COMPUTING LONG TERM PLAN – 2024 2025

	Year 3		Year 4		Year 5		Year 6	
Autumn	Networks	Learning what a network is and how devices communicate and share information	Collaborative learning	Using Microsoft 365 to learn how to work collaboratively and exploring a range of collaborative toolds	Search engines	Learning about how page rank works and how to identify accurate information.	Bletchley Park	Discovering the history of Bletchley Park and learning about code breaking and hacking. Demonstrating digital literacy skills by creating presentations. Learning about how computers have evolved over time and designing a computer of the future.
	Scratch	Exploring the programme 'Scratch' and following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.	Further coding with Scratch	Revisiting the key features and beginning to use 'variables' in code scripts.	Programming music	Using Scratch. Building on programming and music skills to create different sounds, beats and melodies which are put to the test with a Battle of the Bands performance!	Intro to Python	Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.
Spring	Emailing	Using Microsoft 365 to send emails with attachments and understanding what cyberbullying is.	Website design	Using Microsoft 365 tools to learn how web pages and sites are created and how to embed media and links within them.	Mars Rover	Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.	Big Data 1	Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID (Radio-frequency identification).
	Journey inside a computer	Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.	HTML	Learning about the markup language behind a webpage. Becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remix' a live website.	Micro:bit	Creating algorithms and programs that are used in the real world. Using the 'predict, test and evaluate' cycle to create and debug programs with specific aims.	Artificial Intelligence	Exploring what AI is and how it generates text, images and code. Learning about creating and refining prompts to improve AI responses while also considering the ethical implications of AI and its potential to replace human roles.
Summer	Comparison cards databases	Learning about records, fields and data, and sorting and filtering data.	Investigating weather	Researching and storing data on spreadsheets and designing a weather station	Mars Rover 2	Exploring how the Mars Rover moves, follows instructions, collects and sends data. Understanding how computers work, what data is and how it is transferred.	Inventing a product	Designing a product, pupils evaluate, adapt and debug code to make it suitable for their needs and designing products in CAD and creating a website and video.
Throughout the year	Online safety	Learning the difference between fact, opinion and belief and how to deal with upsetting content. Knowing how to protect personal information online	Online safety	Searching for information and making a judgement about the probable accuracy, recognising adverts and pop-ups, understanding that technology can be distracting.	Online safety	Learning about app permissions; the positive and negative aspects of online communication; that online information is not always factual; how to deal with online bullying and managing our health and wellbeing.	Online safety	Learning how to deal with issues online; about the impact and consequences of sharing information online; how to develop a positive online reputation; combating and dealing with online bullying and protective passwords.

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