Chapter 6:

Graphics, Digital Media, and multimedia

## Multiple Choice:

1. Pixels are:
   1. dots of ink from an inkjet printer.
   2. dots on the screen arranged in rows.
   3. points of light used by a cordless, wireless, optical mouse.
   4. points on the end of PDA handheld devices.

**Answer:** B **Reference:** Painting: Bitmapped Graphics **Difficulty:** Easy

1. Pixels are primarily controlled by the:
   1. user.
   2. hardware.
   3. software.
   4. operating system.

**Answer:** C **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. Software that allows a user to paint pixels on the screen using a pointing device is known as:
   1. painting software.
   2. palette software.
   3. bitmapped software.
   4. raster graphics software.

**Answer:** A **Reference:** Painting: Bitmapped Graphics **Difficulty:** Easy

1. Simple pictures or maps are created by:
   1. bitmapped graphics programs.
   2. painting programs.
   3. vector graphics programs.
   4. resolution programs.

**Answer:** A **Reference:** Painting: Bitmapped Graphics **Difficulty:** Easy

1. A bit can contain one of two possible values,:
   1. 0 or 1.
   2. 8 or 16.
   3. 1 or 2.
   4. A or B.

**Answer:** A **Reference:** Painting: Bitmapped Graphics **Difficulty:** Easy

1. When a program assigns 8 bits to a pixel, that pixel can display one of up to \_\_\_\_\_\_\_\_\_\_\_\_ colors.
   1. 32
   2. 64
   3. 256
   4. 1,024

**Answer:** C **Reference:** Painting: Bitmapped Graphics **Difficulty:** Challenging

1. The density of pixels on a screen is known as:
   1. resolution.
   2. pixility.
   3. pixel depth.
   4. screen clarity.

**Answer:** A **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. A digital photograph is a:
   1. resolution graphic.
   2. raster graphic.
   3. bitmapped image.
   4. raster image.

**Answer:** C **Reference:** Image Processing: Photographic Editing by Computer **Difficulty:** Moderate

1. Programs such as Apple iPhoto and Microsoft PictureIt! are examples of:
   1. photo database software.
   2. resolution software.
   3. photo management software.
   4. gray-scale graphics software.

**Answer:** C **Reference:** Image Processing: Photographic Editing by Computer **Difficulty:** Moderate

1. Bitmapped files are usually:
   1. small in size.
   2. large in size.
   3. zipped for convenience.
   4. very fast to attach and transfer through the Internet.

**Answer:** B **Reference:** Drawing: Object-Oriented Graphics **Difficulty:** Moderate

1. Software that stores lines and shapes rather than individual pixels is known as:
   1. vector graphics software.
   2. raster graphics software.
   3. photo database software.
   4. resolution software.

**Answer:** A **Reference:** Drawing: Object-Oriented Graphics **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ is built into many high-end output devices.
   1. Subscript
   2. A font cartridge
   3. A pixel selection
   4. PostScript

**Answer:** D **Reference:** Drawing: Object-Oriented Graphics **Difficulty:** Easy

1. Previously drawn images that artists can legally use in their own work are known as:
   1. copyart.
   2. clip art.
   3. free art.
   4. shareware.

**Answer:** B **Reference:** Working Wisdom: Creating Smart Art **Difficulty:** Moderate

1. Software that can create art that a designer can rotate, view from a variety of angles, and take two-dimensional “snapshots” of the best views is known as:
   1. 3-D modeling software.
   2. photo database software.
   3. photo management software.
   4. gray-scale graphics software.

**Answer:** A **Reference:** 3-D Modeling Software **Difficulty:** Moderate

1. CAD software is primarily used in:
   1. engineering.
   2. software development.
   3. desktop publishing.
   4. accounting.

**Answer:** A **Reference:** CAD/CAM: Turning Pictures into Products **Difficulty:** Moderate

1. CAD stands for:
   1. computer-assisted design.
   2. computer application design.
   3. computer application and design.
   4. computer-aided design.

**Answer:** D **Reference:** CAD/CAM: Turning Pictures into Products **Difficulty:** Moderate

1. CAM stands for:
   1. computer-assisted manufacturing.
   2. computer application and manifestation.
   3. computer-aided manufacturing.
   4. computer application and marketing.

