



## Y6 computing overview 2021-22: *Communication, Web Page Creation, Variables in Games*

Computing Activity	Building Skills and Disciplinary Knowledge	Approaches to Building Skills and Disciplinary Knowledge	Building Substantive Knowledge and Understanding	Approaches to Building Substantive 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 how the World Wide Web is used as a communication tool and how search engines work</li><li>• Understand what makes a good website</li><li>• Understand how to design and evaluate their own website</li><li>• Understand the importance of copyright and fair use of media</li><li>• Understand the use of microcontroller and how to connect and program component</li><li>• Write algorithms and programs that utilise selection</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="#">Communication</a> <ul style="list-style-type: none"><li>• Create a paper-based webpage then discover how their ages would be ranked based on keywords relating to their content</li><li>• Explore and evaluate the different methods in which people communicate online and make decisions about the most appropriate ways to communicate online, depending on the message.</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>						
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>		<b>TERM2:</b> <a href="#">Web Page Creation</a> <ul style="list-style-type: none"><li>• Look at the different layout features available in Google Sites and plan their own web page on paper</li><li>• Become familiar with the terms ‘fair use’ and ‘copyright’, gaining an understanding of why they should only use copyright-free images and sourcing these.</li><li>• Create their own website on Google Sites, paying attention to the navigation paths, with multiple webpages and hyperlinks</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>		<b>TERM3:</b> <a href="#">Selection in Physical Computing</a> <ul style="list-style-type: none"><li>• Use Crumble Controller to build simple circuits</li><li>• Write a program that includes count-controlled loops</li><li>• Explore how to write programs that use an input as a condition, and use this knowledge to write a program that uses a condition to stop a repeating light pattern</li><li>• Use selection to direct the flow of a program</li><li>• Design a physical project that includes selection then use the design to create a controllable system (write algorithm, use selection and test and debug program)</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>						