



## Y3 computing overview 2019-20: *We are toy designers, We are meteorologists, We are photographers*

Computing Activity	Desired Skills	Approaches to Developing Skills	Desired Knowledge and Understanding	Approaches Developing Knowledge and Understanding	Curricula Materials	Assessed through (T1 T2 T3)		
						Exploring Creating	Responding Evaluating	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 and outputs and how to programme them for a toy</li> <li>Understand how to take and read data to record weather through different measurements</li> <li>Understanding how to film, edit and narrate videos</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="#">Unit 3a We are Toy Designers</a> <ul style="list-style-type: none"> <li>design and make an on-screen prototype of a computer-controlled toy</li> <li>understand different forms of input and output (such as sensors, switches, motors, lights and speakers)</li> <li>design, write and debug the control and monitoring program for their toy.</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 Wiki</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>						
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>						
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>						
Communicating	<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>						
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>						
				<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="#">Unit 3c We are presenters</a> <ul style="list-style-type: none"> <li>gain skills in shooting live video, such as framing shots, holding the camera steady, and reviewing</li> <li>edit video, including adding narration and editing clips by setting in/out points</li> <li>understand the qualities of effective video, such as the importance of narrative, consistency, perspective and scene length</li> </ul>			