

Learning Objectives

To understand what a network is and create an informative poster

Success criteria:

- I know that a network joins things together
- I can recognise networks can be wired or wireless
- I can explain the purpose of a network
- I can give my poster a clear title
- I can include information on what a network is and why we use them
- I can select appropriate pictures, colours and designs

National curriculum links:

- Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Before the Lesson

- Watch teacher videos:
1) *What's a Network?*
2) *Using Canva*
- Print out glossary sheets
- Create a class account on Canva: www.canva.com
- *Networks Glossary Resource*
- *Networks Sorting Activity*

Attention Grabber (10 minutes)

The topic of 'networks' is often the most jargon-heavy for new learners as it's one of the areas we know least about as a society.

This topic will include plenty of vocabulary-based activities and it is important that we constantly model the correct vocabulary and encourage pupils to use it when answering questions.

You may choose to ask the children to create their own glossary/dictionary throughout this unit of work which they can add to as they learn new vocabulary. An example template is included in the *Network Glossary* resource.

Show the children an image of two laptops connected with a line, like this:



Ask: Why would it be useful for laptops to be connected?

Or to give more context, ask: Why would it be useful if my computer was connected to another teacher's? Give them time to talk about this with a partner and then share as a class. (*To share information, share resources.*)

They may say "to send messages to each other" and this is possible, but it's unlikely you have a program for this on your laptop. Most messaging programs use the internet and it's important that the children recognise that the internet and a network are not the same thing.

Now ask the same question but about different devices: a printer and a photocopier. A network doesn't just connect computers together, but other devices too. Again, it's best to have photos of things that are within your school that the children may have seen.

Key Questions

Why do we need to connect two computers together?

What could we do with two computers connected?

What other devices do you think are on our network?

Why can't you see wires connected to a laptop?

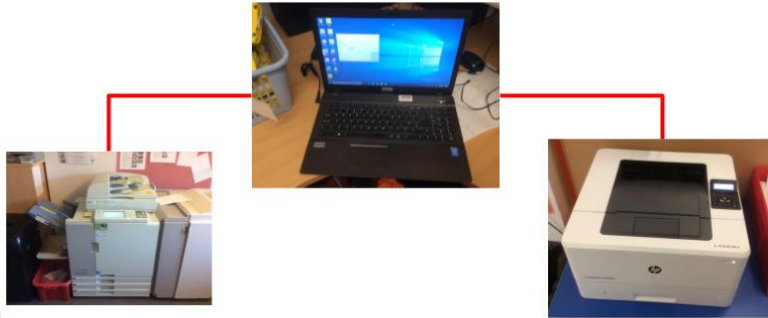
What is a network?

What is a device?

What information do we need to include in our poster?

What does a good poster look like?





Ask: Why is it useful to have these devices connected? What would you do if they weren't connected? (*If the computer wasn't connected to the printer or photocopier, it wouldn't be able to print anything.*)

If you're on a wireless connection, point out to pupils that there are no wires connecting your laptop to the printer, yet you can still print.

Ask the children to discuss and then mention wireless technology. Your computer is connected to wifi, as is the printer and so they do not need wires. **This does not require the internet to work; if the internet is turned off, you'll still be connected to the network.**

The Main Event (30 minutes)

Sorting Activity

Hand out the *Networks Sorting Activity* to each table and ask them to discuss the images and definitions. Ask pupils to sort them into three separate groups: **Network**, **Wireless** and **Device**.

Get them to find appropriate definitions and images to match each of these words, warning them that all groups may not have the same number of pictures or definitions associated with them.

A brief definition of each:

- network - one or more devices connected together
- wireless - a connection that doesn't need wires
- device - technology; more than just computers, eg: printers

Although the images and definitions were added with one of these terms in mind, as long as children can use sound logic to justify why they put them in a specific group, they can sort them in this way. Eg: having a mobile phone in wireless because it doesn't need wires to connect.

Poster Creation

Explain to children that they will be making a poster demonstrating their understanding of what networks are and why they are used.

We have used the software [Canva](https://www.canva.com) for this lesson. This does require you to create a class account and gives children access to one another's work. If this is something you would prefer not to do, we suggest [Sketch.io](https://www.sketch.io) as a good alternative. Whilst it doesn't feature templates as Canva does, it doesn't require a log in. If using Sketch.io, the pupils will need to save their work to the school network as there is no save functionality within the program.

Model logging in to Canva via the website www.canva.com or through the app. Canva is a graphic design platform with a huge selection of premade templates, making it easy to create professional looking posters, leaflets and other documents or designs.

Differentiation

Pupils needing extra support:

If creating a glossary, allow them to stick in the pictures and definitions used in the *Sorting Activity*.

Focus on what a network is over other success criteria.

Pupils working at greater depth:

Should explain clearly what a network is and why they're useful in their posters, as well as using appropriate images and layout.

Demonstrate how to select the 'Poster' option and talk through the basics for how to use Canva if this is the first time they've used it (see teacher video).

Ask children to suggest what they will need to include in their poster for it to be considered successful, eg: a clear title, information on what networks are and what they're used for, appropriate pictures, colours or designs.

Children create a poster explaining what a network is to someone who doesn't know.

Wrapping Up (10 minutes)

Ask the children to score their posters against the agreed success criteria, encouraging them to think how they would add to it.

Explain that they can use Canva at home, and could use it to create posters or other documents about anything they want: lego, clothes, star wars, football, food, etc. You could offer to display their work at school.

Assessing Pupils' Understanding and Progress

Pupils with secure understanding indicated by: Recognising that a network is two or more devices connected and showing this information in a poster which combines text and images.

Pupils working at greater depth indicated by: Explaining why networks are used and what they're used for as well as justifying their colour/font/size choices in their poster.

Next Steps

Computing > Year 3 >
Networks > Lesson 2:
Network Components