Long Term Plan
Subject: Computing
Scheme: Teach Computing / Kapow (E-Safety)

Cycle A – 2025-26; Cycle B – 2024-2025

Cycle A

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Within the new EYFS curriculum the 'Technology' strand has been removed from 'Understanding the World', however, opportunities to use computers and technology are provided throughout the year to ensure that children develop listening skills, problem-solving abilities and thoughtful questioning skills — as well as supporting subject skills and knowledge across the seven areas of learning. Opportunities for children to develop their ability to use computational thinking effectively eg ordering steps in a sequence, breaking down a large task, making decisions based on conditions, using letter and number symbols for coding. E-safety is also taught alongside the rest of the school. Through classroom provision and both focussed and self-chosen learning the children have the opportunity to use the computer and tablets/cameras for recording learning. A range of technology will be explored throughout the year for the children to access, both independently and with an adult. - Tablets - Computers – games/activities linked to the learning theme or subject content. - Remote control toys – cars. - Battery operated toys - Beebots - CD players - Interactive white board – Google Earth / Digi map. - iPads – drawing, sorting, information gathering. - Sound buttons - exploring old typewriters/cameras/computers/mechanical toys/kitchen equipment.					
Year 1 / 2 Cycle A	Technology around us Recognising technology in school and using it responsibly.	Digital writing Using a computer to create and format text, before comparing to writing non-digitally.	Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes.	Grouping data Exploring object labels, then using them to sort and group objects by properties.	Programming animations Designing and programming the movement of a character on screen to tell stories.	Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working nondigitally
	Online Safety L1 (Y1 unit)	Online Safety L2 (Y1 unit)	Internet safety day	Online Safety L3 (Y1 unit)	Online Safety L4 (Y1 unit)	Online Safety L5 (Y1 unit)
Year 3 / Cycle A	Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	Stop-frame animation Capturing and editing digital still images to produce a stop frame animation that tells a story	Sequencing sounds Creating sequences in a block-based programming language to make music.	Branching databases Building and using branching databases to group objects using yes/no questions.	Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions.	Desktop publishing Creating documents and modifying text, images and page layouts for a specific purpose.
	Online Safety L1	Online Safety L2	Internet safety day	Online Safety L3	Online Safety L4	
Year 5/6 (cycle A)	**Systems and searching** Recognising IT systems in the world and how some can enable searching on the internet.	**Video production** Planning, capturing, and editing video to produce a short film.	**Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.	**Flat-file databases** Using a database to order data and create charts to answer questions.	**Introduction to vector graphics** Creating images in a drawing program by using layers and groups of objects.	**Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.
	Online Safety L1 (Y5 unit)	Online Safety L2 (Y5 unit)	Internet safety day	Online Safety L3 (Y5 unit)	Online Safety L4 (Y5 unit)	Online Safety L5 (Y5 unit)

Cycle B

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Within the new EYFS curriculum the 'Technology' strand has been removed from 'Understanding the World', however, opportunities to use computers and technology are provided throughout the year to ensure that children develop listening skills, problem-solving abilities and thoughtful questioning skills — as well as supporting subject skills and knowledge across the seven areas of learning. Opportunities for children to develop their ability to use computational thinking effectively eg ordering steps in a sequence, breaking down a large task, making decisions based on conditions, using letter and number symbols for coding. E-safety is also taught alongside the rest of the school. Through classroom provision and both focussed and self-chosen learning the children have the opportunity to use the computer and tablets/cameras for recording learning. A range of technology will be explored throughout the year for the children to access, both independently and with an adult. - Tablets - Computers – games/activities linked to the learning theme or subject content. - Remote control toys – cars. - Battery operated toys - Beebots - CD players - Interactive white board – Google Earth / Digi map. - iPads – drawing, sorting, information gathering. - Sound buttons - exploring old typewriters/cameras/computers/mechanical toys/kitchen equipment.					
Year 1 / 2 Cycle B	**Information technology around us** Identifying IT and how its responsible use improves our world in school and beyond	**Digital photography** Capturing and changing digital photographs for different purposes.	**Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	**Digital music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	**Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	**Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.
	Online Safety L1 (Year 2 unit)	Online Safety L2 (Year 2 unit)	Internet safety day (Year 2 unit)	Online Safety L3 (Year 2 unit)	Online Safety L4 (Year 2 unit)	
Year 3 / 4 Cycle B	**The internet** Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content	**Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**Repetition in shapes** Using a text-based programming language to explore count-controlled loops when drawing shapes	**Photo editing** Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled.	**Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.	**Data logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation
	Online Safety L1 (Y4 unit)	Online Safety L2 (Y4 unit)	Internet safety day	Online Safety L3 (Y4 unit)	Online Safety L4 (Y4 unit)	Online Safety L5 (Y4 unit)
Year 5/6 Cycle B	**Communication and collaboration** Exploring how data is transferred by working collaboratively online.	**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.	**Variables in games** Exploring variables when designing and coding a game.	**Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	**3D modelling** Planning, developing, and evaluation 3D computer models of physical objects.	**Sensing movement** Designing and coding a project that captures inputs from physical devices.
	Online Safety L1 (Y6 unit)	Online Safety L2 (Y6 unit)	Online Safety L3 (Y6 unit)	Online Safety L4 (Y6 unit)	Online Safety L5 (Y6 unit)	Online Safety L6 (Y6 unit)