



SUBJECT: Curriculum Overview

Year 8

Half Term	Topic studied	What will I learn?	How will I be assessed?
Year 8 Autumn 1	Binary (Advanced)	<ul style="list-style-type: none"> • Complex Logic gates • Denary to Binary • Hex to Binary • ASCII • Complex Truth tables 	Through classwork and homework by completing a series on the Google Classroom. End of unit assessment follows.
Year 8 Autumn 2	Computational Thinking	<ul style="list-style-type: none"> • Decomposition (breaking down problems) • Recognising patterns in code, images and maths • Abstraction (how to focus on details needed) • Algorithms (flowcharts) • Pseudocode 	Through classwork and homework by completing a series on the Google Classroom. End of unit assessment follows.
Year 8 Spring 1	How Computers work	<ul style="list-style-type: none"> • Identify key points in the development of computers • Hardware (Input, Output and Process) • ROM and RAM • Dismantling old computer • Key computer components 	Through classwork and homework by completing a series on the Google Classroom. End of unit assessment follows.
Year 8 Spring 2	Python and Algorithms	<ul style="list-style-type: none"> • Data types (String etc) • Functions and Procedures • Loops and IF statements • Creating Lists • Flow diagrams 	Through classwork and homework by completing a series on the Google Classroom. End of unit assessment follows.
Year 8 Summer 1	Fireworks	<ul style="list-style-type: none"> • Creating vectors • Creating movement in objects • Short animation • Copying and cloning • Exporting finished presentation 	Assessed through classwork and homework. Students will work towards a final animation, which will be assessed for a final mark. This will demonstrate all skills learned during this unit.
Year 8 Summer 2	Advanced Scratch	<ul style="list-style-type: none"> • Produce complex control statements • Designing sprites and costumes • Creating multiple levels • Variable passing 	Through classwork and homework by completing a series on the Google Classroom. End of unit assessment follows.

