



## Computing Long Term Plan

Digital literacy (Mechanics, searching/selecting, information and e-safety)	Information technology (Digital artefacts and computing context)	Computer Science (Algorithms and programming, data and systems)
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Internet safety	Computer skills	Programming – instructions	Data handling	Computer skills	Moving a robot
	Using technology safely, sorting good and wring choices, recognising when they do and do not need help.	Locating the keyboard and mouse, using technology for different purposes	Following instructions as part of a practical game and activity. Debugging instructions when they go wrong.	Sorting and categorising objects in play using pictograms	Mouse control and creating digital art	Using simple instructions to move a beebot robot.
Year 1	Technology around us	Digital Painting	Moving a robot	Grouping data	Digital Writing	Programming animation
	Recognising technology in school and using it responsibly	Choosing appropriate tools in a program to create art and making comparisons with working not digitally.	Writing a short algorithm and program for floor robots and predicting program outcomes.	Exploring objects, labelling, then using them to sort and group objects by properties.	Using a computer to create and format text, before comparing to write non-digitally.	Designing and programming the movement of a character on screen to tell stories.
Year 2	Information technology around us	Digital photography	Robot algorithms	Pictograms	Digital music	Programming quizzes
	Identifying IT and how its responsible use improves our world in school and beyond.	Capturing and changing digital photography for different purposes	Creating and debugging programs, and using logical reasoning to make predictions.	Collecting data in tally charts and using attributes to organise and present data on a computer.	Using a computer as a tool to explore rhythms and melodies, before creating a musical composition	Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.

Year 3	Connecting computers	Stop-frame animation	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs
	Identifying that digital devices have inputs, processes and outputs and how devices can be connected to make networks.	Capturing and editing digital still images to produce a stop-frame animation that tells a story.	Creating sequences un a block-based programming language to make music.	Building and using branching databases to group objects using yes/no questions.	Creating documents by modifying text, images, and page layouts for a specified purpose.	Writing algorithms and programmes that use a range of events to trigger sequences of actions.
Year 4	The internet	Audio production	Repetition in shapes	Data logging	Photo editing	Repetition in games
	Recognising that internet as a network or networks including the WWW and why we should evaluate online content	Capturing and editing audio to produce a podcast, ensuring that copyright is considered	Using a text-based programming language to explore count-controlled loops when drawing shapes	Recognising how and why data is collected over time, before using data loggers to carry out an investigation	Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled	Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5	Computer systems and network	Video production	Selection in physical computing	Flat-file databases	Introduction to vector graphics	Selection in quizzes
	Recognising IT systems in the world and how some can enable searching on the internet	Planning, capturing, and editing video to produce a short film.	Exploring conditions and selection using a programmable microcontroller	Using a database to order data and create charts to answer questions	Creating images in a drawing program by using layers and groups of objects	Exploring selection in programming to design and code an interactive quiz.
Year 6	Communication and collaboration	Webpage creation	Variables in games	Introduction to spreadsheets	3D modelling	Sensing movement
	Exploring how data is transferred by working collaboratively online	Designing and creating webpages, giving consideration to copyright, aesthetics and navigation	Exploring variables when designing and coding a game.	Answering questions by using spreadsheets to organise and calculate data	Planning, developing and evaluating 3D computer models of physical objects.	Designing and coding a project that captures inputs from physical device.