



Computing Knowledge Organiser

Year 3 ★ Computing Systems and Networks ★



Digital Devices – Input, Process Output (IPO)

- A device is something that has been made for a particular purpose (it has a special use).
- Digital devices use processing (have a process) There is more than just an on-off function.
- Digital devices have an input, process, output (IPO)

Input:

Something that sends a message to the device. E.g. You press a button on the keyboard.

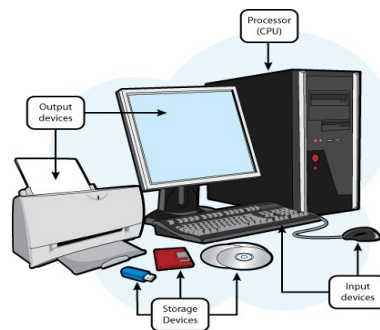


Input Devices:

Keyboard, joystick, mouse, web cam, microphone, touch screen, track ball, digital camera.

Process:

The device acts on the message. E.g. The computer follows a program that tells it what to do when the keyboard is pressed.



Output:

Something that is sent out by the device. E.g. The letter that you have typed on the screen.



Output Devices:

Screen/monitor, printer, headphones, projector, speaker, smartboard.

Important Vocabulary

Digital Device

Input

Output

Connection

Network

Network Switch

Server

WAP

E-Safety



- Technology is something that has been made by people to help us.
- Information technology (I.T.) includes computers and things that work with computers

Networks and Network Devices

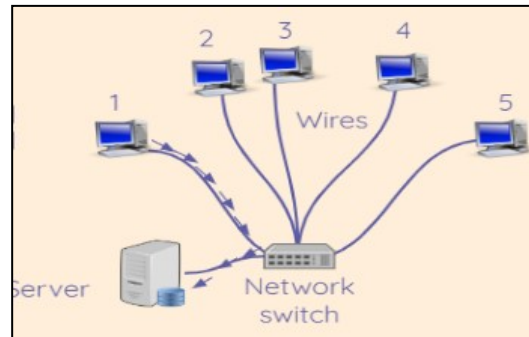
Connections and Networks

- In Computing, a connection describes a link between the computer and something else.
- For example, a computer may be connected to the internet through wires, a mobile data system, or WiFi.
- A computer network is a set of connections that joins computers together.
- The computers in the network can send and receive information to one another.



Network Devices

- Network switch: a device that helps different devices on a network to be connected with each other.
- Server: a computer that manages the network and stores files
- Wireless access point (WAP): a device, connected to a wired network, that sends and receives wireless signals to and from devices.



Why Networks Are Useful

- Computer networks allow us to send and receive information between computers that are in different places.
- Networks can help us to communicate quickly and easily.
- Networks can also join computers to shared devices, like scanners and printers.
- The internet is a global network of computers. Imagine how different life would be without the internet!
- If information is shared on a network, it helps to reduce the risk of data being lost, e.g. if one computer breaks.

