Digital Literacy: School networks

LO: to understand what a school network is

Recap:

Explain to your partner what happens when you do a Google search.

Key vocabulary to use:

search, Google's index of the web, software, spiders, links, web pages, questions, page rank, formula, half a second

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Read the text with your partner.

What are the key pieces of information?

LO: to understand what a network is

A network is usually a group of computers connected to each other either by wireless or an Ethernet cable. They are connected so they can share/exchange data with each other. A network usually consists of the following:

- **Server:** This is where everything on the network is managed. For example setting up new areas, allowing computers to join the network.
- **Fibre Optic:** This is the internet that is provided by a company to allow all computers within the network to access the internet.
- **Router:** A network device that routes the traffic from one network to another.
- **Switch:** This is where the internet is split and goes to the computers around school. This allows the computers to share information with one another. If you send something from one computer it goes to the switch. The switch then decides what to do with it (where it is going) by using an IP address.
- **IP Address:** This is what identifies your computer on the network. Although each IP address contains unique numbers, they usually follow a similar format to this 168.100.0.1. As each IP address is different this can then communicate with the network to send/receive information around without getting lost.
- **Wireless Access Point:** These are dotted around the school. They allow computers to be on the network through wireless rather than cable (Ethernet/RJ45). This is done by plugging the wireless access point into the switch so it can use some of the IP addresses to distribute them to devices wanting to connect to the internet.
- **Firewall:** This is what blocks certain websites (for example dangerous websites) from being seen. When you want to connect to a website, the firewall changes the name of the website (for example Google) into an IP address (all websites are IP addresses but worded as this is easier to remember). It then scans the database to see if this should be allowed or blocked before you enter the website, to ensure it is safe.

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I do

A network is.....

Networks are usually established so.....

They usually consist of:.....

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we do

The _____ manages the network.

If you _____, then it goes to the switch. The switch then _____

An IP address is important as.....

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Dotted around school are _____,
which allow computers to _____
by _____.

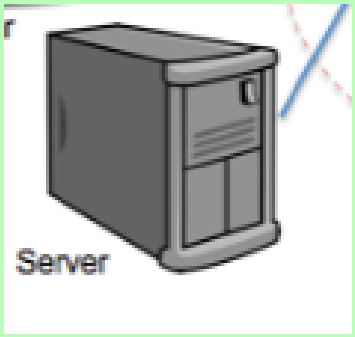
In order to keep us safe online, a
_____ is used. It works
by_____

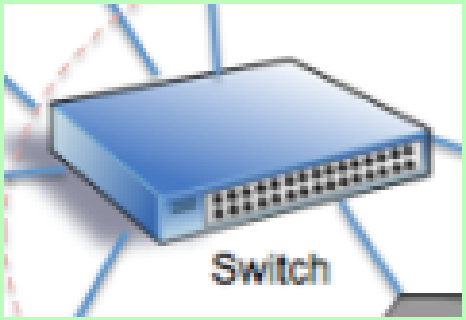
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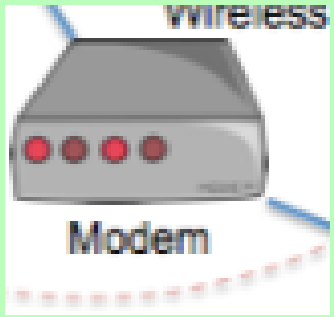
I do

How are all parts of the network linked?











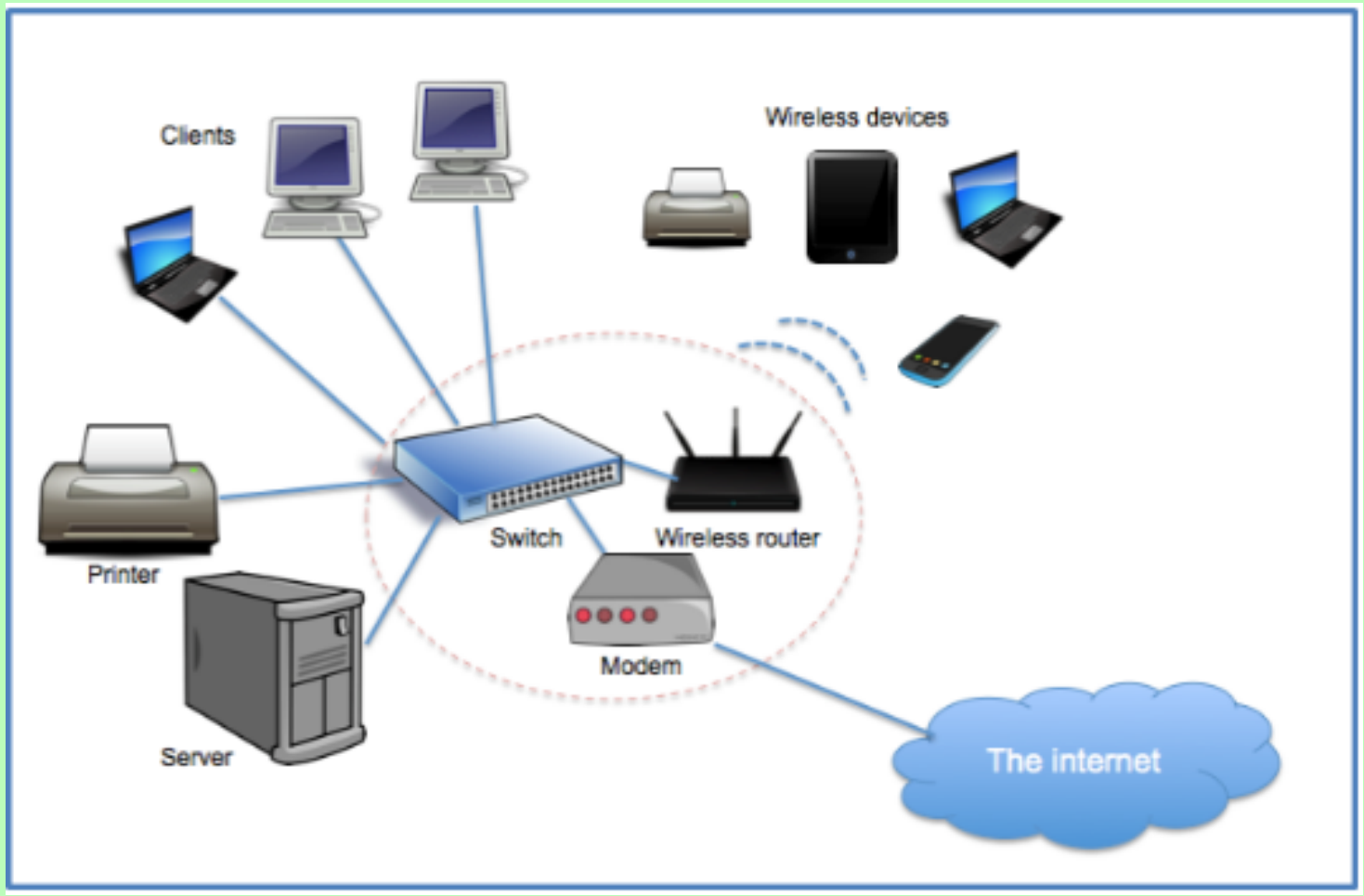


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we do

Explain the diagram to your partner.



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you do

Task:

Draw a diagram to show how the school network works.

Include how all the computers are connected.

Underneath your diagram, write a paragraph to explain the network.