, and sensor data are input into computing devices

47) The width-to-height proportion of a monitor is known as the _____.

Answer: aspect ratio

Diff: 2

Objective: 2.07 Describe options for outputting images and audio from computing devices

48) Monitors display images by using a grid made up of millions of tiny dots, called _____.

Answer: pixels

Diff: 2

Objective: 2.07 Describe options for outputting images and audio from computing devices

49) The length of time it takes for a processor to request, locate, open and deliver information stored in RAM is measured in _____.

Answer: nanoseconds; billionths of a second

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

50) Each pixel on the newest 4K resolution TVs and monitors is actually made up of four yellow, red, blue, and green _____.

Answer: subpixels; sub pixels; sub-pixels

Diff: 3

Objective: 2.07 Describe options for outputting images and audio from computing devices

51) A(n) _____ is a device that combines the functions of a printer, scanner, copier, and fax machine into one unit.

Answer: all-in-one printer; all in one printer

Diff: 2

Objective: 2.08 Describe various types of printers, and explain when you would use them

52) The "brains" of the computer is the _____.

Answer: CPU; central processing unit; processor; microprocessor

Diff: 2

Objective: 2.10 Explain the main functions of the CPU

53) An SD card is an example of a(n) _____ card.

Answer: flash memory; memory; secure digital

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

54) CDs, DVDs, and _____ discs are examples of optical storage.

Answer: Blu-ray; BD; bluray

Diff: 2

Objective: 2.11 Describe the various means of storing data and information with computing devices

55) _____ is a technology most frequently used for credit and debit card processing

Answer: Near field communication; NFC

Diff: 2

Objective: 2.07 Describe options for outputting images and audio from computing devices

56) _____ mode puts the computer in low power usage, but keeps programs in RAM.

Answer: Sleep

Diff: 2

Objective: 2.13 Describe how to manage power consumption on computing devices

57) A(n) _____ display color uses the least electricity when compared to any other color.

Answer: black

Diff: 2

Objective: 2.13 Describe how to manage power consumption on computing devices

58) _____ is a power-saving mode that stores data to a computer's hard drive instead of to its memory.

Answer: Hibernate

Diff: 2

Objective: 2.13 Describe how to manage power consumption on computing devices

59) Information is data that has been organized or presented in a meaningful fashion.

Answer: TRUE

Diff: 2

Objective: 2.01 Describe the four main functions of a computer system and how they interact with data and information

60) A smartphone is a type of computer.

Answer: TRUE

Diff: 1

Objective: 2.03 List common types of computers, and discuss their main features

61) The operating system controls how your computer functions.

Answer: TRUE

Diff: 1

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

62) The terms *data* and *information* can be used interchangeably.

Answer: FALSE

Diff: 1

Objective: 2.01 Describe the four main functions of a computer system and how they interact with data and information

63) The fastest super computer in the world has 9,000,000 computing cores.

Answer: FALSE

Diff: 1

Objective: 2.03 List common types of computers, and discuss their main features

64) Processing is manipulating, calculating, or organizing data into information.

Answer: TRUE

Diff: 2

Objective: 2.01 Describe the four main functions of a computer system and how they interact with data and information

65) On a keyboard, Num Lock and Caps Lock are both toggle keys.

Answer: TRUE

Diff: 1

Objective: 2.04 Identify the main types of keyboards and touch screens

66) Laser printers are usually faster at printing in black and white than inkjet printers.

Answer: TRUE

Diff: 3

Objective: 2.08 Describe various types of printers, and explain when you would use them

67) All printers can print from smartphones and tablets.

Answer: FALSE

Diff: 3

Objective: 2.08 Describe various types of printers, and explain when you would use them

68) The arithmetic logic unit (ALU) controls all of the functions performed by the computer's other components and processes all the commands issued to it by software instructions.

Answer: FALSE

Diff: 2

Objective: 2.10 Explain the main functions of the CPU

69) Game controllers are output devices.

