

KS1 Computing Long Term Plan-

Cycle A

Cycle B

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 1	<p>Technology around us</p> <p>Recognising technology in school and using it responsibly.</p>	<p>Digital painting</p> <p>Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.</p>	<p>Moving a robot</p> <p>Writing short algorithms and programs for floor robots, and predicting program outcomes.</p>	<p>Grouping data</p> <p>Exploring object labels, then using them to sort and group objects by properties.</p>	<p>Digital writing</p> <p>Using a computer to create and format text, before comparing to writing non-digitally.</p>	<p>Programming animations</p> <p>Designing and programming the movement of a character on screen to tell stories.</p>
Year 2	<p>Information technology around us</p> <p>Identifying IT and how its responsible use improves our world in school and beyond.</p>	<p>Digital photography</p> <p>Capturing and changing digital photographs for different purposes.</p>	<p>Robot algorithms</p> <p>Creating and debugging programs, and using logical reasoning to make predictions.</p>	<p>Pictograms</p> <p>Collecting data in tally charts and using attributes to organise and present data on a computer.</p>	<p>Digital music</p> <p>Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.</p>	<p>Programming quizzes</p> <p>Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.</p>

KS2 Computing Long Term Plan-

Cycle A Cycle B

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