



# Computing Subject Overview 2021 2022

	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
<b>EYFS: How do the EYFS developmental strands link to the computing curriculum?</b>	<p>The statutory framework for EYFS (DfE, 2021) defines the characteristics of effective teaching and learning as:</p> <ul style="list-style-type: none"> <li>• playing and exploring – children investigate and experience things, and 'have a go'</li> <li>• active learning – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements</li> <li>• creating and thinking critically – children have and develop their own ideas, make links between ideas, and develop strategies for doing things.</li> </ul> <p>The use of technology and computing related activities provides beneficial links to these characteristics, in addition to links which can be made across all prime and specific areas of learning. Such learning opportunities also promote children's curiosity and their '...understanding of our culturally, socially, technologically and ecologically diverse world' (Development Matters – DfE, 2021).</p>						
	Three and Four-Year-Olds	Personal, Social and Emotional Development		<ul style="list-style-type: none"> <li>• Remember rules without needing an adult to remind them.</li> </ul>			
		Physical Development		<ul style="list-style-type: none"> <li>• Match their developing physical skills to tasks and activities in the setting.</li> </ul>			
		Understanding the World		<ul style="list-style-type: none"> <li>• Explore how things work.</li> </ul>			
	Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none"> <li>• Show resilience and perseverance in the face of a challenge.</li> <li>• Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'.</li> </ul>			
		Physical Development		<ul style="list-style-type: none"> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</li> </ul>			
		Expressive Arts and Design		<ul style="list-style-type: none"> <li>• Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>			

	ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> <li>• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly.</li> </ul>		
		Expressive Arts and Design	Creating with Materials	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.		
<b>Year 1</b>	<p><b>We are discoverers</b></p> <p>Developing our mouse skills. Logging on and off the computers.</p> <p>Using 2paint to create pictures of our favourite toys.</p> <p><b>Online Safety</b> We are Y1 rule writers.</p>	<p><b>We are rhythmic</b></p> <p>Creating sound patterns in ScratchJr and GarageBand</p> <p><b>Online Safety</b> We are kind and thoughtful.</p>	<p><b>We are digital artists</b></p> <p>Using '2Publish' to create our own digital artwork inspired by famous artists.</p> <p><b>Online Safety</b> We are information protectors.</p>	<p><b>We are publishers</b></p> <p>Creating talking E-books based on well-known fairy tales</p> <p><b>Online Safety</b> We are good digital citizens.</p>	<p><b>We are TV chefs</b></p> <p>Creating our own cooking show using the iPads.</p> <p><b>Online Safety</b> We are responsible internet and device users.</p>	<p><b>We are treasure hunters. (CS Coding)</b></p> <p>Programming and debugging Bee Bots.</p> <p><b>Online Safety</b> We are responsible gamers.</p>
<b>Year 2</b>	<p><b>We are astronauts</b></p> <p>Using scratch to program on screen work</p> <p><b>Online Safety</b> We are year 2 rule writers</p>	<p><b>We are game testers</b></p> <p>Exploring how computer games work</p> <p><b>Online Safety</b> We are not online bullies</p>	<p><b>We are photographers -</b></p> <p>Take and edit photographs</p> <p><b>Online Safety</b> We are safe searchers</p>	<p><b>We are researchers</b></p> <p>Research on safe sites; Create a PowerPoint.</p> <p><b>Online Safety</b> We are code masters</p>	<p><b>We are animators</b></p> <p>plan, film and add audio to a short 'stop-motion' animation</p> <p><b>Online Safety</b> We are online behaviour masters</p>	<p><b>We are zoologists</b></p> <p>Using 'Excel' to create a bar chart - data about bugs</p> <p><b>Online Safety</b> We are game raterers</p>

<p><b>Year 3</b></p>	<p><b>We are programmers</b> Using Scratch to create animations</p> <p><b>Online Safety</b> We are year 3 rule writers</p>	<p><b>We are bug fixers</b> Using Scratch and unplugged activities to debug code</p> <p><b>Online Safety</b> We are digital friends</p>	<p><b>We are presenters</b> Using iMovie to create a presentation. Source images online to illustrate presentation and film it against a green screen background.</p> <p><b>Online Safety</b> We are internet detectives</p>	<p><b>We are who we are</b> Using PowerPoint to create a presentation.</p> <p><b>Online Safety</b> We are aware of our digital footprint</p>	<p><b>We are co-authors</b> Using Google docs to create a collaborative document.</p> <p><b>Online Safety</b> We are netiquette experts</p>	<p><b>We are opinion pollsters</b> Using G-suite to create an online opinion poll, seek responses and then analyse the results.</p> <p><b>Online Safety</b> We are avatar creators</p>
<p><b>Year 4</b></p>	<p><b>We are software developers</b> Using Scratch to design a maths game</p> <p><b>Online Safety</b> We are rule writers</p>	<p><b>We are meteorologists</b> Using a data package such as Excel to input data, create charts and analyse data.</p> <p><b>Online Safety</b> We are standing up to peer pressure</p>	<p><b>We are makers</b> Using Crumble, to program and to debug.</p> <p><b>Online Safety-</b> We are aware that our online content lasts forever</p>	<p><b>We are bloggers</b> Using Wordpress to create a sequence of blogs and to develop a critical view of media.</p> <p><b>Online Safety</b> We are online risk managers</p>	<p><b>We are musicians</b> Using Garage Band create repeating rhythms.</p> <p><b>Online Safety</b> We are respectful of digital rights and responsibilities</p>	<p><b>We are artists</b> Using Inkscape or Scratch to create pieces of tessellating art.</p> <p><b>Online Safety</b> We are careful when talking to virtual friends</p>
<p><b>Year 5</b></p>	<p><b>We are cryptographers</b> Learning how to decipher codes and create strong passwords</p> <p><b>Online Safety</b> We are Year 5 rule writers</p>	<p><b>We are game developers</b> Developing an interactive game using scratch</p> <p><b>Online Safety</b> We are responsible for our online actions</p>	<p><b>We are architects</b> Using 'Sketch Up' to extend drawing skills to create 3D models.</p> <p><b>Online Safety</b> We are content evaluators</p>	<p><b>We are adventure gamers</b> Making an interactive, non-linear, text-based adventure game</p> <p><b>Online Safety</b> We are protecting our online reputation</p>	<p><b>We are web developers</b> Working collaboratively to create a website on the solar system</p> <p><b>Online Safety</b> We are respectful of copyright</p>	<p><b>We are touch typists</b> Experimenting with virtual and augmented reality using software.</p> <p><b>Online Safety</b> We are game changers</p>

<p><b>Year 6</b></p>	<p><b>Computational Thinkers</b> Developing an understanding of some important algorithms</p> <p><b>Online Safety</b> We are online safety ambassadors</p>	<p><b>We are publishers</b> Sourcing, writing, editing and combining images and text from a range of sources</p> <p><b>Online Safety</b> We will not share inappropriate images</p>	<p><b>We are connected</b> Using a blogging platform to explore issues related to social media.</p> <p><b>Online Safety</b> We are safe social networkers</p>	<p><b>We are AI developers</b> Learning about different aspects of artificial intelligence including machine learning.</p> <p><b>Online Safety</b> We are respectful of others</p>	<p><b>We are advertisers</b> Creating a short television advert</p> <p><b>Online Safety</b> We are online safety problem solvers</p>	<p><b>Transition Unit</b> Preparations for being responsible users of technology at secondary school.</p> <p><b>Online Safety</b> We are safe gaming experts</p>
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