



Computing Long Term Plan



Holy Trinity C of E Primary School 2021-22

We recognise that our children are citizens of the digital age, and we intend to provide them with the skills and concepts needed to thrive in a future that is increasingly dependent on **computational thinking** and **creativity**.

Safety Online	Computer Science	Digital Literacy and Information Technology
To use the internet in a safe and respectful way, as well as understanding how and where to seek help and support.	To write and debug code successfully and with confidence; analysing problems in computational terms. Computer science covers knowledge of computers and computation, including concepts such as data, system architecture, algorithms and programming. Computer science is seen as the core of computing and underpins the whole of the subject.	To competently and creatively use information communication technology and recognise the use of technology in the wider world. Information technology provides a context for the use of computers in society. It focuses on how computers are used in different sectors and describes the methods used to create digital artefacts such as presentations, spreadsheets and videos.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<i>N.B. Early Years Outcomes are taught throughout the academic year. The topics below are Early Learning Goal outcomes that link to Computing</i>					
	Exploring using media and materials <small>Digital Literacy/ Information Communication Technology</small>	Being imaginative <small>Digital Literacy/ Information Communication Technology</small>	Understanding <small>Computer Science</small>	Technology <small>Digital Literacy/ Information Communication Technology</small>		
Y1	Using the internet safely and responsibly <small>Safety Online</small>	What can I do if I am worried? <small>Safety Online</small>	What is an algorithm? (Bee Bot/Busy Bundle) <small>Computer Science</small>	Writing code and debugging simple programs: (Box Island) <small>Computer Science</small>	How to search the internet <small>Digital Literacy/Information Communication Technology</small>	Using technology creatively <small>Digital Literacy/ Information Communication Technology</small>
	Using technology safely, responsibly and respectfully, e-safety, personal information	Reporting concerns, acceptable and unacceptable behaviour	Understanding what an algorithm is, creating everyday algorithms, writing code with algorithms Internet Safety Day (8.2.2022) - Safety Online External Online Safety opportunity?	Sequencing instructions to achieve a specific goal, debugging, problem solving	Using iPad keyboard, interacting with technology, researching	Copying and pasting, typing, taking photographs, inserting images into a document, saving images moving text and images on the screen
Y2	Why should we use passwords? <small>Safety Online</small>	What should I do if I am worried? <small>Safety Online</small>	How do digital systems/computer programs work? (Box Island) <small>Computer Science</small>	What is block based coding? (Kodable) <small>Computer Science</small>	Using the internet purposefully <small>Digital Literacy/ Information Communication Technology</small>	Creating content <small>Digital Literacy/ Information Communication Technology</small>
	Purpose of password protection, using technology safely, e-safety, being safe online	Unacceptable and acceptable behaviour, a range of ways to report concerns, being responsible online	Use of algorithms, sequencing events, using block-based code, debugging, problem solving Internet Safety Day (8.2.2022) - Safety Online External Online Safety opportunity?	Block based coding: algorithms, sequencing events, debugging, running programs, problem solving, testing programs	Research a given topic, copy and paste text, take photos (including screenshots) and save images, use of technology beyond school,	Manipulate text and images, using emoticons to convey meaning, thinking carefully about the layout of content
Y3	Be SMART <small>Safety Online</small>	Are they who they say they are? <small>Safety Online</small>	Augmented Reality: Coding Club <small>Computer Science</small>	Using ProBots <small>Computer Science</small>	Refining searches on the internet <small>Digital Literacy/ Information Communication Technology</small>	Creating content for a purpose and an audience <small>Digital Literacy/ Information Communication Technology</small>
	Link being safe online to SMART rules, passwords, finger touch and face recognition,	Online personas, unwanted contact, reporting concerns about content and contact	Explaining augmented reality, different perspectives, block-based coding, test, run program	Using different digital devices, algorithms and debugging code, sequencing instructions, coding language (programming arrows on ProBots)	Searching for specific images and information, key words, refining results	Recognise use of technology in the wider world, considering an audience and purpose, manipulating images, videos and text
		James and the Giant Peach: Centipedes, Ancient Egypt Historical Enquiry (Spring 1) <small>Digital Literacy/ Information Communication Technology</small>	Internet Safety Day 8.2.2022			
Searching for specific information, key words, refining results						
Y4	Are they who they say they are? <small>Safety Online</small>	Can you explain online safety? <small>Safety Online</small>	Programming Robots: LightBot <small>Computer Science</small>	Programming Robots: A.L.E.X <small>Computer Science</small>	Collecting and publishing information <small>Digital Literacy/ Information Communication Technology</small>	Publishing content <small>Digital Literacy/ Information Communication Technology</small>
	Online personas, unwanted contact, reporting concerns of content and contact, e-safety	Concerns about content and contact, acceptable and unacceptable behaviour, passwords, online personas, SMART, safe and responsible	Algorithms, debugging, computer program design, tests, running programs, logical reasoning, sequencing, sequence loops, test, run program	Algorithms, debugging, computer program design, tests, running programs, logical reasoning, sequencing, sequence loops, logical reasoning statements (If A, then B), test, run program	Exploring the internet for information, searching specifically, organising information found online, creating effective content e.g. Book Creator	Creating effective content with sound, images and text, manipulating text, images, formatting text
	Who were the Romans? <small>Digital Literacy/ Information Communication Technology</small>		Internet Safety Day 8.2.2022			
Exploring the internet for information, searching for specific information						
Y5	What technology do I use? <small>Safety Online</small>	Block-Based Coding: Tynker <small>Computer Science</small>	Should I be using social media? <small>Safety Online</small>	Beginning Swift-Coding: Tynker <small>Computer Science</small>	Creating content for an audience and a purpose <small>Digital Literacy/ Information Communication Technology</small>	Social Media: Twitter <small>Digital Literacy/ Information Communication Technology</small>
	Screen time, creating content, digital footprints, being a responsible online citizen, being SMART	Algorithms using variable statements, using block-based code, explaining block-based code, use logical reasoning statements (If A, then B), sequence and repetition, test, run program	Social media age restrictions, safety online, content, contact, acceptable and unacceptable behaviour, screen time, being a responsible online citizen	Algorithms using variable statements, use logical reasoning statements (If A, then B), sequence and repetition, beginning to use swift code (building a function) within Tynker, variables, sequence loops, test, run program	Create effective content, formatting text, manipulating images, including sound and video, understanding use of technology in wider world, creating a presentation, publishing software	Being a good online citizen, recognising acceptable an unacceptable behaviour online, using media as content
	Who were the Suffragettes? <small>Digital Literacy/ Information Communication Technology</small>		Internet Safety Day 8.2.2022			
Exploring the internet for information, searching specifically, organising information found online						
Y6	What are the dangers of the internet? <small>Safety Online</small>	Swift Playgrounds <small>Computer Science</small>	How can I keep myself safe? <small>Safety Online</small>			My Journey <small>Digital Literacy/ Information Communication Technology</small>
	Online personas, sharing sensibly, social media restrictions	Variable statements, block-based code, swift coding (building a function), recognising wider use of technology in the world, input and output, coding language, test, run program	Screen time, sharing sensibly, social media restrictions, digital footprint, being a responsible online citizen			Creating a presentation, including a range of content: sounds, images, videos, media
	What is the World Wide Web? <small>Digital Literacy/ Information Communication Technology</small>			Internet Safety Day 8.2.2022	What is the World Wide Web? <small>Digital Literacy</small>	
Researching, searching for specific information, filter results				Researching, searching for specific information, filter results		

Internet Safety Day Tuesday 8th February 2022