Answer: FALSE

Diff: 1

Objective: 2.05 Describe the main types of mice and pointing devices

70) Keyboards that display on-screen when text input is required are known as virtual keyboards.

Answer: TRUE

Diff: 2

Objective: 2.04 Identify the main types of keyboards and touch screens

71) Starting a computer when it is powered off is called a warm boot.

Answer: FALSE

Diff: 2

Objective: 2.13 Describe how to manage power consumption on computing devices

72) The area that holds all of the instructions the computer needs to start up is called RAM.

Answer: FALSE

Diff: 2

Objective: 2.09 Describe the functions of the motherboard and RAM

73) Today's CPUs run at speeds measured in kilohertz.

Answer: FALSE

Diff: 2

Objective: 2.10 Explain the main functions of the CPU

74) Match each of the following terms to its meaning:

- I. CPU
- II. OLED
- III. QWERTY
- IV. ROM
- V. RAM

- A. holds start up instructions needed when the computer is powered on
- B. standard keyboard layout
- C. processes commands issued by software instructions
- D. more energy efficient than LCD monitors
- E. stores programs and data the computer is currently using

Answer: C, D, B, A, E

Diff: 2

Objective: Multiple Objectives in the Chapter

75) Match each of the following terms to its meaning:

- I. data
- II. processing
- III. information
- IV. software
- V. hardware

- A. represents a fact, figure, or idea
- B. data organized in a meaningful way
- C. physical components of a computer
- D. turning data into information
- E. computer programs

Answer: A, D, B, E, C

Diff: 2

Objective: Multiple Objectives in the Chapter

76) Rank the following from smallest capacity to largest capacity:

- I. terabyte
- II. gigabyte
- III. kilobyte
- IV. megabyte
- V. petabyte

- A. largest
- B. second largest
- C. third largest
- D. fourth largest
- E. fifth largest

Answer: B, C, E, D, A

Diff: 2

Objective: 2.02 Define bits and bytes, and describe how they are measured, used, and processed

77) Match each of the following terms to its meaning:

- I. input device
- II. peripheral device
- III. output device
- IV. motherboard
- V. system unit

- A. case that houses the electronic components, power source, and storage devices of a desktop computer
- B. main circuit board containing the central electronic components of a computer
- C. used to enter data
- D. external device that exchanges data with the computer through ports
- E. displays processed data

Answer: C, D, E, B, A

Diff: 2

Objective: Multiple Objectives in the Chapter

78) Match each of the following terms to its meaning:

- I. pixel
- II. hertz
- III. bit
- IV. ppm
- V. dpi

- A. measurement of printing speed
- B. unit of measure for processor speed
- C. tiny dot that creates an image on the computer monitor
- D. measurement of printer resolution
- E. 0 or 1

Answer: C, B, E, A, D

Diff: 3

Objective: Multiple Objectives in the Chapter

1) _____ usually have the largest storage capacity of any storage device inside the computer.

- A) DVD drives
- B) Blu-ray drives
- C) Hard drives
- D) Flash memory cards

Answer: C

Diff: 2

2) Which of the following statements about your computer's primary hard drives is FALSE?

- A) Some hard drives hold up to 8 TB of information.
- B) Hard drives are nonvolatile storage devices.
- C) Internal hard drives use a laser to read and write data.
- D) Internal hard drives are enclosed in the system unit.

Answer: C

Diff: 3

3) Which of the following is NOT an optical storage device?

- A) CD
- B) Flash drive
- C) Blu-ray
- D) DVD

Answer: B

Diff: 2

4) Which of the following *optical* storage devices holds the most high-definition video?

- A) DVD
- B) BD
- C) CD
- D) Hard drive

Answer: B

Diff: 2

5) You can increase the number of USB ports on your computer by adding a(n) _____.

- A) jump drive
- B) repeater
- C) expansion hub
- D) gateway

Answer: C

Diff: 1

6) Which of the following ports do you need to use with a home theater system?

