

KS1 Curriculum overview and skills progression



	Computing systems and networks ¹	Creating media	Programming A	Data and information	Creating media	Programming B
Year 1	Technology around us (1.1)*	Digital painting (1.2)	Moving a robot (1.3)	Grouping data (1.4)	Digital writing (1.5)	Programming animations (1.6)
Year 2	Information technology around us (2.1)	Digital photography (2.2)	Robot algorithms (2.3)	Pictograms (2.4)	Digital music (2.5)	Programming quizzes (2.6)

Unit summaries

	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 Curriculum overview and skills progression



Teach Computing Curriculum overview

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 3	Connecting computers (3.1)	Stop-frame animation (3.2)	Sequencing sounds (3.3)	Branching databases (3.4)	Desktop publishing (3.5)	Events and actions in programs (3.6)
Year 4	The internet (4.1)	Audio production (4.2)	Repetition in shapes (4.3)	Data logging (4.4)	Photo editing (4.5)	Repetition in games (4.6)
Year 5	Systems and searching (5.1)	Video production (5.2)	Selection in physical computing (5.3)	Flat-file databases (5.4)	Introduction to vector graphics (5.5)	Selection in quizzes (5.6)
Year 6	Communication and collaboration (6.1)	Webpage creation (6.2)	Variables in games (6.3)	Introduction to spreadsheets (6.4)	3D modelling (6.5)	Sensing movement (6.6)

Unit summaries

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