

Curriculum Map Year 7 COMPUTING

Topic Name	Term	Skills developed with link to NC Subject content	Reflection on previous link in the curriculum	Progress to future link in the curriculum
Impact of technology	<i>Autumn HT1</i>	<ul style="list-style-type: none"> • 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 	<i>Year 4: the Internet Year 5: Sharing information Year 6: web page creation Year 6: Variables in games</i>	<i>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</i>
Networks	<i>Autumn HT2</i>	<ul style="list-style-type: none"> • Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems 	<i>Year 6: Internet communication</i>	<i>Year 8: Understanding computers GCSE: Networks and communication</i>
Introduction to programming with Kodu	<i>Spring HT1</i>	<ul style="list-style-type: none"> • 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 	<i>Year 6: Variables in games Year 6: Sensing</i>	<i>Year 7: Scratch part 1 Year 8: Scratch part 2 Year 8: Developing on the web: HTML Year 8: Python programming Year 9: Python programming</i>
Coding in Scratch part 1	<i>Spring HT2 Summer HT1</i>	<ul style="list-style-type: none"> • 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 	<i>Year 6: Variables in games Year 6: Sensing Year 7: Introduction to programming with Kodu Year 7: Impact of technology</i>	<i>Year 7: Modelling data - Spreadsheets Year 8: Scratch part 2 Year 8: App development Year 8: Python programming Year 8: Understanding computers Year 9: Python programming</i>
Using media	<i>Summer HT2</i>	<ul style="list-style-type: none"> • 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 	<i>Year 6: Webpage creation Year 7: Impact of technology</i>	<i>Year 8: Media - Vector graphics Year 8 App development Year 8: Developing for the web - HTML Year 9: Media animation Year 9: Graphics Year 9: Sound editing in Audacity</i>