- A) DVI
- B) FireWire
- C) SVGA
- D) HDMI

Answer: D

Diff: 2

7) Which of the following ports has the fastest data transfer rate?

- A) SVGA
- B) FireWire 800
- C) USB 3.0
- D) DVI

Answer: C

Diff: 2

8) Which of the following storage devices has the most capacity?

- A) CD
- B) Cache
- C) BD
- D) DVD

Answer: C

Diff: 2

9) Which of the following statements about flash memory is FALSE?

- A) Flash memory cards are often used in smartphones.
- B) Some flash memory cards can store 256 GB of data.
- C) A flash drive is needed to read a flash memory card.
- D) Some flash memory can be plugged directly into a USB port.

Answer: C

Diff: 3

10) _____ are the places that peripheral devices attach to the computer.

- A) Hubs
- B) Repeaters
- C) Ports
- D) Gateways

Answer: C

Diff: 1

11) Which of the following ports are used to connect a computer to a cable modem or to a network?

- A) FireWire
- B) Ethernet
- C) DVI
- D) HDMI

Answer: B

Diff: 2

12) _____ memory cards are removable storage devices that let you transfer digital data to a computer.

Answer: Flash

Diff: 3

13) A high-capacity _____ hard drive is a viable, portable option for backing up the data on your computer's primary hard drive.

Answer: external

Diff: 3

14) Flash drives plug into a(n) _____ port on a computer.

Answer: Universal Serial Bus (USB)

Diff: 1

15) Blu-ray and DVDs are referred to as _____ media.

Answer: optical; storage

Diff: 1

16) The most common ports used to connect input and output devices are _____ ports.

Answer: Universal Serial Bus (USB)

Diff: 2

17) _____ services allow you to keep your files on the Internet so you can access your files from any computer.

Answer: Cloud storage; Cloud

Diff: 2

18) A(n) _____ is also referred to as a jump drive, USB drive, or flash drive.

Answer: thumb drive

Diff: 2

19) Match each of the following ports to its most common use:

- I. USB
- II. Ethernet
- III. DVI
- IV. VGA
- V. HDMI

- A. used for home theater systems
- B. commonly used for connecting input and output devices
- C. commonly used to connect CRT monitors in older systems
- D. used to connect a computer to a network
- E. commonly used to connect projectors to a computer system

Answer: B, D, E, C, A

Diff: 2

***Technology in Action, Helpdesk, 14e* (Evans et al.)**
Chapter 2 Helpdesk: Understanding Bits and Bytes

1) One byte is equal to _____.

- A) 8 characters
- B) 1 word
- C) 8 bits of data
- D) 100 bits of data

Answer: C

Diff: 2

2) A bit consists of a _____.

- A) single letter such as *R* and *B*
- B) *0* or a *1*
- C) number such a 2 or 9
- D) series of 0s and 1s such as *101*

Answer: B

Diff: 2

3) Which of the following CANNOT be represented by a single byte?

- A) A letter of the alphabet such as *Y*
- B) A word such as *Tom*
- C) A number such as *45*
- D) A special character such as *@*

Answer: B

Diff: 2

4) *Bit* is short for _____.

- A) binary digit
- B) byte
- C) kilobyte
- D) megabyte

Answer: A

Diff: 1

5) Computers work only with _____.

- A) letters and symbols
- B) binary numbers
- C) hexadecimal numbers
- D) decimal numbers

Answer: B

Diff: 2

6) A kilobyte contains approximately one _____ bytes of data.

- A) hundred
- B) thousand
- C) million
- D) billion

Answer: B

Diff: 2

7) A megabyte holds approximately _____ bytes of data.

- A) 1,000,000
- B) 1,000,000,000
- C) 1,000,000,000,000
- D) 1,000,000,000,000,000

Answer: A

Diff: 2

8) Eight binary digits is equal to _____.

