Dame Elizabeth Cadbury School
Curriculum Plan

Computing

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Digital literacy When should I use certain software to support my safe communication with others?		Foundations of Computing What is a computer made up of and how does Internet Censorship effect me?	Foundations of Computing What are the threats to me and networks?	Programming & Algorithms How can I follow and use algorithms and abstraction to support the creation of a program?	
8	Binary & Logic What is Binary and Boolean Logic (including searching & sorting)? How are binary numbers represented in computers?	Computer software & hardware How does computer software and hardware communicate and support the use of technology?	Programming in Python How do variables and data types support with programming?	Computer Systems Why is reliability and testing important when we use technology safely?	Multimedia How can computers be used to manipulate images, audio and video?	
9	Multimedia How can computers be used to manipulate media for positive and negative agendas? How can the use of Lossy and Lossless Compression be beneficial?		Computer Security What can I do to ensure my personal data is protected?	Programming in Python Why is validation important to our personal data and computer security?	Digital literacy When should I use certain software to support me?	Digital literacy project Selecting the correct software and the use of trustworthy searching to meet the needs of an end user.

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10	Programming techniques, storage & memory Compare advantages/disadvantages for each storage device. Be able to apply their knowledge in context within scenarios	Computer networks & network security The threats posed to networks and how networks communicate, including understanding of network protocols.	Programming fundamentals The use of programming constructs, data types and additional techniques including SQL.	System architecture & software What are the effects of changing any of the common characteristics on system performance, either individually or in combination.	Laws & ethics in computing The wider impact on society with Computer Science and the legislation that supports this.	Algorithms Computational thinking and the effect of algorithms, including searching and sorting algorithms.
11	Units, numbers & Boolean logic Conversion of units and numbers and understanding Boolean logic.	Producing robust programs The use of defensive design and testing when creating robust programs.	Images, sound, IDE & robustness How sound and images are represented, what effects them and how compression can effect. Features of IDE's and computer robustness.	Pseudocode, programming languages and system software Refining algorithms including pseudocode. The purpose and functionality of OS and Utility programs.	Exam preparation & Revision Sessions	Exam preparation & Revision Sessions

Curriculum Intent: In Computing we aim to enable students to become skilful, safe and productive members of a modern, online, digital society as it becomes increasingly reliant on computer science, it is vital that students are fluent in the vocabulary, knowledge and skills of the devices used in everyday life and in the workplace.