**Answer:** C **Reference:** CAD/CAM: Turning Pictures into Products **Difficulty:** Moderate

1. PowerPoint is an example of:
   1. presentation graphics software.
   2. raster graphics software.
   3. photo management software.
   4. gray-scale graphics software.

**Answer:** A **Reference:** Presentation Graphics: Bringing Lectures to Life **Difficulty:** Easy

1. The creation of a presentation of slides is done in:
   1. desktop publishing software.
   2. raster graphics software.
   3. presentation graphics software.
   4. gray-scale graphics software.

**Answer:** C **Reference:** Presentation Graphics: Bringing Lectures to Life **Difficulty:** Easy

1. The free add-on program to PowerPoint that makes it possible to publish video presentations to the Web is called:
   1. Micromedia Flash.
   2. Producer.
   3. FrontPage.
   4. Director MX.

**Answer:** B **Reference:** Presentation Graphics: Bringing Lectures to Life **Difficulty:** Moderate

1. Programs such as PowerPoint are also known as:
   1. multimedia Web design tools.
   2. vector graphics programs.
   3. Web design tools.
   4. multimedia-presentation tools.

**Answer:** D **Reference:** Presentation Graphics: Bringing Lectures to Life **Difficulty:** Moderate

1. The creation of motion from still pictures is called:
   1. a presentation.
   2. 3-D modeling.
   3. transition.
   4. animation.

**Answer:** D **Reference:** Animation: Graphics in Time **Difficulty:** Moderate

1. Many bitmapped images in a sequence is known as:
   1. GIF animation.
   2. JPG animation.
   3. TIF animation.
   4. tweening.

**Answer:** A **Reference:** Animation: Graphics in Time **Difficulty:** Moderate

1. Usually, \_\_\_\_\_\_\_\_\_\_\_ video is transferred through FireWire.
   1. analog
   2. digital
   3. bit-mapped
   4. digitized

**Answer:** B **Reference:** Analog and Digital Video **Difficulty:** Moderate

1. When something is displayed at the same time as it is created, accessed, or imported, it is known as:
   1. digital time.
   2. real time.
   3. online time.
   4. batch time.

**Answer:** B **Reference:** Analog and Digital Video **Difficulty:** Moderate

1. A video project usually starts with an outline and a \_\_\_\_\_\_\_\_\_\_\_\_ that describes the action.
   1. story edit
   2. flow chart
   3. storyboard
   4. line chart

**Answer:** C **Reference:** Video Production Goes Digital **Difficulty:** Easy

1. Adobe Premiere, Apple iMovie, and Microsoft Windows Movie Maker 2 are examples of:
   1. video editing software.
   2. presentation software.
   3. graphics software.
   4. digital camera software.

**Answer:** A **Reference:** Video Production Goes Digital **Difficulty:** Moderate

1. What is the process that condenses files to be stored in less space and therefore, sent faster over the Internet?
   1. Data condensation
   2. Data compression
   3. Zipping
   4. Defragmentation

**Answer:** B **Reference:** Data Compression **Difficulty:** Moderate

1. Before files that have been condensed can be opened and used, they must be:
   1. decompressed.
   2. zipped.
   3. decondensed.
   4. deframented.

**Answer:** A **Reference:** How It Works 6.1: Data Compression **Difficulty:** Moderate

1. When sound is digitally recorded, it is said to be:
   1. rerecorded.
   2. animated.
   3. analoged.
   4. digitized.

**Answer:** D **Reference:** Digital Audio Basics **Difficulty:** Moderate

1. The process of copying files to a CD is known as:
   1. burning.
   2. copying.
   3. storing.
   4. pasting.

**Answer:** A **Reference:** Digital Audio Basics **Difficulty:** Easy

1. All EXCEPT \_\_\_\_\_\_\_\_\_\_\_\_ can squeeze music files to a fraction of their original size.
   1. AAC
   2. MP3
   3. WMA
   4. P2P

**Answer:** D **Reference:** Digital Audio Basics **Difficulty:** Challenging

1. Music that plays on a computer, such as a radio station, but is never downloaded is known as:
   1. P2P.
   2. streaming.
   3. MP3.
   4. real time.