- A) 1 word
- B) 1 byte
- C) 1 bit
- D) 100 bytes

Answer: B

Diff: 2

9) Which of the following statements is FALSE?

- A) Everything a computer does is broken down into a series of 0s and 1s.
- B) When referring to computers, every number, letter, or special character consists of a unique combination of 8 bits.
- C) Bit is short for binary digit.
- D) A single bit can represent a single letter.

Answer: D

Diff: 3

10) A kilobyte holds _____ bytes of data.

- A) 256
- B) 1,024
- C) 16
- D) 1,048,576

Answer: B

Diff: 3

11) Which of the following is the smallest unit of measure?

- A) Gigabyte
- B) Megabyte
- C) Petabyte
- D) Terabyte

Answer: B

Diff: 2

12) Which of the following is the largest unit of measure?

- A) Terabyte
- B) Megabyte
- C) Petabyte
- D) Kilobyte

Answer: C

Diff: 2

13) How many bits does it take to spell the word *yes*?

- A) 3
- B) 8
- C) 24
- D) 30

Answer: C

Diff: 3

14) Which of the following is NOT an example of data?

- A) A sound
- B) A word
- C) A report
- D) A picture

Answer: C

Diff: 3

15) The representation of a fact, figure, or idea is called _____.

- A) information
- B) byte
- C) data
- D) input

Answer: C

Diff: 2

16) Data that has been organized is called _____.

- A) binary digits
- B) information
- C) bytes
- D) output

Answer: B

Diff: 2

17) Computers use _____ language to process data at the most basic level.

- A) computer
- B) English
- C) C++
- D) binary

Answer: D

Diff: 2

18) In reference to units of measurement, KB stands for _____.

Answer: kilobyte

Diff: 2

19) In reference to units of measurement, GB stands for _____.

Answer: gigabyte

Diff: 2

20) Processor speeds are measured in units of _____.

Answer: hertz; Hz; megahertz; MHz

Diff: 2

21) Match each of the following terms to its definition:

- I. bit
- II. byte
- III. hertz
- IV. megabyte
- V. terabyte

- A. 8 binary digits
- B. greater than a kilobyte, smaller than a gigabyte
- C. machine cycles per second
- D. 0 or 1
- E. more than one trillion bytes

Answer: D, A, C, B, E

Diff: 3

Technology in Action, Helpdesk, 14e (Evans et al.)
Chapter 2 Helpdesk: Using Output Devices

1) Two of the most important factors to consider when choosing an LCD monitor are its resolution and _____.

- A) refresh rate
- B) aspect ratio
- C) contrast
- D) dot pitch

Answer: B

Diff: 2

2) With a liquid crystal display (LCD) monitor, what causes images to be displayed on the screen?

- A) Light surrounding the images
- B) Up and down movement of light
- C) An electric current passing through the liquid crystal solution and moving the crystals to either block the fluorescent light or let the light shine through
- D) Static electricity

Answer: C

Diff: 3

3) An LCD screen is composed of a fixed grid of _____.

- A) organic materials
- B) phosphors
- C) pixels
- D) rays

Answer: C

Diff: 2

4) The colors displayed by an LCD monitor are made by combining which of the following colors?

- A) Cyan, yellow, magenta, and black
- B) Red, blue, and green
- C) Green, blue, and yellow
- D) Yellow, red, blue, and green

Answer: D

Diff: 3

5) An LCD's viewing angle is measured in _____.

- A) degrees
- B) refreshes
- C) megahertz
- D) inches

Answer: A

Diff: 2

6) A monitor's _____ is a measure of the difference in light intensity between the brightest white and the darkest black colors.

- A) brightness
- B) resolution
- C) aspect ratio
- D) contrast ratio

Answer: D

Diff: 2

7) A printer's resolution is measured in _____.

- A) dpi
- B) pixels
- C) ppm
- D) pdf

Answer: A

Diff: 2

8) Speed for printers is measured in _____.

