



## Y3 computing overview 2023-24: *Connecting Computers, Stop Frame Animation, Sequencing Sounds.*

Computing Activity	Building Skills and Disciplinary Knowledge	Approaches to Developing Skills and Disciplinary Knowledge	Building Substantive Knowledge and Understanding	Approaches to Developing Substantive Knowledge and Understanding	Curricula Materials	Assessed through (T1 T2 T3)		
						Exploring	Responding	Designing
Algorithms and Programs	<ul style="list-style-type: none"> <li>Use sequence in programs</li> <li>Use selection in programs</li> <li>Work with various forms of input and output</li> <li>Use repetition in programs</li> <li>Work with variables</li> <li>Use logical reasoning to explain how some simple algorithms work</li> <li>Use sequence, selection, and repetition in programs</li> </ul>	<ul style="list-style-type: none"> <li>Class/group tuition with technical guidance from the Switched On computing program</li> </ul>	<ul style="list-style-type: none"> <li>Understand inputs, outputs and processes</li> <li>Understand devices that make up network infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Class teacher showing children existing examples</li> <li>Group work on creating and developing their own work</li> </ul>	<b>TERM1:</b> <a href="#">Connecting Computers</a> <ul style="list-style-type: none"> <li>Use paint programs to compare digital and non-digital processes</li> <li>Understand how networks are connected and build a 'digital' network through role-play</li> <li>Create a map of your school network</li> </ul>	Most children will be able to... (working at)	Some children will not yet be able to...(working towards)	Some children are confidently able to... (exceeding)
Databases	<ul style="list-style-type: none"> <li>Create and edit content on digital applications</li> <li>Use internet services to create content that presents information</li> <li>Use internet services to create and evaluate content that presents information</li> <li>Design and create content</li> </ul>	<ul style="list-style-type: none"> <li>Class/group tuition with reference to existing databases</li> </ul>	<ul style="list-style-type: none"> <li>Understanding how to create stop-frame animation, edit and narrate/overdu b videos</li> </ul>					
Using the internet	<ul style="list-style-type: none"> <li>Use search technologies effectively</li> <li>Be discerning in evaluating digital content</li> <li>Be discerning in evaluating digital content</li> </ul>	<ul style="list-style-type: none"> <li>Class/group internet browsing, followed by reflective discussion</li> </ul>	<ul style="list-style-type: none"> <li>Understand how create a program, featuring sequences</li> </ul>	<ul style="list-style-type: none"> <li>Class teacher talk through programs and algorithms with opportunities to try different programs</li> <li>Observing algorithms and debugging them</li> </ul>	<b>TERM2:</b> <a href="#">Stop Frame Animation</a> <ul style="list-style-type: none"> <li>Create story boards for a frame-by-frame animation</li> <li>Use iMotion to create a simple stop-motion animation</li> <li>Gain skills in making small changes for stop-motion with crisp imaging</li> <li>Edit video, including adding sounds/narration, media and text and editing clips by setting in/out points</li> <li>Understand and evaluate the qualities of effective video, such as the importance of narrative, consistency and special effects.</li> </ul>			
Problem solving	<ul style="list-style-type: none"> <li>Solve problems by decomposing them into smaller parts</li> <li>Design programs that accomplish specific goals</li> <li>Write programs that accomplish specific goals</li> <li>Debug programs that accomplish specific goals</li> <li>Use logical reasoning to detect and correct errors in algorithms and programs</li> </ul>	<ul style="list-style-type: none"> <li>Class, then group opportunities for problem solving</li> </ul>						
Communicat ing	<ul style="list-style-type: none"> <li>Understand the opportunities networks offer for communication and collaboration</li> <li>Use a variety of software (including internet services) to present information</li> </ul>	<ul style="list-style-type: none"> <li>Observational opportunities to work as part of a group</li> </ul>		<ul style="list-style-type: none"> <li>Teacher led creating and editing</li> <li>Observing pre-existing master pieces and masters in the field</li> </ul>	<b>TERM3:</b> <a href="#">Sequencing Sounds</a> <ul style="list-style-type: none"> <li>Use Scratch to create a program</li> <li>Plan, design, code and run a project</li> <li>Code a sprite to create a set of chords</li> <li>Plan and code an algorithm in scratch to create your own musical instrument, programming a performance.</li> </ul>			
SMSC	<ul style="list-style-type: none"> <li>Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour</li> <li>To know how to seek help – where to go, and how to set privacy settings</li> <li>Recognise acceptable/ unacceptable behaviour</li> <li>Knowing how to find out about website or game policies</li> </ul>	<ul style="list-style-type: none"> <li>Teacher guidance on safe internet use and introduction to supportive websites (NSPCC)</li> </ul>						