**Answer:** B **Reference:** Working Wisdom: Digital Audio Do’s and Don’ts **Difficulty:** Moderate

1. A standard interface that is used to send commands to instruments and sound sources is:
   1. downloading.
   2. RealAudio.
   3. MIDI.
   4. AAC.

**Answer:** C **Reference:** Samplers, Synthesizers, and Sequencers **Difficulty:** Moderate

1. Historically, the term “hypertext” was used when textual information was linked in \_\_\_\_\_\_\_\_\_\_\_\_ ways.
   1. sequential
   2. real time
   3. nonsequential
   4. linear

**Answer:** C **Reference:** Hypertext and Hypermedia **Difficulty:** Moderate

1. When a document or media is to be accessed and read from beginning to end, it is known as:
   1. sequential.
   2. real time.
   3. nonsequential.
   4. linear.

**Answer:** A **Reference:** Hypertext and Hypermedia **Difficulty:** Moderate

1. The term \_\_\_\_\_\_\_\_\_\_\_\_ generally means using some combination of text, graphics, animation, video, music, voice, and sound effects to communicate.
   1. MIDI
   2. hyperlinking
   3. WYSIWYG
   4. multimedia

**Answer:** D **Reference:** Interactive Multimedia: What Is It? **Difficulty:** Moderate

1. Computer-generated worlds that created the illusion of immersion are known as:
   1. virtual worlds.
   2. hypermedia.
   3. hyperlinks.
   4. real time.

**Answer:** A **Reference:** Inventing the Future: Shared Virtual Spaces **Difficulty:** Easy

1. \_\_\_\_\_\_\_\_\_\_\_\_ combines virtual worlds with networking, placing multiple participants in a virtual space.
   1. Virtual reality
   2. Hypermedia
   3. Hyper reality
   4. Real time

**Answer:** A **Reference:** Inventing the Future: Shared Virtual Spaces **Difficulty:** Easy

1. A musical composition is typically made up of numerous:
   1. sectors.
   2. tracks.
   3. files.
   4. directories.

**Answer:** B **Reference:** How It Works: 6.1 Computer-Based Music Production **Difficulty:** Easy

1. MIDI stands for:
   1. Musical Instruction and Digitized Instruments.
   2. Musical Instrument Digital Interface.
   3. Music and Instruments Digitized Instantly.
   4. Musical Interface Digitally Integrated.

**Answer:** B **Reference:** Samplers, Synthesizers, and Sequencers **Difficulty:** Moderate

1. Guidelines for creating a well-done presentation include all EXCEPT:
   1. maintain a consistent appearance.
   2. keep it simple
   3. make it lively.
   4. use a large variety and quantity of sounds, animation, and bells and whistles.

**Answer:** D **Reference:** Working Wisdom **Difficulty:** Easy

## Fill in the Blank:

1. \_\_\_\_\_\_\_\_\_\_\_\_ was the developer of HTML and the Web.

**Answer:** Tim Berners-Lee **Reference:** Tim Berners-Lee Weaves **Difficulty:** Challenging

1. The \_\_\_\_\_\_\_\_\_\_\_\_ is an organization dedicated to helping evolve the Web in positive directions.

**Answer:** W3C **Reference:** Tim Berners-Lee Weaves **Difficulty:** Challenging

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ a tiny dot of white, black, or color arranged in rows on a monitor.

**Answer:** pixel **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. Painting programs create \_\_\_\_\_\_\_\_\_\_\_\_ graphics.

**Answer:** bitmapped **Reference:** Painting: Bitmapped Graphics **Difficulty:** Challenging

1. \_\_\_\_\_\_\_\_\_\_\_\_ graphics allow each pixel be show on the monitor as black, white, or a shade of gray.

**Answer:** Gray-scale **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. The number of bits devoted to each pixel is called \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** bit depth or color depth **Reference:** Painting: Bitmapped Graphics **Difficulty:** Challenging

1. The clarity of a monitor is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** resolution **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. DPI stands for \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** dots per inch **Reference:** Painting: Bitmapped Graphics **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ allows a photographer to manipulate digital photos and other high-resolution images with tools similar to those found in paint programs.

