

# Computing Content Release Plan

All Topics Contain 5 Lessons

<b>Year 1</b>	<b>Using Computers - Coming soon!</b> Introducing children to logging in and using technology for a purpose, including creating art	<b>Programming: Beebots</b> Using Bee-Bots to navigate an area and constructing simple algorithms, through the story of The Three Little Pigs	<b>Algorithms Unplugged - Coming soon!</b> Learning how computers handle information by exploring 'unplugged' algorithms- completing tasks away from the computer	<b>Digital Imagery - Coming soon!</b> Taking and manipulating digital photographs, including adding images found via a search engine	<b>Rocket to the Moon 1 and 2 - Coming soon!</b> Appreciating the value of computers through understanding that they helped us get to the moon. Creating and building a rocket which researches and saves information using appropriate software	
<b>Year 2</b>	<b>Journey Inside a Computer - Coming soon!</b> Based on the book <i>Hello Ruby</i> by Linda Liukas, children learn how computers and computer hardware work	<b>Word Processing and Making friends- Coming soon!</b> Using their developing word processing skills to write simple messages to friends and understand why we must be careful about who we talk to online	<b>Programming: ScratchJR</b> Exploring ScratchJR, a programming app that introduces simple programming for a purpose	<b>Algorithms and Debugging - Coming soon!</b> Identifying problems with a code using 'unplugged' and 'plugged' systems to diagnose and correct errors in an algorithm- a process known as 'debugging'	<b>International Space Station 1- Coming soon!</b>	<b>International Space Station 2- Coming soon!</b>
<b>Year 3</b>	<b>Emailing and Cybersafety - Coming soon!</b> Learning how to send emails, including attachments and how to make sure they are responsible digital citizens with their new email addresses through understanding what Cyberbullying	<b>What's Inside a Computer? - Coming soon!</b>	<b>Sensor Data: Plants 1 - Coming soon!</b>	<b>Sensor Data: Plants 2 - Coming soon!</b>	<b>Programming: Scratch</b> Using Scratch, with its block-based approach to coding language, pupils will learn to tell stories and create simple games	<b>Computer Networks - Coming soon!</b>
<b>Year 4</b>	<b>Collaborative Learning - Coming soon!</b> Understanding the importance of using collaborative learning tools and combining this with digital literacy skills to create online safety content	<b>How the Internet Works - Coming soon!</b> We use the Internet every single day, but 30 years ago, it didn't exist. In this topic, pupils will understand how data is transferred around the world using the world wide web	<b>Website Design and Blogging - Coming soon!</b> Designing and creating their own websites, considering content and style. Pupils will learn what is meant by the term blogging and spend time creating their own blog content	<b>HTML</b> Exploring the language behind well known websites, while developing their understanding of how to change the core characteristics of a website using HTML and CSS	<b>Weather and The Water Cycle 1 - Coming soon!</b>	<b>Weather and the Water Cycle 2 - Coming soon!</b>
<b>Year 5</b>	<b>Online Safety - Coming soon!</b> Creating an online safety resource for next year's Year 5 pupils using tools such as presentation software, video tools or even a simple stop-motion animation	<b>Micro:bit - Coming soon!</b>	<b>Search Engines - Coming soon!</b>	<b>Sonic Pi - Coming soon!</b> Composing music using code through Sonic Pi, pupils can import samples, add drum beats or just compose a simple tune culminating in a 'battle of the bands' using live loops of music	<b>Mars Rover</b> Exploring inputs and outputs and Binary numbers to understand how the Mars Rover transmits and receives data and how scientists are able to control it to explore another planet!	<b>Mars Rover - Coming soon!</b>
<b>Year 6</b>	<b>Bletchley Park 1 and 2 - Coming soon!</b> Learning how the first modern computers were created at Bletchley Park as part of a WWII code breaking team, going on to investigate secret codes and how they are created. Pupils will explore 'brute force' hacking and understand how to make passwords more secure and look at the earliest computers and how they have changed over time as well as researching the history of Bletchley Park and the key historical figures that worked there during World War II, showcasing their digital literacy skills in a presentation		<b>Skills Showcase - Coming soon!</b> Reflecting on and showcasing their computing skills. They will create an entire project around a specific theme	<b>Intro to Python - Coming soon!</b>	<b>Big Data 1</b> Understanding how data is collected and stored by exploring barcodes, QR codes and RFID chips. Pupils will investigate how collecting big data can be used to help people at theme parks and when navigating transport networks	<b>Big Data 2 - Coming soon!</b>