# 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.

D) Terabyte Answer: A Diff: 2

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

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
Sojective. 2.09 Describe the renetions of the modificound that it is
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
ogitta. t. 2.07 belief the following of the modificount and it in

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
cojour en 2010 2000 nom to manago pomer consumption on companing actives
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
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
The state of the s
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
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 <i>data</i> and <i>information</i> 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

## Technology in Action, Helpdesk, 14e (Evans et al.) **Chapter 2 Helpdesk: Exploring Storage Devices and Ports** 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
<ul> <li>9) Which of the following statements about flash memory is FALSE?</li> <li>A) Flash memory cards are often used in smartphones.</li> <li>B) Some flash memory cards can store 256 GB of data.</li> <li>C) A flash drive is needed to read a flash memory card.</li> <li>D) Some flash memory can be plugged directly into a USB port.</li> <li>Answer: C</li> <li>Diff: 3</li> </ul>
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

#### 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 <i>Y</i> B) A word such as <i>Tom</i> C) A number such as <i>45</i> 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

<ul> <li>6) A kilobyte contains approximately one</li> <li>A) hundred</li> <li>B) thousand</li> <li>C) million</li> <li>D) billion</li> <li>Answer: B</li> <li>Diff: 2</li> </ul>	bytes of data.
7) A megabyte holds approximately by A) 1,000,000 B) 1,000,000,000 C) 1,000,000,000,000 D) 1,000,000,000,000 Answer: A Diff: 2	tes of data.
8) Eight binary digits is equal to A) 1 word B) 1 byte C) 1 bit D) 100 bytes Answer: B Diff: 2	
<ul> <li>9) Which of the following statements is FALSE?</li> <li>A) Everything a computer does is broken down in</li> <li>B) When referring to computers, every number, locombination of 8 bits.</li> <li>C) Bit is short for binary digit.</li> <li>D) A single bit can represent a single letter.</li> <li>Answer: D</li> <li>Diff: 3</li> </ul>	
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 <i>yes</i> ?  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
<ul> <li>2) With a liquid crystal display (LCD) monitor, what causes images to be displayed on the screen?</li> <li>A) Light surrounding the images</li> <li>B) Up and down movement of light</li> <li>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</li> <li>D) Static electricity</li> <li>Answer: C</li> <li>Diff: 3</li> </ul>
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

<ul> <li>6) A monitor's is a measure of the difference in light intensity between the brighte white and the darkest black colors.</li> <li>A) brightness</li> <li>B) resolution</li> <li>C) aspect ratio</li> <li>D) contrast ratio</li> </ul>	st
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) $1600 \times 1200$ B) $1920 \times 1080$ C) $1024 \times 768$ D) $1366 \times 768$ 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

## 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
<ul> <li>2) Which of the following numbering systems is ordinarily used by people?</li> <li>A) Binary</li> <li>B) Octal</li> <li>C) Decimal</li> <li>D) Hexadecimal</li> <li>Answer: C</li> <li>Diff: 1</li> </ul>
3) Hexadecimal represents numbers using which base? A) 2 B) 8 C) 10 D) 16 Answer: D Diff: 2
<ul> <li>4) In the RGB system, when all three component colors are set to zero, what is the result?</li> <li>A) The light for each color is turned on.</li> <li>B) The decimal and hexadecimal values differ.</li> <li>C) The resulting color is pitch black.</li> <li>D) The resulting color is white.</li> <li>Answer: C</li> <li>Diff: 3</li> </ul>
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 he system. A) 2 B) 4 C) 8 D) 16 Answer: B Diff: 3	xadecimal number is represented by	digits in the bina	ary numbering
	numbering system uses base 2.		
represent an o	ng information in a computer, the binary nur n switch. 1, one	nbering system use	s a(n) to
represent an o	ng information in a computer, the binary nur ff switch.  0, zero	nbering system use	s a(n)to
10) For each n Answer: Diff: 1	numbering base system, the far right always 1, one, ones	has a place value of	·
to read.	numbers are used in place of binary number Hexadecimal, Decimal	rs because binary nu	umbers are difficult
	B system, each color can have a value from 255, two hundred fifty-five	0 to	
13) In the hexathe digit to its Answer: Diff: 2	adecimal numbering system, each place valuright. 16, sixteen	ie digit is	times greater than
14) In the bina Answer: Diff: 1	ary numbering system, each place value digi 2, two	t can have	_ possible values.

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
<ul> <li>A. number that represents the value of each digit</li> <li>B. numbering system that uses 0s and 1s</li> <li>C. coding system for displaying colors on a computer screen</li> <li>D. people normally use this numbering system</li> <li>E. numbering system that uses base 16</li> <li>Answer: B, E, D, C, A</li> </ul>

#### Technology In Action, Sound Bytes, 14e (Evans et al.) Chapter 2 Sound Bytes: Smartphones Are Really Smart

1) The two major mobile operating systems on the market are  A) PrimOS  B) Windows  C) iOS  D) Palm  Answer: C  Diff: 3	and Android.
2) The Android smartphone operating system was developed byA) 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	
<ul> <li>4) Smartphones include all of the following EXCEPT</li> <li>A) a CPU</li> <li>B) a mouse</li> <li>C) storage capabilities</li> <li>D) ports</li> <li>Answer: B</li> <li>Diff: 1</li> </ul>	
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