

1. A(n) _____ executes instructions in parallel with the CPU and carries out all of the graphics operations, including modeling, motion, rendering, and display.
☒ GPU
2. The GPU along with its dedicated RAM, referred to as _____ memory, is located on a graphics card.
☒ video
3. Animating an object containing thousands of _____ can require billions of arithmetic operations.
☒ vertices
4. Some of the first computer games were created in the early 1970s by college students experimenting after hours to see what the new _____ were capable of doing.
☒ Minicomputers
5. _____ is a term coined in the mid-1960s to describe a computer system that was smaller and less expensive than the unwieldy mainframes of the 1950s and early 60s.
☒ Minicomputer
6. Because of the many technical complexities, the cost of developing a sophisticated _____ can run to tens of millions of dollars and take hundreds or thousands of person-years to design and implement.
☒ MMOG
7. In a MMOG, the virtual world in which the game is played is _____.
☒ persistent
8. The branch of computer graphics that studies methods for creating images at a rate matching that of the real world is called _____.
☒ real-time graphics
9. In object modeling, once an object's surface is tessellated, information about the polygons is stored in memory in the form of a _____.
☒ vertex list
10. _____ means taking an object stored as a mathematical model and converting it into a fully formed, visually pleasing three-dimensional image.
☒ Rendering
11. Imaging speed is known as the _____ rate.
☒ frame
12. The _____ software used to log on to a MMOG game server may either be proprietary code purchased from the gaming company or a publicly available program such as a web browser.
☒ client

13. Extremely high-quality, lifelike images are known by the term ____ animation.

☒ photorealistic

14. ____ are pre-prepared objects that can be dropped into a frame as is, producing a significant speedup in frame creation.

☒ Cut-ins

15. There is a sequence of operations, termed the ____, which must be completed successfully to produce a realistic three-dimensional image.

☒ graphics pipeline

16. ____ was the first feature-length film to have its central character generated using animation.

☒ King Kong

17. A video card is connected to the main CPU and memory through a plug-in expansion slot or through the ____.

☒ system bus

18. Both hand-drawn frames and ____ animation are manual techniques that require a great deal of time.

☒ stop-motion

19. All of the following are technical problems that the designers of MMOG must address and solve EXCEPT ____.

☐ they are responsible for keeping track of each user's activity to ensure his or her actions do not incorrectly affect the actions of other players

☐ they are responsible for making sure the database can be accessed quickly enough to provide real-time response to user actions

☐ they are responsible for implementing the network protocols to support a vast communications array

☒ they are responsible for ensuring the game's visualizations are not too sophisticated for the user community

20. Using a CGI technique called ____, a human animator only needs to produce the first frame, the last frame, and the elapsed time in order for a computer to automatically generate the required intermediate frames called tweeners.

☒ keyframing