

2.4 Output Devices (Printers).

Printers are used to transfer information from the computer onto paper. For example, if you typed a letter in a word processor, you could print out a paper copy to send. There are many different types of printers (presented below).



Laser: These are large, expensive printers that work like a photocopier. They usually have very high quality printouts and can print very fast.



Inkjet and Bubble-Jet: These are smaller, cheaper printers that use a little cartridge to spray a jet of ink onto the paper. They are fairly quiet and of good quality, but are not as fast or produce such high quality output as a laser printer. These printers are sometimes known as **line printers** because they print each page one line at a time.



Dot matrix/impact: An older type of printer that uses a ribbon and a print head, like a typewriter. They are very loud and extremely slow. However, they are very much cheaper.



Plotter: This is a special type of printer that draws pictures based on commands from a computer. They are used by engineers and designers who need to draw complicated diagrams (in conjunction with CAD – Computer Aided Design – software).

2.5 Storage.

A PC processes the data in streams of **bits** (the smallest component of computer data). Each **bit** can be in one of two states: **1** or **0** (**on** and **off**). These states are known as **binary digits**.

Bits are combined in sets of **eight** to form a **byte**. Bytes are used to represent data such as characters – for example, 01000001 is the character ‘A’ in binary code. Binary codes are also used for instructions.

Further units used to measure data are called **kilobytes**, **megabytes** and **gigabytes**.

A **kilobyte (KB)** is **1024 bytes**. The size of files stored on your computer is often measured in kilobytes.

A **megabyte (MB)** is **1,048,576 bytes** (1024 kilobytes). MB’s are often used to measure the storage capacity of a disk or the amount of main memory in a computer system. As an example, 1MB is approximately 5000 pages of double-spaced text.

A **gigabyte (GB)** is **1,024 megabyte’s**. Devices such as hard drives are often measured in gigabytes.