Year 7 Introduction to Computers Knowledge Organiser

Computer System

A basic, **complete,** and **functional** computer.

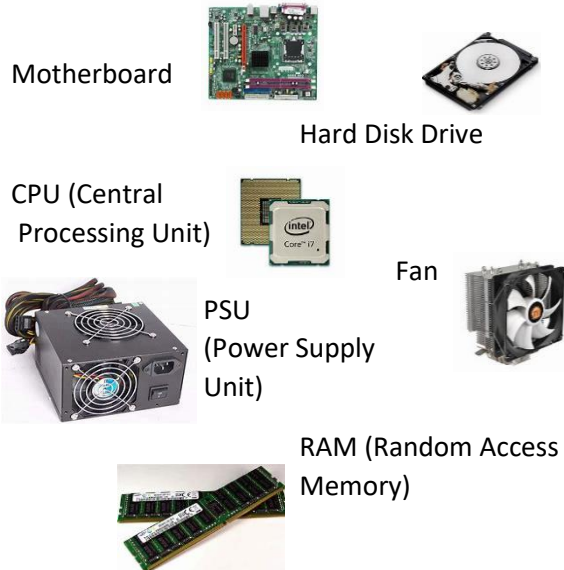It will include all the hardware and software required to make it functional

INPUT → PROCESS → OUTPUT

Hardware

Computer hardware refers to the **physical parts of a computer and related devices**. Internal hardware devices include motherboards, hard drives, and RAM.

Computer Components

Motherboard

Hard Disk Drive

CPU (Central Processing Unit)

Fan

PSU (Power Supply Unit)

RAM (Random Access Memory)

Types of Computer Storage

Storage is a **mechanism that enables a computer to retain data**, either temporarily or permanently. Storage is among the key components of a computer system and can be classified into several forms, although the types we cover are:

Internal Storage:

Most often refers to a **computer's internal** hard drive. This is the primary storage device used to store a user's files and applications. The computer's internal memory, **RAM (Random Access Memory)** and **ROM (Read Only Memory)** is also classed as internal storage.
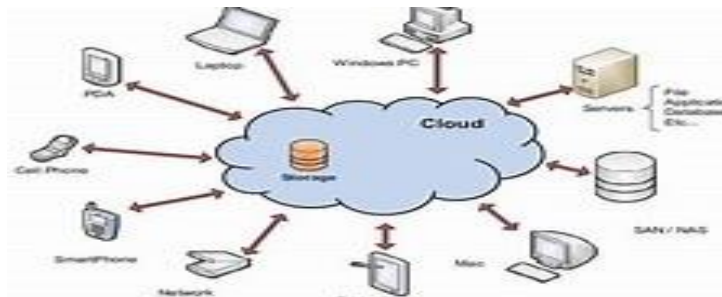
External Storage:

Commonly referred to as an external drive, external storage is storage that's not part of the internal parts of a computer. These drives often connect to the computer using a connection, such as USB (Universal Serial Bus).

Common types of external storage are **Flash Drives (USB Sticks)** and **DVDs.**

Cloud Storage

Cloud storage is a cloud computing model in which data is stored on remote servers accessed from the internet, or "cloud".

Software

Computer software refers to the programs and other operating information used by a computer.

The main piece of software on a computer is the

Operating System

The part of the operating system we see on screen is known as the User Interface.

- Graphical User Interface (GUI).
  The most popular type of system. They combine menu driven interfaces with icons.
- Command Line Interface (CLI).
  Users need to learn the commands to make it work.
- Menu Driven Interface.
  A list of options organised under various headings or menus

Most used Operating Systems (OS)

- Microsoft – Windows
- Apple – IOS
- Google - Android