

2.1 Computing systems and networks – IT around us – Knowledge Organiser

Year 7 Topic number Hyperlink to planning

Key prior learning is highlighted in green, but must be revisited and reinforced during this teaching sequence.

Overview

Information Technology Around Us



- Technology is something that has been made by people to help us.
- Technology is 'man-made' and not 'natural.'
- Information technology (I.T.) includes computers and things that work with computers.
- Information technology is in lots of important items in our homes and around the world.
- It is important that we understand how to use information technology safely

I.T. in the Home

There is lots of Information Technology in our homes. I.T. is used to:

- Control the tools and appliances that we use in the home, e.g. the panel for the heating, setting the washing machine, and programming the microwave.
- Help us to communicate with one another, e.g. the internet router and



I.T. in the World

There is also lots of information technology in the wider world

- I.T. can be found in shops, e.g. the barcode, barcode scanner and till all work together to scan your shopping items.
- I.T. can be found in ATMs, e.g. the
- I.T. can be found outside, e.g. traffic lights, buttons, and signals work together to tell you when to cross the road.



Information Technology

- Technology is the name for man-made things that help us.
- Information technology is made up of computers and things that work with computers.

-Information technology includes computers, for example desktop computers, laptops, games consoles smart phones and tablet.



-Information technology also includes devices that work with computers, e.g. USB sticks, SMART boards and digital cameras.



Using Technology Safely



- We can follow a rules to use technology safely, e.g.:
- Make sure that the games and apps that we access are age-appropriate.
- Always sit down when using devices. They can be broken if dropped!
- Do not use devices at social times, e.g. at the table. It is bad manners.
- Only use technology at agreed times. Too much screen time is bad for us!
- If you see something upsetting online, make sure you tell a trusted adult

How I.T. Improves Our World

-Information Technology helps us in lots of different ways in our daily lives.

-I.T. can help to make things quicker and easier. E.g. at the supermarket, the barcodes/ scanners quickly add up the product numbers and costs of the things that we want to buy.



-I.T. can also help us to stay safe. E.g. The traffic lights, buttons and signals help us to avoid traffic when crossing the road



Technology

Computer

Mouse

Keyboard

Information Technology

Device

Barcode

Screen

Scan