

Programme of Study			
Year 9	Unit Titles	Learning Objectives	Assessment
Computing 2019-20 Lesson 1	Introduction -Recap of Python	Pupils will learn: L1 – Python, background, variables, iteration and selection.	Map Skills Assessment: (L6)design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems
Lesson 2	Computing Legislation		
	Assessment after Legislation carried out here.		
Lesson 3	Computer Systems	L2 – Basics of Acts surrounding computing.	(L6)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
Lesson 4	Network Topology		(L1)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 [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions
Lesson 5	Computational Thinking	L3 – what makes a good presentation, theme: Laws around Sexting.	(L8)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]
Lesson 6	System Security	L4 – How CPU and memory works.	
	Binary, Decimal and Hexadecimal		
Lesson 7	Databases	L5 – Explanation of network protocols and connection.	
Lesson 8	Assessment		
Lesson 9		L6 – Decomposition, Pattern Recognition, Algorithm design and Abstraction.	(L5)understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems
Lesson 10			

		<p>L7 – What is a good password?</p> <p>L8 – Number systems and why computers use binary?</p> <p>L9 – Introduction to databases with MS Access.</p> <p>L10 – Online assessment utilising MS Forms.</p>	<p>(L4)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</p> <p>(L3)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</p> <p>(L3 & 9)create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</p> <p>(L2, 7 & 10) 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.</p>
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