Curriculum Overview Year 7 Computing

	Focus	Autumn	Spring	Summer
Year 7	**Topic**	Working Online	Introduction to Programming	Control Systems
	Key concepts/ideas	Students will learn basic computer skills to allow them to work effectively from home or school. They will know how to behave appropriately online, including the need to keep a clean digital footprint.	Using the online software Scratch, students will be introduced to the key programming constructs such as Selection, Iteration and Sequencing.	Students will learn to construct algorithms to control real-world systems such as traffic lights or home automation, using software called 'Flowol'. They will learn to create flowcharts to control these systems, ensuring they utilise subroutines to improve the efficiency of their creations.
	Key skills	Logging on to the school systems, remote working, behaving appropriately online.	Logic, computational thinking, sequencing, problem solving.	Logic, computational thinking, sequencing, problem solving, creating algorithms.
	Key terms/vocab	Password, OneDrive, Go4Schools, cyberbullying, social media, digital footprint.	Algorithm, sequence, programming.	Algorithm, sequence, subroutine
	Independent learning / wider reading	N/A	Extension of in-class activities using Scratch online.	Investigate how products at home, operate using control systems. Try writing algorithms for everyday processes you might do in the house. For example, going to bed, making a cup of tea, boiling and egg. Try drawing flowcharts to represent different control systems in your house.
	Assessment	Online examination.	Regular formative assessment in class. Summative assessment task towards the end of the unit.	Regular formative assessment in class. Summative assessment task towards the end of the unit.
	Careers links	Managing your digital reputation.	Programming pathways.	