COMPUTING
PROGRESSION MAP

Year 6			
	AUTUMN TERM:	**SPRING TERM:**	**SUMMER TERM:**
	Creating a Mobile App [1] **Programming & Debugging (Text-Based Coding) [2]**	**Computational Thinking [1]** **Game Creation [2]**	**Spreadsheets & Networks [1]** **Programming & Debugging [2]**
Domain	**Progression Statement**		
Computer Science	**Problem Solving:** o Understands the importance of planning, testing and correcting algorithms. **Programming:** o Shows awareness of evaluating the effectiveness and efficiency algorithms, tests programming and debugs. o Understand the need for precision when creating algorithms. **Logical Thinking:** o Uses logical reasoning to detect and correct errors in algorithms and programs.	**Problem Solving:** o Approaches a wider range of problems thinking computationally, helping them to design other algorithms for other specific outcomes. **Programming:** o Evaluates the effectiveness and efficiency of algorithm, tests programming and debugs. o Uses variables and operators to achieve a required output. o Gives reasoning for each step within algorithms. o Develops more complex flow diagrams. **Logical Thinking:** o Uses logical thinking, imagination and creativity to improve and extend a program. o Use logical reasoning to detect and correct errors in algorithms and programs.	**Problem Solving:** o Decomposes various problems into smaller parts to design an algorithm for a specific outcome recognising similarities to solutions used before. **Programming:** o Evaluates the effectiveness and efficiency of algorithm, continually tests programming and debugs with efficiency and fluency. o Applies a deeper understanding when using variables and operators to achieve a required output. o Uses different inputs (including sensors) to control a device or onscreen action, predicting what will happen. **Logical Thinking:** o Can describe various home / school networks, what hardware they use, and services they provide. o Uses logical thinking, imagination and creativity to improve and extend a program. o Use logical reasoning to detect and correct errors in algorithms and programs.

Information Technology	**Creating Content:** o Combines different media, recognising the contribution of each to achieve a particular outcome. o Selects, uses and combines the appropriate technology tools to create effects that will have an impact on others. o Reviews and improves work, supports others to improve theirs. **Searching:** o Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness. o Reasons confidently about the way search results are selected and ranked.	**Creating Content:** o Combines a range of media, recognising the contribution of each to achieve a particular outcome. **Searching:** o Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness. o Recognises the importance of copyright and how to acknowledge the sources of information.	**Creating Content:** o Designs and creates a spreadsheet for a specific purpose, incorporating different features of design and function. o Creates documents and presentations for a variety of audiences and purposes, considering the appropriateness of text and formatting choices. o Presents their documents and presentations to others and consider improvements.
Digital Literacy	**E-Safety:** o Uses technology safely, respectfully and responsibly. o Shows awareness of the positive/ negative impact of what they post online, knowing it can be seen and used. o Is aware of ways that they can protect their own digital devices from harm. o Shows awareness of the SMART rules. o Has an awareness of their digital footprint, that what they do on the internet stays there. **Using IT Beyond School:** o Considers the meanings and possible impact of emojis and text-talk. o Identifies the features and implications of a phishing email.	**E-Safety:** o Regularly explains about secure passwords. o Is aware of the various consequences of sharing too much information online. o Can explain the consequences of spending too much time online or on a game. o Shows awareness of the SMART rules. o Has an awareness of their digital footprint, that what they do on the internet stays there. **Using IT Beyond School:** o Understands the hidden costs of app usage and in-app purchasing. o Recognises privacy settings and the value of implementing them.	**Searching:** o Uses a range of strategies to increase the accuracy of keyword searches. Makes confident inferences about their effectiveness. o Acknowledges sources of information appropriately. o Understands how computer networks work, including the internet. **E-Safety:** o Identifies information that is safe to share and what is not safe to share online. o Encourages friends to protect themselves and make good choices online, including reporting concerns to an adult. o Understands what is meant by cyber-bullying and explore the similarities and differences to bullying. **Using IT Beyond School:** o Has a growing appreciation of the dangers of spending too long online or playing a games.

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