1. There are two components on a motherboard that really limit the capabilities of a computer. What are they?

2. Name several motherboard manufacturers.

3. Place the AT, ATX, ATX v2, BTX, NLX form factor specifications in order of release.

4. We are looking at a computer with a motherboard power plug that has two 6 pin connectors. What form factor are we looking at?

5. We are looking at a computer that has a single 24 pin P1 power connector for the motherboard. The power supply has multiple SATA power plugs, a eight pin and a four pin processor plug, and a 6 pin PCI express power plug. What from factor are we looking at?

6. We are looking at a computer that has a single 20 pin P1 power connector for the motherboard. The power supply has multiple 4 pin Molex power plugs, an eight pin auxiliary plug, and even a 4 pin floppy power plug. What from factor are we looking at?

7. What are the three most common types of chipsets on the motherboard?

8. This device is no longer located on the motherboard in current architecture since its functions are now located in the processor. Those circuits are directed to the graphics card and the memory. What is this device?

9. We should take care to cool these three integrated circuits on a motherboard or card in an expansion slot.

10. Describe these cards in an expansion slot.
    a. Sound
    b. Network Interface Card (NIC) - wired
    c. Network Interface Card (NIC) - wireless
    d. Graphics Card

11. What is the reason that the two conductors leading to the front of the computers are twisted pair?

12. What part of the chipset connects to the keyboard, mouse and SATA drives?

13. What type of BIOS is capable of being updated using a software program obtained by the motherboard manufacturer?

14. What type of BIOS is Capable of being updated by installing a new BIOS chip obtained by the motherboard manufacturer?

15. When not drained, this device is capable of providing power to save computer settings on the chip

16. What Is read from initially when the computer is first turned on and POSTs?

17. Are PCI and PCI express technologies the same?

18. What is the purpose of an AGP port?

19. What two places show us the information to plug the twisted pair control wires coming from the front into the motherboard?

20. In this process, we locate the CMOS jumper on the motherboard and move the jumper from pins 1 and 2 to 2 and 3. We then power on the computer for several seconds. When we turn the computer off, we relocate the jumper to pins 1 and 2. Turn on the computer and we can now access the BIOS.

21. Name several items that we would find a motherboard.

22. Very high end graphics cards are required by graphic artists, engineers using 3D CAD programs and gamers. Today, motherboards come with two _____ for multiple video cards.

23. Current motherboards come with multiple SATA ports to include 2 to 6 hard drives. This enables the PC technician to have _____ setup for automatic backup.

24. How many drives are required for Redundant Array of Independent Disks 1?

25. How many drives are required for Redundant Array of Independent Disks 5?