Curriculum Map Year 7 COMPUTING

Topic Name	Term	Skills developed with link to NC Subject content	Reflection on previous link in the	Progress to future link in the
Impact of technology	Autumn HT1	 Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability 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 	Year 4: the Internet Year 5: Sharing information Year 6:web page creation Year 6: Variables in games	Year 7: Scratch part 1 Year 7: Using media Year 8: Scratch part 2 Year 8: App development Year 8: Media: Vector graphics Year 9: Cybersecurity Year 9: Graphics Year 9: Sound in Audacity Year 9: Media: Animations
Networks	Autumn HT2	 Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems 	Year 6: Internet communication	Year 8: Understanding computers GCSE: Networks and communication
Introduction to programming with Kodu	Spring HT1	 Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; design and develop modular programs that use procedures or functions 	Year 6: Variables in games Year 6: Sensing	Year 7: Scratch part 1 Year 8: Developing on the web: HTML Year 8: Python programming Year 9: Python programming
Coding on Scratch part 1	Spring HT2	 Understand several key algorithms that reflect computational thinking; use logical reasoning to compare the utility of alternative algorithms for the same problem Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures; design and develop modular programs that use procedures or functions Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability 	Year 6: Variables in games Year 6: Sensing Year 7: Introduction to programming with Kodu Year 7: Impact of technology	Year 7: Modelling data - Spreadsheets Year 8: Scratch part 2 Year 8: App development Year 8: Python programming Year 8: Developing for the web: HTML Year 8: Understanding computers Year 9: Python programming
Using media	Summer HT1	 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 Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability 	Year 6: Webpage creation Year 7: Impact of technology	Year 8: Media - Vector graphics Year 9: Media animation Year 9: Graphics Year 9: Sound editing in Audacity

Modelling data - Spreadsheets	Summer HT2	 Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and Year 6: Introduction to spreadsheets Year 7: Scratch part 1 	}
		physical systems	
		 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	

Year 7: Scratch part 2