

# Year 3 Computing – Connecting Computers

## What I should already know

- To recognise the uses and features of IT.
- To identify and explain the purpose of IT in the home.
- To identify and compare different types of IT beyond school.
- To explain how IT benefits people.
- To recognise how to use IT safely and responsibly.
- To identify the choices that can be made when using IT.

## Connecting Computers

- Technology is something that has been made by people to help us.
- Information technology includes computers and things that work with computers.
- Digital devices are things made for a particular purpose, that use processing.
- Digital devices have an input, process, and output (IPO).
- Information and data can be shared across networks.
- Many devices are used to create networks.

### Digital Devices – Input, Process Output (IPO)

-A device is something that has been made for a particular purpose (it has a special use). Interactive Whiteboards and CleverTouch screens are a good tool for teaching and learning. iPads and other tablets are a good tool for researching, creating, storing and taking images. There are many devices suitable for different purposes.

-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.

### 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.

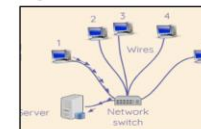


#### Network Devices

-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.



## What I will learn by the end of this unit

- Explain that digital devices accept inputs and produce outputs.
- Classify input and output devices.
- Explain how to use digital devices for different activities.
- Explain how information is passed between devices.
- Identify how devices in a network are connected to each other.

### Disciplinary Skills

- Use search technologies effectively.
- Appreciate how results are selected and ranked.
- Be discerning in evaluating digital content.

### Key Vocabulary

digital  
output  
information

device  
process  
connection

input  
program  
network

### 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.

