

Computing Long Term Plan

	Autumn		Spring		Summer	
<b>CYCLE A</b> **Online Safety runs through every unit in each year group.						
<b>EYFS, Year 1 &amp; 2</b>	<b>Computing systems and networks: Improving mouse skills</b> Building an understanding of how to log-in and navigate around a computer using a mouse.	<b>Commands Unplugged</b> Exploring commands and instructions through a range of unplugged games.	<b>Skills Showcase: Sending rockets to the Moon</b> Developing keyboard and mouse skills through a range of digital projects.	<b>Computing systems and networks: What is a Computer?</b> Identifying what a computer is by understanding different inputs, outs and processes.	<b>Programming: Algorithms and debugging</b> Developing an understanding of what an algorithm is and how they can be used,	<b>Computing systems and networks: Word Processing</b> Developing word processing skills by learning touch typing.
<b>Year 3 &amp; 4</b>	<b>Computing systems and networks: Networks</b> Developing an understanding of computer networks by learning how devices communicate.	<b>Data handling: Comparison cards databases</b> Exploring the concepts of sorting and filtering by learning about records, fields and data.	<b>Computer systems and networks: Journey inside a computer</b> Exploring how computers work by role-playing different computer parts and creating models.	<b>Computer systems and networks: Collaborative Learning</b> Developing collaborative working skills through using online software to create and share digital content.	<b>Data handling: Investigating</b> Investigating how weather data is gathered, recorded and used to create forecasts.	<b>Skills showcase: HTML</b> Investigating how websites are created by exploring HTML and CSS code.
<b>Year 5 &amp; 6</b>	<b>Computer systems and networks: Emailing</b> Learning how to send emails with attachments and how to use them responsibly.	<b>Programming: Scratch</b> Investigating programming through scratch by creating animations and learning key coding concepts.	<b>Video Trailers: Using iPads</b> Developing digital video skills through creating trailers using special edits, transitions and editing.	<b>Creating media: Website design</b> Developing research, word processing and collaborative working skills through website design.	<b>Programming: Further coding with Scratch</b> Designing and programming a game using variables, sensors and 'if' statements.	<b>Programming: Computational Thinking</b> Developing computational thinking skills through decomposition and pattern recognition.
<b>CYCLE B</b> **Online Safety runs through every unit in each year group.						
<b>EYFS, Year 1 &amp; 2</b>	<b>Bee-Bots</b> Exploring programming by giving clear instructions to a Bee-Bot and explaining how it works.	<b>Digital Imagery</b> Developing photography and image editing skills to capture photos to create an adventure story.	<b>Data Handling: Introduction to data</b> Learning what data is, why it is useful and the different ways that it can be gathered and recorded.	<b>Scratch Jr</b> Exploring how to use blocks and loops in simple coding.	<b>Stop Motion</b> Creating simple animations, storyboarding creative ideas and decomposing a story into small parts of actions.	<b>Data Handling: International Space Station</b> Learning how astronauts survive on the ISS.
<b>Year 3 &amp; 4</b>	<b>Emailing</b> Learning how write and send an email with an attachment, as well discussing the dangers of negative language online.	<b>Video Trailers</b> Learning how to create storyboard for a book trailer, considering camera angles and editing videos.	<b>Programming Scratch</b> Exploring scratch by programming an animation, learning new coding concepts, testing and debugging.	<b>Website Design</b> Exploring how to create a webpage using Microsoft Swap.	<b>Computational Thinking</b> Exploring computational thinking through unplugged activities and applying these to programming.	<b>Further coding with Scratch</b> Programming a game using variables and sensors, debugging to solve problems.
<b>Year 5 &amp; 6</b>	<b>Micro:bit</b> Exploring how to program the BBC micro:bit, creating interactive projects with sensors, variables and conditional statements.	<b>Mars Rover 1</b> Identifying how the Mars Rover collects different types of data and transmits this back to Earth using binary code.	<b>Mar Rover 2</b> Further exploration into creating images and coding in real world situations.	<b>Bletchley Park</b> Exploring code-breaking at Bletchley Park.	<b>Computing Systems &amp; Networks: Exploring AI</b> Exploring what AI is and how it generates text, images and code, as well as learning about the ethical implications.	<b>Inventing a Product</b> Designing a new electronic product and using CAD software to design appropriate housing for it.