



COMPUTING SYSTEMS AND NETWORKS KNOWLEDGE ORGANISER



Overview

Technology Around Us



- You should already know that 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 the telephone.
- Entertain us, e.g. the information technology in toys, consoles and computer games.



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 bank card, chip and PIN card reader help you to access your bank account.
- 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 create and follow a number of 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.
- Stick to using technology at agreed times. Too much screen time is not good for us!



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.
- I.T. also helps us to communicate with one another and have fun! E.g. it can connect us to the internet, and can allow us to play games, share and receive information.



Important Vocabulary

Information Technology

Computer

Device

Barcode

Scanner

Communication

Entertainment

Appliances

Signal

E-Safety