Computer Systems are made up of many different parts, for example hardware, software, processors, memory etc.

Hardware is any physical part of the computer that you can touch, see and pickup.

Examples of hardware include the monitor, keyboard, mouse, disk drives, printer, scanner and speakers.

Software are the applications and programming instructions needed to make the computer hardware do useful work.

Some examples of systems software which tells the computer what to do:

* Operating System
* Utilities
* User Interface

Some examples of application software which allow you to do your work:

* Word processors such as Microsoft Word
* Spreadsheets such as Microsoft Excel
* Databases such as Microsoft Access

A peripheral is any device which connects to the computer and exchanges data with the CPU.

Peripherals include all of the computer's input and output devices.

Examples are:

* monitor
* keyboard
* mouse
* printer
* scanner
* speakers
* external hard drives

**Central Processing Unit (CPU)**

The CPU is the 'brain' of the computer. It is where all the searching, sorting, calculating and decision making takes place.

The CPU contains a tiny quartz clock. Each time this clock 'ticks', one instruction can be dealt with by the CPU. So the more times this clock ticks per second, the more instructions the CPU can carry out and the faster things get done.

You need to have a basic understanding of the three main parts of a CPU. These are the:

* Control Unit
* Immediate Access Store
* Arithmetic and Logic Unit (ALU)

##### The Control Unit

This has three main jobs:

1. It controls and monitors the hardware attached to the system to make sure that the commands given to it by the application software are used. For example, if you send something to print, the control unit will keep a check that the instructions are sent to the printer correctly.
2. It controls the input and output of data so that the signals go to the right place at the right time
3. It controls the flow of data within the CPU

The speed of the CPU is measured in either Megaherts (MHz) or more commonly now in Gigahertz (GHz). A 1 MHz CPU can carry out one million instructions per second. A 1 GHz CPU can carry out 1 billion instructions per second!

A typical CPU installed in a computer today would run at around 3 GHz.