



# ST. CATHERINE'S COLLEGE

A CHURCH OF ENGLAND ACADEMY

Learning overview for Computer Science			Year group: 7	
Term	Key topics / scheme of work	What most students will learn (Prior assessment may alter starting point & content)	Key skills used	How will this learning be assessed?
Term 1 or 2 (unit 1)	E-Safety Scratch programming quiz	How to stay safe online. Focussing on trolling, cyberbullying, being a responsible digital citizen, how to report abuse, our digital footprints, using location and privacy settings. Students then code an e-safety quiz in Scratch to embed these skills.	Methods used to report concerns/abuse, collecting and organising data, using feedback from others, communicating safely online, navigating the web.	E-safety web quizzes, mid-unit progress checks and E-safety poster. Computational thinking challenges and Python quiz completion.
Term 3 and 4 (unit 2)	Physical coding using BBC microbits	Students develop their Python coding skills using minicomputers. They follow a series of challenges exploring the different features of the microbit	Writing algorithms and using flowcharts. Using if, elif and else, creating loops and variables. Using iteration in a For and While loop. Coding images. Refining programs to do creative things.	Web quizzes, mid unit progress check test and end of unit test. Completion of coding challenges. Computational thinking challenges.
Term 5 & 6 (unit 3)	Coding in Python	Students will develop their Python skills building on previous learning.	Developing their use of built in Python functions, the use of variables, lists, the use of random function and how to identify syntax errors.	Completion of Python challenges, computational thinking challenges, mid unit progress check test and online quizzes.

