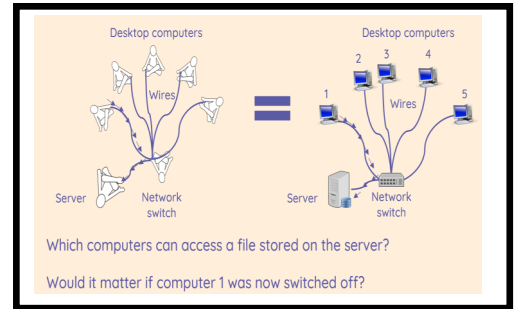# Computing 3.1 Connecting Computers Yr 3/4 Cycle B Autumn 1

Computing Systems and Networks

Core Learning Recognise that a digital device is made up of several ports; computers can be connected to each other and a network is made up of a number of components.

Which computers can access a file stored on the server?

Would it matter if computer 1 was now switched off?

Procedural Knowledge (Skills)

To explain:
that a computer system accepts an input and processes it to produce an output;
how a computer network can be used to share information;
the role of a switch server, and wireless access point in a network.

To identify:
input and output devices; networks devices around me and how

Propositional Knowledge (Concepts)

Describe what an input is.

Identify the benefits of computer networks

Identify how:
changing the process can affect the output;
devices in a network are connected with one another;

Explain:
hat a process acts on the inputs;
that an output is produced by the process;
how computer systems can change the way that we work;
how information is passed through multiple connections.

Stages:

- **How does a digital device work?**
- **What parts make up a digital device?**
- **How do digital device help us?**
- **How am I connected?**
- **How are computers connected?**
- **What does our school network look like?**

BE AWARE OF MISCONCEPTIONS!! A digital device processes information digitally, which means that it does something beyond being either on or off.
A misconception may be that the groupings are 'electrical' and 'non-electrical' .

Generic vocabulary: Connection, digital/non-digital, Information (Data) , network cables, network sockets, server and wireless access point.

Key Topic vocabulary: Model 'Input-process-output'
Input: Pressing buttons on the keyboard (the input).
Process: Following the program for the button that you have pressed (process).
Output: i.e showing the correct letter on the screen (output).

Digital device: is a device is capable of some processing ie it has functions beyond being either on or off.
Internet: is a network, or system, that connects millions of computers worldwide.
Network: a group or system that provides electronic communication services.
Server: is a computer program or device that provides a service to another computer program and its user.
Program: a series of coded software instructions to control the operation of a computer or other machine.

Sources of support

- Teach it unit plans and Learning Graphs https://teachcomputing.org/curriculum/key-stage-2
- School IT Team (Collette/Alyssa) for Lessons 5 and 6 visit the server
- Refer back to Prior Teach it units 1.1 and 2.1 if required