

COMPUTING: SYSTEMS, NETWORKS AND ONLINE SAFETY- I.T. AROUND US.

KNOWLEDGE ORGANISER



Overview

Technology Around Us

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

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 <u>computers</u>, 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!
- If you see something upsetting online, make sure you tell a trusted grown up.

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 cafes and shops, e.g. the barcode, barcode scanners, self-checkout and till all work together to scan your shopping items.
- -I.T. can be found on the road, e.g. speed cameras, traffic light sensors, and smart road signs.
- -I.T. can be found at the airport e.g. security scanners, air control tower and information boards.



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 a police officer's job quicker and easier. E.g. body cams record incidents, walkie talkies make it easier to communicate quickly, CCTV footage supports finding evidence.
- -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 SATNAVs help us find our way in places so we don't get lost.
- -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