Curriculum Overview Year 8 Computing

	Focus	Autumn	Spring	Summer
Year 8	**Topic**	Online Safety	Data Representation	Programming with Python
	Key concepts/ideas	Responding appropriately to incidents online. Using content legally.	Understand how data is represented in computer systems.	An introduction to Python, a powerful but easy-to-use high-level programming language. Students will understand the process of developing programs, the importance of writing correct syntax, being able to formulate algorithms for simple programs and debugging their programs.
	Key skills	Understand the possible actions and their consequences when responding to the actions of others online. Understand how to search effectively for resources and use them in accordance with their licensing terms.	Write simple algorithms to perform a range of tasks. Have an awareness of the binary number system and be able to convert numbers between binary and denary.	Create programs to successfully perform a range of tasks.
	Key terms/vocab	Respond, Cyberbullying, Grooming, relationship	Algorithm, instructions, syntax, binary, denary	Logic, Computational thinking, Sequencing, Problem Solving, Python functions, Syntax
	Independent learning / wider reading	Check the setting on your social media accounts. Are they set to private? Review your online 'friends'. Are they all people you know in real life? Are they all positive? Consider unfriending if not.	Practice converting number from binary to denary and vice versa. Research the hexadecimal number system and try the same.	Write pseudocode for a program which allows someone to enter a temperate and the program outputs if it is too hot or too cold.
	Assessment	Online safety poster	Online Examination	Practical programming task.
	Careers links	Managing your digital reputation	Computing in the workplace	