

Y5 COMPUTING PROGRESSION MAP

		Progression Statement	
Computer Science: Problem Solving	Decomposes more open-ended problems into smaller parts, provides some reasoning for their choices.	<p>Decomposes more open-ended problems into smaller parts, provides reasoning for their choices.</p> <p>Beginning to apply the same principles across other subject areas.</p>	Approaches a range of problems thinking computationally, helping them to design other algorithms for other specific outcomes.
Computer Science: Programming	<p>Understands the importance of how to refine a procedures using repeat commands to improve a program.</p> <p>Represent an algorithm symbolically (e.g. as a flow chart) to plan a procedure.</p>	<p>Uses variables to increase programming possibilities.</p> <p>Uses conditions 'if' and 'then' with an understanding of their function.</p> <p>Uses programs linked to physical systems and sensors e.g. the alarm goes off when a burglar opens the door.</p>	<p>Understands the function of variables to increase programming possibilities.</p> <p>Has a deeper understanding of conditions 'if' and 'then' using them with increased confidence.</p>

<p>Computer Science: Logical thinking</p>	<p>Uses logical reasoning to explain how multiple algorithms work within a program, with confidence.</p>	<p>Uses logical thinking, imagination and creativity to improve and extend a program.</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>Uses logical reasoning to detect and correct errors in algorithms and programs.</p>
<p>Information Technology: Creating content</p>	<p>Uses text, photo, sound and video editing tools to refine work.</p> <p>Selects, uses and combines the appropriate technology tools to create effects that will have an impact on others.</p> <p>Reviews and improves work, supports others to improve theirs.</p>	<p>Uses a spreadsheet and database to collect and record data.</p> <p>Choses an appropriate tool to collect data, then presents it in an appropriate way.</p> <p>Searches databases using different operators to refine my search.</p> <p>Identifies errors in Data.</p>	<p>Designs and creates a database.</p> <p>Uses information in a database to create a graph in order to answer questions.</p> <p>Produces documents and presentations with a common theme, to provide consistency of font and style.</p>

<p>Information Technology: Searching</p>	<p>Uses strategies to increase the accuracy of their keyword searches.</p> <p>Beginning to make inferences about their use of various strategies.</p>	<p>Makes inferences about their use of various strategies with a deeper understanding.</p> <p>Understands that some sites maybe biased e.g. newspapers with political stance.</p>	<p>Use the internet to productively search for information and resources to support work in other subjects.</p>
<p>Digital Literacy: E-Safety</p>	<p>Knows the importance of protecting passwords and other personal information.</p> <p>Explains the need to protect themselves and friends and how to report concerns to an adult.</p>	<p>Knows that anything posted online can be seen, used and may affect others.</p> <p>Knows about the dangers of spending too long online or playing a game.</p>	<p>Can discuss the importance of choosing an age- appropriate website or game.</p> <p>Can explain why I need to protect my computer or device from harm.</p>
<p>Digital Literacy: Using IT beyond school</p>	<p>Communicates appropriately within and via messaging services and apps.</p> <p>Identifies the features and implications of malicious communications.</p>	<p>Shows awareness of the hidden costs of app usage and in-app purchasing.</p> <p>Is aware that apps and games have privacy settings.</p>	<p>Has a growing appreciation of the dangers of spending too long online or playing a games.</p>