



Fen Ditton C. P. School

# Computing Curriculum Overview

2021-2022



1 hour weekly sessions	Computing Systems and Networks	Creating Media	Programming A	Data and Information	Creating Media	Programming B
Year 1 & 2	<b>Technology around us</b> Recognising technology in school and using it responsibly	<b>Digital painting</b> Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally	<b>Moving a robot</b> Writing short algorithms and programs for floor robots, and predicting program outcomes	<b>Grouping data</b> Exploring object labels, then using them to sort and group objects by properties	<b>Digital writing</b> Using a computer to create a format text, before comparing to writing non-digitally	<b>Programming animations</b> Designing and programming the movement of a character on screen to tell stories
Year 2 & 3	<b>Information technology around us</b> Identifying IT and how its responsible use improves our world in school and beyond	<b>Digital photography</b> Capturing and changing digital photographs for different purposes	<b>Robot algorithms</b> Creating and debugging programs and using logical reasoning to make predictions	<b>Pictograms</b> Collecting data in tally charts and using attributes to organise and present data on a computer	<b>Making music</b> Using a computer as a tool to explore rhythms and melodies, before creating a musical composition	<b>Programming quizzes</b> Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz
Year 3 & 4	<b>Connecting Computers</b> Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	<b>Stop-frame animation</b> Capturing and editing digital still images to produce a stop-frame animation that tells a story	<b>Sequencing sounds</b> Creating sequences in a block-based programming language to make music	<b>Branching databases</b> Building and using branching databases to group objects using yes/no questions	<b>Desktop publishing</b> Creating documents by modifying text, images and page layouts for a specified purpose	<b>Events and actions in programs</b> Writing algorithms and programs that use a range of events to trigger sequences of actions
Year 4 & 5	<b>The Internet</b> Recognising the internet as a network of networks including the WWW, and why we should evaluate online content	<b>Audio editing</b> Capturing and editing audio to produce a podcast, ensuring that copyright is considered	<b>Repetition in shapes</b> Using a text-based programming language to explore count-controlled loops when drawing shapes	<b>Flat-file databases</b> Using a database to order data and create charts to answer questions	<b>Photo editing</b> Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled	<b>Repetition in games</b> Using a block-based programming language to explore count-controlled and infinite loops when creating a game
Year 5 & 6	<b>Internet communication</b> Recognising how the WWW can be used to communicate and be	<b>Webpage creating</b> Designing and creating webpages, giving consideration to	<b>Variables in games</b> Exploring variables when designing and coding a game	<b>Introduction to spreadsheets</b> Answering questions by using	<b>3D modelling</b> Planning, developing and evaluating 3D	<b>Sensing</b> Designing and coding a project that captures

	searched to find information	copyright, aesthetics, and navigation		spreadsheets to organise and calculate data	computer models of physical objects	inputs from a physical device
<b><i>Additional alternative units for Upper KS2 years 4 to 6 to suit cohort</i></b>	<b>Sharing information</b> Identifying and exploring how information is shared between digital systems	<b>Video editing</b> Planning, capturing, and editing video to produce a short film			<b>Vector drawing</b> Creating images in a drawing program by using layers and groups of objects	<b>Selection in quizzes</b> Exploring selection in programming to design and code an interactive quiz