



COMPUTING PROGRESSION MAP

Year 6			
	AUTUMN TERM:	SPRING TERM:	SUMMER TERM:
	Creating a Mobile App [1] Text-Based Programming [2]	Computational Thinking [1] Creating Spreadsheets [2]	How Data Is Stored [1] Programming & Debugging [2]
Domain	Progression Statement		
Computer Science	<p>Problem Solving:</p> <ul style="list-style-type: none">○ Understands 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. <p>Programming:</p> <ul style="list-style-type: none">○ Shows awareness of evaluating the effectiveness and efficiency algorithms, tests programming and debugs.○ Understand the need for precision when creating algorithms.○ Evaluates the effectiveness and efficiency of algorithm, tests programming and debugs.○ Uses variables and operators to achieve a required output.○ Gives reasoning for each step within algorithms.○ Develops more complex flow diagrams○ Evaluates the effectiveness and efficiency of algorithm, continually tests programming and debugs with efficiency and fluency.○ Applies a deeper understanding when using variables and operators to achieve a required output.○ Uses different inputs (including sensors) to control a device or onscreen action, predicting what will happen. <p>Logical Thinking:</p> <ul style="list-style-type: none">○ Uses logical reasoning to detect and correct errors in algorithms and programs.○ Uses logical thinking, imagination and creativity to improve and extend a program.○ Can describe various home / school networks, what hardware they use, and services they provide.		
Information Technology	<p>Creating Content:</p> <ul style="list-style-type: none">○ Combines different media, recognising the contribution of each to achieve a particular outcome.○ Selects, uses and combines the appropriate technology tools to create effects that will have an impact on others.○ Reviews and improves work, supports others to improve theirs.○ Selects the most effective tool to collect data for an investigation.○ Checks the data collected for accuracy and plausibility. Interprets data collected, presents it appropriately.○ Designs and creates a spreadsheet for a specific purpose, incorporating different features of design and function.○ Creates documents and presentations for a variety of audiences and purposes, considering the appropriateness of text and formatting choices.		

	<ul style="list-style-type: none"> ○ Presents their documents and presentations to others and consider improvements. <p>Searching:</p> <ul style="list-style-type: none"> ○ Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness. <p>Reasons confidently about the way search results are selected and ranked.</p>
Digital Literacy	<p>E-Safety:</p> <ul style="list-style-type: none"> ○ Uses technology safely, respectfully and responsibly. ○ Shows awareness of the positive/ negative impact of what they post online, knowing it can be seen and used. ○ Is aware of ways that they can protect their own digital devices from harm. ○ Shows awareness of the SMART rules. ○ Has an awareness of their digital footprint, that what they do on the internet stays there. ○ Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness. ○ Acknowledges sources of information appropriately. ○ Understands how computer networks work, including the internet. ○ Regularly explains about secure passwords. ○ Is aware of the various consequences of sharing too much information online. ○ Can explain the consequences of spending too much time online or on a game. <p>Using IT Beyond School:</p> <ul style="list-style-type: none"> ○ Considers the meanings and possible impact of emojis and text-talk. ○ Identifies the features and implications of a phishing email. ○ Understands the hidden costs of app usage and in-app purchasing. ○ Recognises privacy settings and the value of implementing them. <p>Has a growing appreciation of the dangers of spending too long online or playing a games.</p>

Year group long-term overview (with statutory requirements) and subject progression map (above) to be used together to inform medium term planning.