



Computing: Long Term Plan

	Autumn		Spring		Summer		Ongoing
	Computing systems and networks .1	Creating Media .2	Programming A .3	Data and information .4	Creating Media .5	Programming B .6	Typing Progression
EYFS	Technology around us What is technology/ what needs to be switched on to work? Identifying technology around us – in school, in our homes and when we are out and about plus programmable toys	Digital safety Introduction to the computer keyboard Internet safety	Digital painting Using a paint program to create a piece of firework art.	Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes.	Digital painting Using a combination of programs (to create a work of art with their name which has been typed.	Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes.	Develop familiarity with the keyboard – caps lock, spacebar, enter/return, to provide text on screen that is clear and error free (type name with a capital letter); use number keys Use touch pad
Year 1	Technology around us Recognising technology in school and using it responsibly.	Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working 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.	Digital writing Using a computer to create and format text, before comparing to writing non-digitally.	Programming animations Designing and programming the movement of a character on screen to tell stories.	Develop familiarity with the keyboard –, backspace, shift to enter symbols above numbers (@/£,etc), enter, to provide text on screen that is clear and error free Use mouse, pg up/down and arrow keys
Year 2	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.	Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer.	Making 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	Use shift keys to enter all other symbols (?, etc) Use the mouse or arrow keys to insert words and sentences. Click and drag using touchpad One hand use of shift key; keyboard seen as two halves (left side accessed by left hand only)
Year 3	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	Desktop publishing Creating documents by modifying text, images, and page layouts for a specified purpose.	Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions.	Developing confidence typing with two hands touch typing programs

Year 4	The internet Recognising the internet as 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	Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Photo editing Manipulating digital images, and reflecting on the impact of 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.	Developing confidence typing with two hands touch typing programs
Year 5	Systems and searching Recognising IT systems around us and how they allow us to search 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.	Vector drawing 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.	Developing confidence typing with two hands touch typing programs
Year 6	Communication and collaboration Identifying and exploring how data is transferred and information is shared 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 evaluating 3D computer models of physical objects.	Sensing Designing and coding a project that captures inputs from a physical device.	Developing confidence typing with two hands touch typing programs