

# KS3 Computing Curriculum Mapping

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	7.1 Creative Programming in Python	7.2 Computer Systems	7.3 Vector Graphics	7.4 Web Technologies 1 (HTML)	7.5 Modelling with Spreadsheets	7.6 Programming the Crumble
8	8.1 Programming in Python 1	8.2 Programming in Python 2	8.3 Artificial Intelligence 1	8.4 Cyber Security	8.5 Web Technologies 2 (CSS)	8.6 Programming the MicroBit
9	9.1 Programming in Python 3	9.2 Communications and Networks	9.3 Artificial Intelligence 2	9.4 Data Science	9.5 Technology and Society	9.6 Web Technologies 3 (JavaScript)

Statement Number	National Curriculum Statement	Year 7						Year 8						Year 9					
		7.1	7.2	7.3	7.4	7.5	7.6	8.1	8.2	8.3	8.4	8.5	8.6	9.1	9.2	9.3	9.4	9.5	9.6
1	design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems																		
2	understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem																		
3	use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions																		
4	understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]																		
5	understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems																		
6	understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits																		
7	undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users																		
8	create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability																		
9	understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns																		

