

Y6 COMPUTING PROGRESSION MAP

		Progression Statement	
Computer Science: Problem Solving	Understand the importance of planning, testing and correcting algorithms.	Approaches a wider range of problems thinking computationally, helping them to design other algorithms for other specific outcomes.	Decomposes various problems into smaller parts to design an algorithm for a specific outcome recognising similarities to solutions used before.
Computer Science: Programming	<p>Shows awareness of evaluating the effectiveness and efficiency algorithms, tests programming and debugs.</p> <p>Recognises what variables and operators are.</p> <p>Understands and uses nested loops.</p> <p>Understand the need for precision when creating algorithms.</p>	<p>Evaluates the effectiveness and efficiency of algorithm, tests programming and debugs.</p> <p>Uses variables and operators to achieve a required output.</p> <p>Gives reasoning for each step within algorithms.</p> <p>Develops more complex flow diagrams.</p>	<p>Evaluates the effectiveness and efficiency of algorithm, continually tests programming and debugs with efficiency and fluency.</p> <p>Applies a deeper understanding when using variables and operators to achieve a required output.</p> <p>Uses different inputs (including sensors) to control a device or onscreen action, predicting what will happen.</p>

<p>Computer Science: Logical thinking</p>	<p>Uses logical reasoning to detect and correct errors in algorithms and programs.</p>	<p>Uses logical thinking, imagination and creativity to improve and extend a program.</p> <p>Use logical reasoning to detect and correct errors in algorithms and programs.</p>	<p>Uses logical thinking, imagination and creativity to improve and extend a program.</p> <p>Use logical reasoning to detect and correct errors in algorithms and programs.</p>
<p>Information Technology: Creating content</p>	<p>Shows awareness of tools to collect data for an investigation.</p> <p>Knows that data collected should be accurate. Presents data collected appropriately.</p> <p>Identifies the potential of familiar technology to improve their creativity.</p> <p>Combines different media, recognising the contribution of each to achieve a particular outcome.</p>	<p>Selects the most effective tool to collect data for an investigation.</p> <p>Checks the data collected for accuracy and plausibility. Interprets data collected, presents it appropriately.</p> <p>Reasons confidently, identifying the potential of unfamiliar technology to increase their creativity.</p> <p>Combines a range of media, recognising the contribution of each to achieve a particular outcome.</p>	<p>Designs and creates a spreadsheet for a specific purpose, incorporating different features of design and function.</p> <p>Creates documents and presentations for a variety of audiences and purposes, considering the appropriateness of text and formatting choices.</p> <p>Presents their documents and presentations to others and consider improvements.</p>

<p>Information Technology: Searching</p>	<p>Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness.</p> <p>Reasons confidently about the way search results are selected and ranked.</p>	<p>Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness.</p> <p>Recognises the importance of copyright and how to acknowledge the sources of information.</p>	<p>Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness.</p> <p>Acknowledges sources of information appropriately.</p> <p>Understands how computer networks work, including the internet.</p>
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<p>Digital Literacy: E-Safety</p>	<p>Explores opportunities networks offer for communication and collaboration between themselves and others.</p> <p>Shows awareness of the positive/ negative impact of what they post online, knowing it can be seen and used.</p> <p>Is aware of ways that they can protect their own digital devices from harm.</p>	<p>Regularly explains about secure passwords.</p> <p>Is aware of the various consequences of sharing too much information online.</p> <p>Can explain the consequences of spending too much time online or on a game.</p>	<p>Identifies information that is safe to share and what is not safe to share online.</p> <p>Encourages friends to protect themselves and make good choices online, including reporting concerns to an adult.</p> <p>Understands what is meant by cyber-bullying and explore the similarities and differences to bullying.</p>
<p>Digital Literacy: Using IT beyond school</p>	<p>Considers the meanings and possible impact of emojis and text-talk.</p> <p>Identifies the features and implications of a phishing email.</p>	<p>Understands the hidden costs of app usage and in-app purchasing.</p> <p>Recognises privacy settings and the value of implementing them.</p>	<p>Has a growing appreciation of the dangers of spending too long online or playing games.</p>