

Introduction to Computer Hardware Review

1. What two things does a computer need to operate?
2. Explain the terms input, process, storage and output.
3. Name five computer input devices.
4. Name five computer output devices.
5. Name five computer storage devices.
6. Describe the different ports on a computer.
7. Originally motherboard contained Electrically Programmable Read Only Memory (EPROM) chips and technicians had to remove the chip to make a BIOS upgrade. Today, computer companies provide motherboards with Electrically Erasable Programmable Read Only Memory (EEPROM) chips where the BIOS can be updated by doing what?
8. Name two companies that produce microprocessors
9. Describe the following technologies
 - a. Tally stick
 - b. Abacus
 - c. Slide rule
 - d. Mechanical calculator
 - e. Atanasoff Berry Computer
 - f. ENIAC
 - g. Microprocessor
10. This electrical device converts AC such as 120 volts to 3.3, 5 and 12 volts DC.
11. This motherboard component controls devices such hard drive, USB connections, expansion slots, keyboard and mouse.
12. This component on older motherboards connects the processor, graphics card and memory.
13. Name three expansion slot connection technologies for video cards
14. How do we measure clock speeds on a computer?
15. A modern motherboard no longer has a North Bridge integrated circuit (IC) because those functions have been added to what device?
16. Describe the following hard drive technologies:
 - a. Winchester hard drive
 - b. Integrated Device Electronics (IDE)
 - c. Enhanced Integrated Device Electronics (EIDE)
 - d. Serial Advanced Technology Attachment (SATA)

17. The power supply on the computer is making a lot of noise. What device could be causing the irritation?
18. What devices can hold our data when the computer is turned off?
19. This device typically has a heatsink and fan mounted on it for essential cooling. What other devices can have a heatsink and fan?
20. What is the 4-bit binary number for base 10 number 11?
21. Place the names of mobile storage device technologies in the order from oldest to newest.
22. You have a 64 bit computer with 64 GB of RAM. You have not looked up the chip set or motherboard specification. However, you have mathematically computed that $64 \times 1,000,000,000$ determines that this amount of RAM is the technology limit for 64 bit computing. Are you correct?