

Networks

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 behavior.

Key Knowledge:

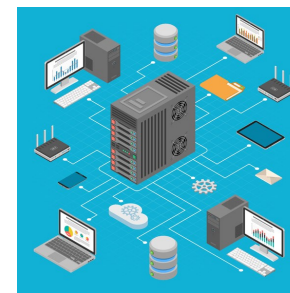
- Understand that computers in a school are connected together in a network.
- Understand why computers are networked.
- Know that servers on the internet are located across the planet.
- Recognise and understand the difference between the internet and WWW.
- Understand how webpages are viewed across the internet.
- Explain the difference between wired and non-wired networks.
- Explain what a server is and how it provides services to connected devices.
- Understand the basics of cloud computing and its advantages.
- Describe the role of firewalls in securing computer networks.
- Identify potential risks and safety measures when using computer networks and the internet.

Possible programs/ websites:

- Barefoot computing website
- Teach computing website
- BBC Bitesize
- National Geographic Kids

We should already know:

- Technology is something that helps us.
- Identify examples of technology in the classroom and in the home.
- Use the keyboard to type on the computer.
- Create rules for using technology responsibly .



Key Vocabulary:

Cloud computing	Storing and accessing data and programs over the internet instead of a local computer or server.
Internet	A global network of interconnected computer networks that allow communication and sharing of information.
IP Address	A unique numerical label assigned to each device connected to a computer network.
Firewall	A security system that protects a network by filtering and controlling incoming and outgoing traffic.
LAN	Local Area Network
Modem	A device that connects a computer to the internet through a telephone or cable line.
Network	A collection of interconnected devices that can share data and resources.
Router	A device that connects different networks and directs data packets to their destination.
Server	A powerful computer that provides services and resources to other devices in the network.
Web browser	A software application used to access and browse the internet.