

Knowledge Organiser for Year 2

Big question: What is information technology?

British Values Link: Rule of Law

(Knowing and following the rules, being fair and keeping everyone safe)

KS1 National curriculum specification

- Recognise common uses of information technology beyond school, including those which they don't frequently encounter in their daily routine.

In this unit, children will:

Understand what IT is and identify uses in school.

Discuss where we see IT at home.

Explore where we see IT in the world.

Consider how IT improves our world.

Demonstrate safe uses of IT.

Discuss how we use IT responsibly.

Information Technology	Using technology safely
<p>Technology is the name for man-made things that help us.</p> <p>Information technology is made up of computers and things that work with computers.</p> <p>Information technology includes computers, for example, desktop computers, laptops, games consoles, smart phones and iPads.</p> 	<p>We can create and follow a number of rules to use technology safely.</p> <ul style="list-style-type: none"> -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. 
<p>Information technology also includes devices that work with computers e.g. USB sticks, SMART boards and digital cameras.</p>	
IT in the Home	IT in the World
<p>There is lots of information technology in our homes. IT is used to:</p> <ul style="list-style-type: none"> -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 	<p>There is also lots of information technology in the wider world</p> <ul style="list-style-type: none"> -IT can be found in shops, e.g. the barcode, barcode scanner and till all work together to scan your shopping items. -IT can be found in ATMs, e.g. the bank card, chip and PIN card reader help you to access 

<p>with one another, e.g. the internet router and the telephone. -Entertain us, e.g. the information technology in toys, consoles and computer games</p>	<p>your bank account. -IT can be found outside, e.g. traffic lights, buttons, and signals work together to tell you when to cross the road.</p>
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Key vocabulary:	
technology	Something that has been made by people to help us. It is man-made and not natural.
Information Technology (IT)	Computers, devices with computers inside, or things made to work with computers.
computer	A machine that can store and process information, and you can use it to play games, do homework, and watch videos.
barcode	A pattern of lines and numbers that stores information about a product, which can be read by a special machine
scanner	A device that reads barcodes or copies pictures and documents into a computer.
communication	The way people share information, ideas, or feelings with each other, like talking, texting, or emailing.
entertainment	Activities that people do for fun and enjoyment, like watching movies, playing games, or listening to music.
appliances	Machines or devices that help with household tasks, like a refrigerator, microwave, or washing machine.
signal	A message or information sent from one place to another, like a TV signal or a phone signal.
e-safety	Staying safe when using IT such as not sharing personal information that could easily identify you.

Teacher Subject Knowledge:	
Progression	This unit progresses learners' understanding of technology and how they interact with it. They will develop this understanding to become familiar with the term information technology and will be able to identify common features of IT. This unit also builds on the learners' understanding of using technology safely and responsibly.
Information for each lesson	<p>Lesson 1: You should have a clear understanding of devices which can be described as information technology (IT). For younger learners, IT can be seen as computers, devices with computers inside, or things made to work with computers.</p> <p>Lesson 2: You should have a clear understanding of devices which can be described as IT. For younger learners, IT can be seen as computers, devices with computers inside, or things made to work with computers.</p> <p>Lesson 3: You will need to understand where technology can be found in shops and how it can be used. You should also know which devices can work together, for example:</p> <ul style="list-style-type: none"> • Barcode, barcode scanner, till • Bank card, chip and PIN card reader, till • Traffic light, crossing button, crossing signal

	<p>Lesson 4: You can find some useful information and a short video about barcodes at www.waspbarcode.com/buzz/barcode</p> <p>Lesson 5: You should know your school's rules regarding the safe use of technology and be familiar with Education for a Connected World.</p> <p>Lesson 6: You will need to be familiar with the Digital 5 a Day: www.childrenscommissioner.gov.uk/our-work/digital/5-a-day</p>												
Links to Seesaw activities	<p>All found in School & Trust Library, Computer Science, Year 2:</p> <p>Community School & District Seesaw Lessons My Library</p> <p>2nd Grade Computer Science My Schools & District Search 2nd Grade Activities...</p> <h2>My Schools & District 2nd Grade Computer Science Activities</h2> <p>7 Activities</p> <p>Community Activities - Computer Science</p> <p>Browse teacher-created activities from our community of Seesaw Ambassadors and Seesaw Certified Educators.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Can you use a computer for? Circle all that are true.</p> <table border="1" style="border-collapse: collapse; width: 100px;"> <tr><td style="padding: 5px;">drawing</td><td style="padding: 5px;">writing</td></tr> <tr><td style="padding: 5px;">playing games</td><td style="padding: 5px;">throwing</td></tr> </table> <p>Miss Wilson</p> <p>Cold Task - Yr2 Understanding...</p> </div> <div style="text-align: center;"> <p>Draw or write happy moments or thoughts.</p> <table border="1" style="border-collapse: collapse; width: 100px;"> <tr><td style="padding: 5px;">(Icon)</td><td style="padding: 5px;">(Icon)</td></tr> </table> <p>Miss Wilson</p> <p>D.U.O: choices that are made when using IT -</p> </div> <div style="text-align: center;"> <p>Which do you think might be used in a shop?</p> <table border="1" style="border-collapse: collapse; width: 100px;"> <tr><td style="padding: 5px;">(Icon)</td><td style="padding: 5px;">(Icon)</td></tr> <tr><td style="padding: 5px;">(Icon)</td><td style="padding: 5px;">(Icon)</td></tr> <tr><td style="padding: 5px;">(Icon)</td><td style="padding: 5px;">(Icon)</td></tr> </table> <p>Miss Wilson</p> <p>D.U.O: safe use of IT - Lesson 5 - Yr2...</p> </div> <div style="text-align: center;"> <p>Miss Wilson</p> <p>D.U.O: how IT can benefit us - Lesson 4 ...</p> </div> <div style="text-align: center;"> <p>Miss Wilson</p> <p>D.U.O: IT beyond school - Lesson 3 - Yr...</p> </div> </div>	drawing	writing	playing games	throwing	(Icon)							
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