

Suggested long-term plan: Computing - Outline (KS1)

		Year 1	
Autumn 1	Computing systems and networks	Autumn 2	Programming 1
	Improving mouse skills (5 lessons) Learning how to login and navigate around a computer; developing mouse skills; learning how to drag, drop, click and control a cursor to create works of art		Algorithms unplugged (5 lessons) Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific.
Spring 1	Skills showcase	Spring 2	Programming 2
	Rocket to the moon (5 lessons) Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.		Programming Bee-Bots (5 lessons) (Option 1: Bee-Bot) (Option 2: Virtual Bee-Bot) Introducing programming through the use of a Bee-Bot and exploring its functions.
Summer 1	Creating media	Summer 2	Data handling
	Digital imagery (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Taking and editing photos, searching for and adding images to a project.		Introduction to data (5 lessons) Learning what data is and the different ways it can be represented. Learning why data is useful and the ways it can be gathered and recorded.
Online safety	Online safety		
	Online safety Y1 (4 lessons) Learning how to stay safe online and how to manage feelings and emotions when someone or something has upset us.		



Suggested long-term plan: Computing - Outline (KS1)

		Year 2	
	Computing systems and networks		Programming 1
Autumn 1	What is a computer? (5 lessons) Exploring what a computer is by identifying how inputs and outputs work and how computers are used in the wider world to design their own computerised invention.	Autumn 2	Algorithms and debugging (5 lessons) Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient, introduction of loops.
Spring 1	Computing systems and networks	Spring 2	Programming 2
	Word processing (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Developing touch typing skills, learning keyboard shortcuts and simple editing tools.		ScratchJr (5 lessons) Exploring what 'blocks' do' by carrying out an informative cycle of predict > test > review. Programming a familiar story and make a musical instrument.
Summer 1	Creating media	Summer 2	Data handling
	Stop Motion (5 lessons) (Option 1: Using tablet devices), (Option 2: Devices with cameras) or (Option 3: Devices without cameras) Learning how to create simple animations from storyboarding creative ideas.		International Space Station (5 lessons) Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans, to survive.
	Online safety		
Online safety	Online safety Y2 (5 lessons) Learning: how to keep information safe and private online; who we should ask before sharing things online and how to give, or deny permission online.		



Suggested long-term plan: Computing - Outline (Lower KS2)

		Year 3	
Autumn 1	Computing systems and networks	Autumn 2	Programming
	Networks and the internet ((5 lessons) (Option 1:Google) (Option 2: Microsoft Office 365) Learning what a network and how devices communicate and share information.		Scratch (5 lessons) Exploring the programme Scratch, following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.
Spring 1	Computing systems and networks	Spring 2	Computing systems and networks
	Emailing (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Sending emails with attachments and understanding what cyberbullying is.		Journey inside a computer (5 lessons) Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.
Summer 1	Creating media	Summer 2	Data handling
	Video trailers (5 lessons) (Option 1: Using devices other than iPads) (Option 2: Using iPads) Developing digital video skills to create trailers, with special effects and transitions.		Comparison cards databases (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Learning about records, fields and data and sorting and filtering data.
Online safety	Online safety		
	Online safety Y3 (4 lessons) Learning: the difference between fact, opinion and belief; and how to deal with upsetting online content. Knowing how to protect personal information online.		



Suggested long-term plan: Computing - Outline (Lower KS2)

		Year 4	
Autumn 1	Computing systems and networks	Autumn 2	Programming
	Collaborative learning (5 lessons) (Option 1: Google) (Option 2: Microsoft Office) Learning how to work collaboratively and exploring a range of collaborative tools.		Further coding with Scratch (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Revisiting the key features and beginning to use 'variables' in code scripts.
Spring 1	Computing systems and networks	Spring 2	Computing systems and networks
	Website design (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Learning how web pages and sites are created and how to embed media and links.		HTML (5 lessons) 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.
Summer 1	Creating media	Summer 2	Data handling
	Computational thinking (5 lessons) Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.		Investigating weather (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Researching and storing data on spreadsheets and designing a weather station.
Online safety	Online safety		
	Online safety Y4 (6 lessons) Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.		