- A) pps
- B) Kps
- C) Mhz
- D) ppm

Answer: D

Diff: 2

9) To accommodate HD format video, new monitors have an aspect ratio of _____.

- A) 25:16
- B) 5:4
- C) 16:9
- D) 4:3

Answer: C

Diff: 3

10) The resolution of a monitor has to be at least _____ to play a Blu-ray movie.

- A) 1600×1200
- B) 1920×1080
- C) 1024×768
- D) 1366×768

Answer: B

Diff: 3

11) Response time refers to the amount of time it takes _____.

A) to begin printing once you have clicked Print

B) for your computer to boot up

C) for a pixel to change color

D) to adjust the settings on a monitor

Answer: C

Diff: 1

12) Flat-panel monitors are also called _____ monitors.

Answer: liquid crystal display (LCD); light emitting diode (LED)

Diff: 1

13) Images are created on an LCD monitor using millions of tiny dots known as _____.

Answer: pixels

Diff: 1

14) A(n) _____ printer uses toner rather than wet ink.

Answer: laser

Diff: 2

15) An inkjet printer sprays ink onto the page and is an example of a(n) _____ printer.

Answer: nonimpact; non-impact

Diff: 2

16) The _____ of a monitor tells how far you can move to the side, above, or below the monitor before the image quality degrades to unacceptable levels.

Answer: viewing angle

Diff: 2

17) A(n) _____ printer works either by melting wax-based ink onto ordinary paper or by burning dots onto specially coated paper.

Answer: thermal

Diff: 2

18) LCD stands for _____.

Answer: liquid crystal display

Diff: 2

19) Match each of the following terms to its definition:

- I. contrast ratio
- II. brightness
- III. viewing angle
- IV. response time
- V. resolution

- A. how long it takes a pixel to change color
- B. the difference in light intensity between the brightest white and the darkest black colors a monitor can produce
- C. measured as candelas per square meter
- D. tells how far you can move to the side, above, or below a monitor before the image quality degrades below acceptable levels
- E. number of pixels displayed on a screen

Answer: B, C, D, A, E

Diff: 3

20) Match each of the following printer concepts or terms to its measurement or function:

- I. printer speed
- II. printer resolution
- III. inkjet printers
- IV. all-in-one
- V. laser printers

- A. measured in ppm
- B. measured in dpi
- C. generally produce the highest quality printouts
- D. affordable and produce photo-quality images
- E. combines the functions of a printer, scanner, copier, and fax into a single machine

Answer: A, B, D, E, C

Diff: 2

***Technology In Action, Sound Bytes, 14e* (Evans et al.)**
Chapter 2 Sound Bytes: Binary Numbers Interactive

1) A binary digit is referred to as a _____.

- A) bit
- B) byte
- C) microbit
- D) character

Answer: A

Diff: 1

2) Which of the following numbering systems is ordinarily used by people?

- A) Binary
- B) Octal
- C) Decimal
- D) Hexadecimal

Answer: C

Diff: 1

3) Hexadecimal represents numbers using which base?

- A) 2
- B) 8
- C) 10
- D) 16

Answer: D

Diff: 2

4) In the RGB system, when all three component colors are set to zero, what is the result?

- A) The light for each color is turned on.
- B) The decimal and hexadecimal values differ.
- C) The resulting color is pitch black.
- D) The resulting color is white.

Answer: C

Diff: 3

5) How many colors are used in the RGB system?

- A) 2
- B) 3
- C) 16
- D) 255

Answer: B

Diff: 2

6) A single hexadecimal number is represented by _____ digits in the binary numbering system.

- A) 2
- B) 4
- C) 8
- D) 16

Answer: B

Diff: 3

7) The _____ numbering system uses base 2.

Answer: binary

Diff: 1

8) When storing information in a computer, the binary numbering system uses a(n) _____ to represent an on switch.

