ST CATHERINE'S COLLEGE
A CHURCH OF ENGLAND ACADEMY

Learning overview for Computer Science			**Year group: 8**	
Term	**Key topics / scheme of work**	**What most pupils will learn** (Prior assessment may alter starting point & content)	**Key skills used**	**How will this learning be assessed?**
Term 1 (Unit 1)	Coding an E-safety Python quiz	Coding skills in Python, concluding with students programming their own E-safety quiz in Python.	Outputting to screen, syntax correction, selection skills.	Computational challenges, progress check test and end of unit test
Term 2 (Unit 2)	Computer Control	Computer control, how computers are used to automate aspects of our lives and how this happens. How to create a simulated event e.g., programming an automated greenhouse.	The three accepted ways to code, input, processes and output devices, flowcharts, the role of different sensors. They will use subroutines to make programs more efficient.	Computational challenges, progress check test and end of unit test
Term 3 (Unit 3)	Coding with Microbits	Develop python skills using BBC Microbits.	Syntax fixing, creating algorithms, using selection and iteration, investigating and modifying code.	Task completion, Computational challenges, progress check test and end of unit test
Term 4 (Unit 3 cont'd & Unit 4)	Coding with Microbits cont'd & Python	Students will continue to develop python skills using BBC Microbits. Students will develop their knowledge of Python.	Sequence, selection, iteration and the use of subroutines.	Python and Computational challenges, progress check test and end of unit test.

Term 5 (Unit 4 cont'd)	Python cont'd	Students will continue to develop their knowledge of Python.	Sequence, selection, iteration and the use of subroutines.	Python and Computational challenges, progress check test and end of unit test.
Term 6 (Unit 5)	Interactive interface	How to create a two-page website with embedded media and widgets.	Using a range of html tags and CSS. Embedding various interactive features into a webpage. Ethical issues regarding the use of images and accessibility.	Computational challenges, progress check test and end of unit test.