

## Hardware Components

1.1.1 What is hardware? It's a word used to describe devices. It's the part of the computer system you can touch or see it.

1.1.2 What is software? Anything that can be stored electronically is software.

1.1.3 Complete the following table – put a “y” in the correct column

Name of Item	Hardware	Software	Something Else
Screen	√		
Keyboard	√		
Sony Playstation Game			√
Toaster			√
Operating system		√	
Video			√
Printer	√		
CD or DVD		√	
Ringtone			√
Word processing program		√	
This worksheet			√

**✍ Writing**

1.2.1 Fill in this table: Put a number from (1) to (4) for in each box. Put (1) for the most expensive, most portable biggest and (4) for the least expensive, least portable and smallest. Give an example of at least one use for each type of computer.

Category	Mainframe	Personal (P.C.)	Laptop	PDA
Cost	1	4	2	3
Portability				
Storage Capacity	1			
Use				use as a clock, calendar and accessing the Internet

Find a picture of each type of computer and paste them here.

**Mainframe****(P.C.)****Laptop****PDA**

**✍ Writing**

1.3.1 Define a peripheral device

It's an input, output or storage device that can be connected to the CPU.

1.3.2 List all the peripheral devices you can see in this room

Scanner, print, mouse, keyboard and monitor.

1.3.3 List at least five more peripheral devices you know about

Zip disk, speaker, plotter, screen, joysticks.

Find some pictures of peripheral devices and paste them here.



**Mouse**



**keyboard**



**monitor**



**scanner**

1.4.1 What does the term input mean when referring to a computer system?

Input is the data you give to the computer.

1.4.2 From your list of peripherals, which ones are input devices?

Mice, keyboard, scanner, light pens, joysticks.

1.4.3 Describe the following input devices and explain what they are used for:

Input Device	Description and Use
Keyboard	A Keyboard is an arrangement of rectangular buttons, or keys, it could be used to enter words and figures.
Mouse	A mouse consists of a small case, held under one of the user's hands, with one or more buttons; it could be used to select icons to run programs or select items.
Touch pad	A touchpad is an input device commonly used in laptop computers.
Tracker ball	A tracker ball is an input device where a finger is used to rotate a ball.
Joystick	A joystick is a personal computer peripheral or general control device consisting of a handheld stick. Joystick is often used to control video games, and usually has one or more push-buttons whose state can also be read by the computer.
Microphone	A microphone, sometimes referred to as a mike or mic It's used in many applications such as telephones, tape recorders, hearing aids,
Scanner	A scanner is a device that analyzes images, printed text, or handwriting, or an object. Its used to input pictures or texts.
Digital Camera	A digital camera is an electronic device used to take and store photographs digitally.
Webcam	A webcam is small camera, it could used record or see each other through it.
Digitiser	
Sensor	A sensor is a type of transducer. Sensors are used in everyday life. Applications include automobile s, machines, medicine and industry.
Touchscreen	A touchscreen is display overlays which have the ability to display and receive information on the same screen.
Light Pen	A Light Pen is a pointing device shaped like a pen. It allows the user to point to displayed objects, or draw on the screen.

1.5.1 What does “output” mean?

Output is the information the computer gives back after processing.

1.5.2 From your list of peripherals, which ones are output devices?

Print, speaker, Plotter, screen.

1.5.3 Describe the following output devices and explain what they are used for.

Output Device	Description and Use
Monitor (VDU)	A monitor is a piece of electrical equipment which displays viewable images.
Printer	A device that prints text or illustrations on paper.
Plotter	A plotter is a vector graphics printing device that connects to a computer.
Speakers	Speaker is an electromechanical transducer that converts an electrical signal into sound.

1.5.4 Fill in this table comparing the three main types of printer, dot matrix, ink jet and laser. Put a number from (1) to (4) for in each box. Put (1) for the most expensive, noisiest, fastest and best quality and (4) for the least expensive, least noisy and slowest and lowest quality. Tick the ones which can print in colour.

Category	Dot Matrix	Ink Jet	Laser
Cost	3	4	1
Noise			
Speed			1
Quality of Print			1
Colour or B/W		√	√

1.6.1 What are the two main types of computer memory?

RAM and ROM

1.6.2 What does **RAM** stand for?

Random Access Memory

1.6.3 What does **RAM** hold?

It holds data, system software and application programmes.

1.6.4 What does **ROM** stand for?

Read Only Memory

1.6.5 What does **ROM** hold?

It holds basic programmes.

1.6.6 What does “volatile” mean?

Volatile means something changing or changeable

1.6.7 Which memory is volatile?

RAM

1.6.8 Write **RAM** or **ROM** in the first column.

<b>RAM or ROM</b>	<b>Volatile?</b>	<b>Read/Write?</b>	<b>Holds ...</b>
RAM	Yes	Read + Write	Data and Programs
ROM	No	Read only	Start up instructions

1.6.9 Fill in the blanks in these equations

8	bits	=	1	byte
1000	bytes	=	1	kilobyte
1000	kilobyte bytes	=	1	megabyte
1000	megabytes	=	1	gigabytes
1000	gigabytes	=	1	_____

1.6.13 Look at the following table about **Backing Storage**. Fill in the blanks.

Name of device	Volatile? y/n	Storage Capacity	Optical or Magnetic?	Read/Write?	Other (speed/ cost / use)
Floppy Disk Drive	N	1.44 Mb	Magnetic	Read + Write	21.5 p
Hard Disk Drive	N	40 Gb	Magnetic	Read + Write	0.15 p stores data on one or more rigid, flat, disks
Magnetic Tape	N		Magnetic	Read only	Used to back up data stored on hard disk
CD ROM	Y	About 675 Mb	optical	Read only	Uses to store computer data.
CD – R	Y		Optical	Write once read many	Stores audio
CD – RW	Y	About 670 Mb	optical	Read + Write	creates data and audio CDs.
DVD	Y	4.7 Gb	optical	Read only	Stores & compress video data
DVD-RW	Y	1.46 Gb	optical	Read +write	Uses to hold data that can be rewritten.