



Subject: Computing

Theale CE Primary School Subject Overview

Group	Year	Term	Topic Overview
F52/Year 1	FS2		<p>Children in Foundation Stage will have opportunities throughout the year to become familiar with the online tools that they will use later. These opportunities include:</p> <p>Communication and Language - "Being Imaginative". Using a variety of applications to create electronic artwork and stories.</p> <p>Reading - An introduction to online tools that require reading to properly understand. Create slideshows and receive emails.</p> <p>Writing - Writing on an electronic device using a keyboard or touchscreen.</p> <p>Exploring and using Media - Experiment with electronic tools for making music, paintings and 3D modeling.</p> <p>Life Skills - Using technology to learn more about healthy living and relationships.</p>
	Year 1	Autumn (1)	Online Safety - Why do we have usernames, passwords and avatars? How do they keep us safe? Understanding what makes a good username, avatar and password
		Autumn (2)	Art and Design - Animated Story books: Exploring and creating e-books, comparing similarities and differences with traditional books
		Spring (3)	Technology outside the classroom - Exploring technology used outside the classroom, at home and in the community
		Spring (4)	Computational thinking and Coding - To understand how the order of instructions changes the outcomes using BeeBots.
		Summer (5)	Coding and computational thinking - Lego Builders: begin to think logically about scenarios. Children will be introduced to the term 'algorithm'. This concept is at the core of coding.
		Summer (6)	Data Handling - Pictograms: What is a pictogram? How can it be used to present and interpret data
Year 2&3	Year 2	Autumn (1)	Online Safety - Searching the internet safely and understanding our "digital footprint"
		Autumn (2)	Coding - Writing code and debugging where needed

		Spring (3)	Spreadsheets - Using spreadsheets to store data and the copy/paste tool	
		Spring (4)	Art and Design - Creating images: Exploring different styles of traditional art using electronic medium, e.g. pointilism, cubism	
		Summer (5)	Presenting Ideas - Using a range of tools to explore non-fiction and fiction topics	
		Summer (6)	Data Handling - Asking questions and creating branching data bases	
	Year 3	Autumn (1)	Online Safety - What are PEGI ratings? Why do we have them? Digital foot prints and using digital media - what happens to things we post online? How can we keep ourselves safe?	
		Autumn (2)	Coding - Introduction to repeating "loops", including variables and the "if" command	
		Spring (3)	Spreadsheets - Using coordinates to navigate spreadsheets and creating bar charts	
		Spring (4)	Typing - Learning the core skills of touch-typing on a physical or electronic keyboard	
		Summer (5)	email - Writing and sending emails to specific addresses, including attachments when appropriate	
		Summer (6)	Simulations - Understanding how computers allow us to explore dangerous or difficult situations in safety	
	Year 4&5	Year 4	Autumn (1)	Online Safety - Consider the risks and benefits of computer use, including as part of a healthy lifestyle
			Autumn (2)	Coding - LOGO: Using repeat loops and variable to create shapes and mathematical patterns
			Spring (3)	Spreadsheets - Planning and budgeting for an event (imaginary or other)
Spring (4)			Effective searching and Computer Hardware - Review how to use search engines effectively. Learn the different parts that make up a computer	
Summer (5)			Animation - Creating 'stop motion' animations	
Summer (6)			Making music - Compose a piece of music using digital software	
Year 5		Autumn (1)	Online Safety - Understanding the importance of being safe online, including personal data and sharing concerns about things online, downloading software and apps, the need for being healthy	
		Autumn (2)	Coding - Designing and creating games that make use of timers and variables	

		Spring (3)	Spreadsheets - Writing formulae to resolve age-appropriate mathematical problems (e.g. calculate area of triangles)
		Spring (4)	Data Handling - Exploring and creating databases
		Summer (5)	Writing and Presenting - Choosing appropriate fonts, styles and layouts for different text types
		Summer (6)	3D Modeling - Understanding the real-world applications and different stages of 3D computer design
Year 6	Year 6	Autumn (1)	Coding - Writing and debugging code to make multiple things occur, using a sophisticated range of variables and functions.
		Autumn (2)	Spreadsheets - Using formulae to explore real life situations and solve mathematical problems
		Spring (3)	Text adventures - Design and make a choose-your-own-adventure game using hyperlinks
		Spring (4)	Networks - Understanding what a network is and why they are important; recognizing the internet as a global network
		Summer (5)	Binary - Investigating number systems other than base 10; understanding simple binary and its significance in computing
		Summer (6)	Online Safety - Understanding how mobile devices can be used to store personal information without direct consent; analyzing the positive and negative impacts technology can have on our lives.