

Computing Systems and Networks - Connecting Computers

Year Group 3



Prior Learning Needed

- To recognise different types of computers used in school
- To identify that a computer is a part of information technology
- To recognise the features of information technology
- To talk about uses of information technology
- To explain how information technology benefits us
- To say how rules for using information technology can help us
- To recognise that choices are made when using information technology

Vocabulary

Digital device, input, process, output, network, streaming service, connection, network switch, server, message carrier, wireless access point

Substantive Knowledge (Facts)

- To describe what an input is
- To explain that a process acts on the inputs
- To explain that an output is produced by the process
- To explain how computer systems can change the way that we work
- To identify that changing the process can affect the output
- To recognise that a digital device is made up of several parts
- To recognise that computers can be connected to each other
- To identify how devices in a network are connected with each other
- To recognise that a network is made up of a number of components
- To explain how information is passed through multiple connections
- To identify the benefits of computer networks

Disciplinary Knowledge (Skills)

To explain how digital devices function

- I can explain that digital devices accept inputs; explain that digital devices produce outputs and I can follow a process

To identify input and output devices

- I can classify input and output devices; describe a simple process and I can design a digital device

To recognise how digital devices can change the way that we work

- I can explain how I use digital devices for different activities; recognise similarities between using digital devices and using non-digital tools and I can suggest differences between using digital devices and using non-digital tools

To explain how a computer network can be used to share information

- I can recognise different connections; explain how messages are passed through multiple connections and I can discuss why we need a network switch

To explore how digital devices can be connected

- I can recognise that a computer network is made up of a number of devices; demonstrate how information can be passed between devices and I can explain the role of a switch, server, and wireless access point in a network

To recognise the physical components of a network

- I can identify how devices in a network are connected together; identify networked devices around me and I can identify the benefits of computer networks