

## **Worksheet – Basic concepts of hardware Lesson 4 CPU, RAM and ports**

1. The computer memory(RAM) stores all programs and data currently being used on the computer.
  - 1.1 When a computer is being used to type a document, the Word processor program will be in RAM. What other data relating to this exercise will also be in RAM.
  - 1.2 List two programs that will be in RAM when the computer is being used to play a CD
  - 1.3 The Computer memory(RAM) is temporary, and is cleared when the computer's power is turned off. What is this characteristic of RAM called?
2. How does cache memory speed up the CPU's execution of instructions?
3. The CPU is a large chip which has millions of tiny components built into it.
  - 3.1 Give the model and name of one CPU used in modern computers
  - 3.2 Also write down the name of (or give more than one answer) a company that manufactures the CPU.
  - 3.3 What three parts does the CPU consist of? List their functions.
4. Why is there a fan inside the computer case even if the case does not feel hot?
5. What is the Firewire port mostly used for?
6. List 6 devices that can be connected to the USB port.
7. What did the original modems do?
8. What is the function of a 3G modem and an ADSL modem? Describe them in a way that the differences between the devices would be clear.
9. Name two hardware features or specifications that smartphone designers have to compromise in order to extend battery life and reduce the size of the phone.
10. Do you think smart phones or consumer tablets will replace the normal desktop in the near future. Motivate your answer.