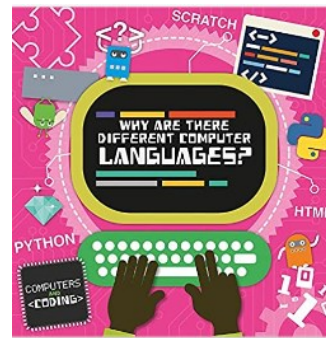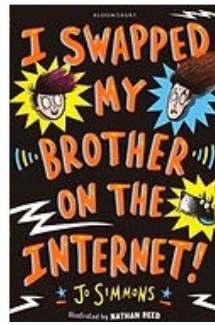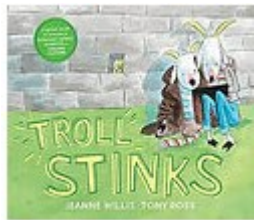## Theme Overview

'Lightning Speed' is a thematic unit based around the history and development of the internet and World Wide Web, with a focus on computing. We will primarily look at how computers communicate, the importance of networks, how email works and how the internet enables collaboration.
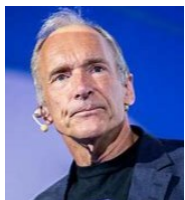
Recommended Reading...

Access books online for free through Hampshire School Library Service. Ask your child's teacher for their barcode/login information.

What we should know...

Networks

Our school's computer network is called a LAN (Local Area Network) - a network of connected computers and other devices. Some devices are connected by cables, some are wireless. Everything is connected to the main switch/hub and this connects everything to the server. The server is a computer that is always left on. It serves the network by running programs, storing files, allowing access to the printer and allowing access to the Internet.

The Internet and the World Wide Web

The internet is a huge network of networks! It connects millions of computer together globally, forming a network in which any computer can communicate with any computer other computer as long as they are both connected to the Internet. The World Wide Web is the collection of web pages held on the Internet in servers. The Internet enables us to access the WWW to view websites.

Tim Berners-Lee

The British computer scientist, Tim Berners-Lee, invented the World Wide Web in 1991. He was frustrated that he had to keep moving between different computers to get the information he needed for his experiments, so he decided to use the Internet to share computers.

Emails

Emails are sent by your server to the server that the domain part of the email address belongs to. Emails are broken down into small packets of data to be sent across the internet, then recorded and stored, ready for the person to read the message.

Nearly 300 billion emails are sent every single day!

Key Vocabulary you should discuss with your child

Cable: a thick wire, or a group of wires, inside a rubber or plastic covering, which used to carry electricity or electronic signals

Device: a piece of mechanical or electronic equipment used for a particular purpose

Email: messages distributed by electronic means from one computer user via a network

Hub: centre

Internet: a communication system that connects computers and databases all over the world

LAN: Local Area Network: network that connects computers and devices within a building or small group of buildings
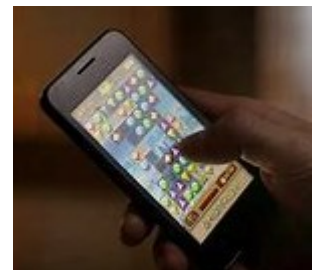
Network: a group of connected things or people

Server: a computer, a device or a program that is dedicated to managing network resources

WWW: World Wide Web: a network of online content

Concept Flow

- To understand that the computers in school are connected together in a network

- To understand why computers are networked

- To understand the difference between the Internet and the World Wide Web (WWW)

- To understand that servers on the Internet are located across the planet

Please talk to your children about the information on this sheet. The more children discuss their learning the more likely they are to embed the learning to their memory. If you have any questions please don't hesitate to contact your child's class teacher.