Curriculum Overview – Year 8 Computing

Year	Term	Unit/s of Work	Assessment
8	1	E-safety Computer systems Programming (LOGO/Python)	 Parts of the computer; inputs/outputs. Table. Health and safety of using computers; wireless and wired networks. Paragraph questions. History of coding, making a coding wheel/cipher disc. How to write a program in order to control an on screen turtle. TERMLY TEACHER ASSESSMENT Pupils will create algorithms to solve several problems which in turn they will program on screen.
	2	Data, Information and Knowledge (More advanced) Programming (Python/Scratch – more advanced) Internet (Theme Park Statistics) (Bias/safer searching/ smarter searching)	Pupils will build on the prior knowledge from the “Data, Information and Knowledge (Basic)” unit of work. They will see how binary works and how computers use binary including ASCII code. They will see how different file types lead to different size files and the implications for file storage, and file transfer (bandwidth issues). Multiple choice test. 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. TEACHER ASSESSMENT The final task is for pupils to create an entirely independent program using the knowledge obtained from the previous lessons.
	3	Summer Project – Theme Park Interactive media (Flash, Video, Sound, Graphics) Flowol, Publisher	 A creative project, create/edit an animation, video, sound and graphic. Create interactive rich media for a virtual tour of a theme park. Create algorithms for operating a safety feature of the theme park. TERMLY TEACHER ASSESSMENT Design, create and evaluate promotional material for the theme park