Long Term Plan
2023 -2024
Subject: Computing
Scheme: Kapow

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS		EYFS Computing: Using a Computer Learning about the main parts of a computer and how to use the keyboard and mouse. Learning how to log in and out.	EYFS Computing: Using Instructions The children learn to receive and give instructions and understand the importance of precise instructions.	EYFS Computing: Using Exploring Hardware Tinkering and exploring with different computer hardware and learning to operate a camera.	EYFS Computing: Bee-Bot Programming Children learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware.	EYFS Computing: Data Handling Children sort and categorise data and are introduced to branching databases and pictograms.
Year 1	Online safety	KS1 Y1 Computing: Algorithms Unplugged Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific	KS1 Computing: Skills Showcase: Rocket to the Moon Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.	KS1 Computing: Programming Bee Bot Introducing programming through the use of a Bee-Bot and exploring its functions.	KS1 Y1: Computing: Digital Imagery (using office 365) Taking and editing photos, searching for and adding images to a project.	KS1 Computing: Introduction to Data 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.
Year 2	Online safety	KS1 Computing: What Is A Computer 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.	KS1 Computing: Algorithms and Debugging Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient, introduction of loops.	Y2 : Computing: Word Processing Skills Developing touch typing skills, learning keyboard shortcuts and simple editing tools.	Stop Motion Animation Using Tablets Learning how to create simple animations from storyboarding creative ideas	KS1 Computing: Data Handling Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans, to survive.

Year 3	Computing systems and networks – Connecting computers (Teach computing)	KS2 Computing: Scratch Exploring the programme Scratch, following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.	KS2 Computing: Journey Inside a Computer Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.	KS2 Y3: Video Trailers Using iPads Developing digital video skills to create trailers, with special effects and transitions.	Lower KS2 Computing: Emailing (using office 365) Sending emails with attachments and understanding what cyberbullying is.	Y3: KS2: Computing: Databases (using office 365) Learning about records, fields and data and sorting and filtering data.
	Online Safety L1	Online Safety L2	Internet safety day	Online Safety L3	Online Safety L4	
Year 4	KS2 Computing: Year 4 Online Safety Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.	KS2 Computing: Collaborative Learning Learning how to work collaboratively and exploring a range of collaborative tools	KS2 Computing: Further Scratch Programming Revisiting the key features and beginning to use 'variables' in code scripts.	Microsoft Unit: Website Design (using Office 365) Learning how web pages and sites are created and how to embed media and links	KS2 Computing: Computational Thinking Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.	KS2 Computing: Weather Data Handling Researching and storing data on spreadsheets and designing a weather station.
Year 5/6 (cycle A)	KS2 Computing: 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.	KS2 Computing: Search Engines Learning about how page rank works and how to identify inaccurate information.	Ks2 Computing: Music Programming with Sonic Pi 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	Data handling: Mars Rover I Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.	Ks2 Computing: Micro:bit Programming 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.	Ks2 Computing: Stop Motion Studio Creating animations, storyboard ideas and decomposing a story into small parts before putting together to create the illusion of a moving image.