

Curriculum Overview – Year 9 Computing



Year	Term	Unit/s of Work	Assessment
9	1	Hardware and Software Understanding Computer systems Networks	<p><i>Pupils learn about: inputs/outputs; parts of the computer; health and safety of using computers. Potentially setting up Raspberry Pi in groups.</i></p> <p><i>Pupils learn the concepts behind the fetch-execute cycle and relate it to the von Neumann architecture. They will then learn about how data is store into memory and the basic function and operation of location addressable memory. They will learn about the different range of operating systems and application software.</i></p> <p><i>Pupils learn about the different wired and wireless network, hardware used, software used and network topologies.</i></p> <p><i>END OF UNIT TEST Multiple choice and essay question</i></p>
	2	Programming (Python) Database Unit	<p><i>Pupils learn how to use pseudo code to create algorithms that then are converted into programs in Python. Pupils will go through a series of challenges that teach them the concepts of programming and will build upon on the prior knowledge of the previous lessons. The final task is for pupils to create an entirely independent program using the knowledge obtained from the previous lessons.</i></p> <p><i>Components of a Database, designing and running queries picking a primary key, flat file and relational database.</i></p> <p><i>END OF UNIT TEST Multiple choice and essay question based on a case study</i></p>
	3	Programming (Python) Research Controlled Assessment	<p><i>Pupils learn the difference between a compiler and an interpreter. Using Small Basic they will create several programs using the text window and graphics window. Each program will be aimed to solve a computational problem, for example: using tables in order to create an electronic phonebook.</i></p> <p><i>Controlled assessment task , Practical Investigation.</i></p>