

NETWORKS – OVERVIEW

Overview

This unit introduces Year 1 students to the idea that technology works as **systems**, where different parts work together to help us do things. It develops students’ understanding based on everyday experiences beginning with familiar non-digital systems before gradually introducing digital devices and how they connect.

Students will learn that devices have specific **jobs** and that many digital outcomes rely on more than one device working together. Through practical, unplugged activities and role play, students will explore how information can be sent and received and what happens when a system does not work as intended.

The unit focuses on developing students’ understanding of systems thinking rather than technical detail. Concepts such as routers or Wi-Fi are deliberately avoided so that pupils can build a secure conceptual foundation that will be developed further in later year groups.

Knowledge and understanding	Computing concepts
To understand that a system is made of parts that work together.	Systems
To identify common digital devices and describe their purpose.	Devices
To understand that devices have specific roles or jobs.	Purpose and function
To understand that actions can cause responses.	Input and output
To understand that some devices are connected and can send or receive information	Connection
To recognise that systems may not work if a part is missing or not working.	Problem solving and debugging

The Computing Curriculum

You can see where the knowledge and understanding developed in this unit fits into the computing curriculum in the table below:

Prior Learning	Future Learning
EYFS Unit: Using a computer	Year 2 Unit: Parts of a computer
	Year 3 Unit: Connecting computers
	Year 4 Unit: Search engines
	Year 5 Unit: Systems and searching
	Year 6 Unit: Communicating and collaborating

Cross-curricular links and extension activities

This unit provides opportunities for cross-curricular links with **science**, particularly in identifying parts and understanding their functions. Links to **PSHE** are made through teamwork, roles, and cooperation when students act as parts of a system. This unit provides links to **English**, as students

explain how systems work using clear spoken language and simple reasoning. Opportunities for **design and technology** arise when students design and improve simple systems, both digital and non-digital.

The unit also supports students' wider development by encouraging collaboration, clear communication, and problem-solving. Students are encouraged to explain their thinking, recognise when something has gone wrong, and suggest improvements in a supportive and practical way.