

Year 4 Term 2

Is life better with electricity?

COMPUTING



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.
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Essential Prior Learning:

Technology can be used to share ideas, and experiences with others.
Know some ways to stay safe and respectful online.
A computer network is two or more computer connected together; school computers are connected together in a network so they can share information and work together.
Printers, tablets, computers are networked so they can share things information.
The World Wide Web is one thing you can do on the internet to watch videos, visit websites, read pages using a browser like Chrome or Safari.

Progression in Skill:

Understand how technology connects people together with similar hobbies and interests.
Identify components of the school's network (e.g., router, switch, server and WiFi).
Explain the difference between wired and wireless connections.

Understand that websites are stored on special computers called servers, which send information to our devices. These servers can be found in various places across the Earth.
Understand that files can be saved on a server so they can be accessed from different devices.
Know that the Internet and the World Wide Web are not the same thing. Recognise that the internet connects computers around the world, allowing them to share information (send emails, play games online), while the World Wide Web is one way the internet can be used to access websites and online content.

Long-term Memory Knowledge:

Digital tools (like websites, apps, and games) help people with shared interests communicate.
Identify and describe the roles of key parts of a network—like routers (direct traffic), switches (connect devices), servers (store and send data), and WiFi (wireless access).
Wired connections use cables, while wireless connections use signals.
Websites live on special computers called servers, which can be located anywhere in the world, and that these servers send information to their devices.
Saving files to a server (like in cloud storage) means they can access their work from different devices, which is useful for collaboration and flexibility.
The Internet is the global network that connects computers.
The World Wide Web is a way to use the internet to access websites and content.

Key Vocabulary

router	A box that helps send internet to different devices in a building.
switch	A device that connects computers and other equipment so they can talk to each other.
server	A special computer that stores websites, files, and information and sends them to other devices.

wired	A connection that uses cables to link devices to the internet.
wireless	A connection that uses signals (like WiFi) to link devices to the internet without cables.
devices	Things like computers, tablets, and phones that we use to go online or do work.
internet	A huge network that connects computers all over the world so they can share information.
world wide web	A part of the internet that lets us visit websites and look at online content.

Progression in Resources:

Router, server

Relevance

Now	To understand how they can access the internet and what is can be used for.
Future	To take an interest in technology and experiment with designing their own software. They can fix problems with technology in their own home.
Aspiration	To have fluency in digital literacy and make wise decisions with technology uses. To be IT engineers and work within the technology sector.