Year 9 Computing Curriculum Overview

Intention: 1. Computational thinking and problem-solving skills 2. Digital literacy 3. Foundation to GCSE topics

Autumn term		Spring Term		Summer term
Common theme throughout the year: Office applications, especially Spreadsheets for collecting, analysing and presenting data. Word processing to present information with fluency and accuracy.				
Python Programming	Back to the Future	Computer Networks	HTML, CSS & JavaScript	Scrolling Game Maker
Review of Year 8: - Outputs - Inputs - Variable Storage - IF Statements Advancing Knowledge: - FOR Loops - WHILE Loops Problem Solving Tasks (Abstraction and Decomposition) - Drawing with vectors and coordinates	Visiting famous CS pioneers and exploring their work: - George Boole – Boolean Logic - Tim Berners-Lee – HTML and WWW - Charles Babbage – The Difference Engine and Problem Solving - Alan Turing – Code Breaking - Ada Lovelace the first computer programmer	- Advantages / Disadvantages of Networks - Local Area Networks (definitions and hardware required) - Wide Area Networks (definitions and hardware required) - Data Packets and the Internet - DNS and the Internet - hardware and software to support HTML	- Planning and layouts - Handling inputs and outputs - Making decisions using if statements - Formatting techniques - Generating a quiz interface - Testing - Evaluations	- Designing Interfaces - Gameplay (progression) and Algorithms - Code Development - Alpha Testing - Debugging - End-User Beta Testing - Evaluations

Assessment

Baseline assessment carried out in the first two weeks assessing: Computational thinking, Problem solving and Abstraction
Formative: written assessments made up of exam style questions covering all aspects of the unit. This will be carried out at the end of the unit. [MCQ's and written tests]
Summative: Extended projects which assess the full development process of designing and programming a unique, end-user focused solution, making use of the various components of the computer: Design, Development, Testing and Evaluation.