**Answer:** Image processing software **Reference:** Image Processing **Difficulty:** Challenging

1. When a digital image is currently being viewed on a computer screen, it is actively loaded into \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** RAM **Reference:** Image Processing **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ graphic software stores a picture not as a collection of dots, but as a collection of lines and shapes.

**Answer:** Vector or object-oriented **Reference:** Image Processing **Difficulty:** Moderate

1. A standard page-description language for describing text fonts, illustrations, and other elements of the printed page is called \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** PostScript **Reference:** Image Processing **Difficulty:** Challenging

1. Images that are available without copyright restrictions are called \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** clip art **Reference:** Working Wisdom: Creating Smart Art **Difficulty:** Easy

1. \_\_\_\_\_\_\_\_\_\_\_\_ photographs, drawings, text, or company logos should not be used without permission.

**Answer:** Copyrighted **Reference:** Working Wisdom: Creating Smart Art **Difficulty:** Easy

1. \_\_\_\_\_\_\_\_\_\_\_\_ software can rotate, stretch, and combine images with other model objects.

**Answer:** 3-D modeling **Reference:** 3-D Modeling Software **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ software is used by engineers to design products.

**Answer:** CAD **Reference:** CAD/CAM: Turning Pictures into Products **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ software is used to control manufacturing of products.

**Answer:** CAM **Reference:** CAD/CAM: Turning Pictures into Products **Difficulty:** Moderate

1. CIM stands for \_\_\_\_\_\_\_\_\_\_\_.

**Answer:** computer-integrated manufacturing **Reference:** CAD/CAM **Difficulty:** Moderate

1. SVG stands for \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** Scalable Vector Graphics **Reference:** Animation: Graphics in Time **Difficulty:** Moderate

1. When computers act in \_\_\_\_\_\_\_\_\_\_\_\_, they are displaying multimedia at the same time they are being created.

**Answer:** real time **Reference:** Analog and Digital Video **Difficulty:** Moderate

1. When a video clip merges and transforms into another image it is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** morphing **Reference:** Video Production Goes Digital **Difficulty:** Moderate

1. When using a(n) \_\_\_\_\_\_\_\_\_\_\_ compression system, a file can be compressed and decompressed without loss of data.

**Answer:** lossless **Reference:** How It Works 6.1: Data Compression **Difficulty:** Moderate

1. AR stands for \_\_\_\_\_\_\_\_\_\_\_.

**Answer:** augmented reality **Reference:** Inventing the Future: Shared Virtual Spaces **Difficulty:** Challenging

## Matching:

1. Match the following software programs with their capabilities:

I. image processing software A. stores a picture as a collection of lines and shapes

II. painting software B. can create pixels on the screen with a pointing device

III. photo management software C. can eliminate “red eye” and brush away blemishes

IV. drawing software D. can create objects or models that can be rotated or stretched

V. 3-D modeling software E. simplify and automate capturing, organizing, and editing digital images

VI. video editing software F. automates the creation of visual aids for lectures

**Answers:** C, B, E, A, D, F **Reference:** Multiple locations **Difficulty:** Challenging

1. Match the following software programs with their capabilities:

I. compression software A. squeezes data into smaller sizes

II. sequencing software B. used to imitate music and used with MIDI

III. CAD C. used to control the manufacturing of parts

IV. multimedia authoring software D. desktop publishing and interactive multimedia authoring software

V. CAM E. used by engineers and designers to design products

VI. presentation graphics software F. can combine clips into coherent scenes, splice together scenes, and insert visual transitions

**Answers:** A, B, E, F, C, D **Reference:** Multiple locations **Difficulty:** Challenging

1. Match the following terms to their meanings:

I. compression A. expanding a file into its original form

II. streaming B. combination of text, graphics, animation, video, music, and voice

III. multimedia C. running music, for example, in real time

IV. decompression D. squeezing data into a smaller file

V. morphing E. when video and audio clips are stored digitally and are able to be edited

VI. nonlinear editing F. images displayed at the same time they are created or imported

VII. real time G. changing and merging one computer image into another

**Answers:** D, C, B, A G, E, F **Reference:** Multiple locations **Difficulty:** Moderate