Answer: 1, one

Diff: 1

9) When storing information in a computer, the binary numbering system uses a(n) _____ to represent an off switch.

Answer: 0, zero

Diff: 1

10) For each numbering base system, the far right always has a place value of _____.

Answer: 1, one, ones

Diff: 1

11) _____ numbers are used in place of binary numbers because binary numbers are difficult to read.

Answer: Hexadecimal, Decimal

Diff: 2

12) In the RGB system, each color can have a value from 0 to _____.

Answer: 255, two hundred fifty-five

Diff: 3

13) In the hexadecimal numbering system, each place value digit is _____ times greater than the digit to its right.

Answer: 16, sixteen

Diff: 2

14) In the binary numbering system, each place value digit can have _____ possible values.

Answer: 2, two

Diff: 1

15) In the _____ numbering system, each place value digit is ten times greater than the digit to its right.

Answer: decimal

Diff: 1

16) Computers store information in _____ (Base 2), which is difficult, if not impossible for humans to read.

Answer: binary

Diff: 1

17) The _____ system uses combinations of red, green and blue light to display a full spectrum of colors.

Answer: RGB

Diff: 1

18) Match the following terms to their meaning:

I. binary

II. hexadecimal

III. decimal

IV. RGB

V. base

A. number that represents the value of each digit

B. numbering system that uses 0s and 1s

C. coding system for displaying colors on a computer screen

D. people normally use this numbering system

E. numbering system that uses base 16

Answer: B, E, D, C, A

Diff: 2

Chapter 2 Sound Bytes: Smartphones Are Really Smart

1) The two major mobile operating systems on the market are _____ and Android.

- A) PrimOS
- B) Windows
- C) iOS
- D) Palm

Answer: C

Diff: 3

2) The Android smartphone operating system was developed by _____.

- A) Samsung
- B) Apple
- C) Intel
- D) Google

Answer: D

Diff: 2

3) Smartphones store their operating system software in _____.

- A) ROM
- B) RAM
- C) SD cards
- D) micro SD cards

Answer: A

Diff: 2

4) Smartphones include all of the following EXCEPT _____.

- A) a CPU
- B) a mouse
- C) storage capabilities
- D) ports

Answer: B

Diff: 1

5) Some smartphones support additional memory through _____.

- A) micro SD flash cards
- B) operating system swap files
- C) Global Positioning System (GPS)
- D) Bluetooth connectivity

Answer: A

Diff: 2

6) _____ measure the amount of movement in any direction to detect shaking and rotation.

- A) Synchronizers
- B) Accelerometers
- C) Proximity sensors
- D) GPS

Answer: B

Diff: 2

7) Who built and operates the Global Positioning System?

- A) NASA
- B) UN
- C) U.S. Department of Defense
- D) DARPA

Answer: C

Diff: 3

8) Many full-featured smartphones support additional memory through micro _____ flash cards.

Answer: SD

Diff: 2

9) Using _____, a smartphone can connect to an automobile audio/control system.

Answer: Bluetooth

Diff: 1

10) Google Assistant and Apple's Siri use _____ to assist smartphone users.

Answer: voice recognition

Diff: 2

11) A(n) _____ measures the amount of movement in any direction so that they can detect shaking or rotation.

Answer: accelerometer

Diff: 2

12) Smartphones come with _____ screens in a variety of resolutions.

Answer: OLED

Diff: 2

13) Smartphones are small fully functional computers.

Answer: TRUE

Diff: 1

14) Android devices do NOT support voice recognition.

Answer: FALSE

Diff: 1

15) Apple's iPhone series does NOT allow you to add any memory.

Answer: TRUE

Diff: 2

16) Match each of the following terms to its description:

I. OLED

II. 4G

III. GPS

IV. stylus

V. Siri

A. powerful navigational system

B. cellular network

C. screen type used by smartphones

D. Apple's artificial intelligent assistant

E. pointing device

Answer: C, B, A, E, D

Diff: 3