

## Computing Overview 23-24

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p><b>Technology around us</b> Recognising technology in school and using it responsibly. <b>Access to:</b> Laptops <a href="https://nccce.io/drag-paintz.app">nccce.io/drag-paintz.app</a>.</p>	<p><b>Digital Painting</b> Choosing appropriate paint tools in a program to create art, and making comparisons with working non-digitally <b>Access to:</b> Laptops Paint</p>	<p><b>Moving a robot</b> Writing short algorithms and programs for floor robots, and predicting program outcomes. <b>Access to:</b> Bee bots</p>	<p><b>Grouping Data</b> Exploring object labels, then using them to sort and group objects by properties. <b>Access to:</b> Nothing - Unplugged lessons</p>	<p><b>Digital Writing</b> Using a computer to create and format text, before comparing to writing non-digitally. <b>Access to:</b> Laptop Microsoft Word</p>	<p><b>Programming animations</b> Designing and programming the movement of a character on screen to tell stories. <b>Access to:</b> Beebots Tablets with Scratch</p>
Year 2	<p><b>Information technology around us</b> Identifying IT and how its responsible use improves our world in school and beyond. <b>Access to:</b> (Lesson 6) Laptops, tablets - gonoodle, paintz.appz</p>	<p><b>Digital photography</b> Capturing and changing digital photographs for different purposes. <b>Access to:</b> Digital camera, tablet, Pixlr app</p>	<p><b>Robot algorithms</b> Creating and debugging programs, and using logical reasoning to make predictions. <b>Access to:</b> Beebots</p>	<p><b>Pictograms</b> Collecting data in tally charts and using attributes to organise and present data on a computer. <b>Access to:</b> Laptops, j2.com - pictogram, j2.com - chart</p>	<p><b>Programming quizzes</b> Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. <b>Access to:</b> Tablets, Scratch Jr.</p>	<p><b>Making music</b> Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. <b>Access to:</b> Laptops, Chrome music lab.</p>
Year 3	<p><b>Connecting computers</b> Identifying that digital devices have inputs, processes and outputs, and how devices can be</p>	<p><b>Sequences sounds</b> Creating sequences in a block-based programming language to make music. <b>Access to:</b> Chromebooks</p>	<p><b>Stop-frame animation</b> Capturing and editing digital still images to produce a stop-frame animation that tells a story. <b>Access to:</b></p>	<p><b>Branching databases</b> Building and using branching databases to group objects using yes/no questions. <b>Access to:</b> Chromebooks</p>	<p><b>Events and actions in programs</b> Writing algorithms and programs that use a range of events to trigger sequences of actions.</p>	<p><b>Desktop publishing</b> Creating documents by modifying text, images, and page layouts for a specified purpose.</p>

	connected to make networks.		Tablets		<b>Access to:</b> Chromebooks	
<b>Year 4</b>	<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>Access to:</b> Laptops	<b>Repetition in shapes</b> Using a text-based programming language to explore count-controlled loops when drawing shapes. <b>Access to:</b> Chromebooks	<b>Photo editing</b> Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. <b>Access to:</b> Tablets	<b>Repetition in games</b> Using a block-based language to explore count-controlled and infinite loops when creating a game. <b>Access to:</b> Chromebooks	<b>Data logging</b> Recognising how and why data is collected over time, before using data loggers to carry out an investigation. <b>Access to:</b> Laptops
<b>Year 5</b>	<b>Computer systems and networks: systems and searching</b> Identifying and exploring how information is shared between digital systems. <b>Access to:</b>	<b>Vector drawing</b> Creating images in a drawing program by using layers and groups of objects. <b>Access to:</b> Chromebooks	<b>Selection in physical computing</b> Exploring conditions and selections using a programmable microcontroller. <b>Access to:</b> Chromebooks Crumbles	<b>Flat-file databases</b> Using a database to order data and create charts to answer questions. <b>Access to:</b> Chromebooks	<b>Selection in quizzes</b> Exploring selection in programming to design and code an interactive quiz. <b>Access to:</b> Chromebooks	<b>Video editing</b> Planning, capturing and editing video to produce a short film.
<b>Year 6</b>	<b>Computing systems and networks – communication and collaboration</b> Recognising how the WWW can be used to communicate and be searched to find information <b>Access to:</b> Chromebooks	<b>Webpage creation</b> Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. <b>Access to:</b> Chromebooks	<b>Variables in games</b> Exploring variables when designing coding a game. <b>Access to:</b> Chromebooks	<b>Sensing</b> Designing and coding a project that captures inputs from a physical device. <b>Access to:</b> Microbits - loan from Bishop Challoner	<b>Introduction to spreadsheets</b> Answering questions by using spreadsheets to organise and calculate data. <b>Access to:</b> Chromebooks	<b>3D modelling</b> Planning, developing, and evaluating 3D computer models of physical objects. <b>Access to:</b> Chromebooks