Curriculum Map - Year 8 - Computer Science

Please note that this is a live document and may be updated during the year

Autumn Term		Spring Term		Summer Term	
Unit Title:	**Unit Title**:	**Unit Title:**	**Unit Title:**	**Unit Title:**	**Unit Title:**
Hardware and Software	Image Manipulation	Python - Python Turtle	Binary - Hex	Spreadsheets	Javascript Next Steps
Key topics covered:	**Key topics covered:**	**Key topics covered:**	**Key topics covered:**	**Key topics covered:**	**Key topics covered:**
2 Lessons E-safety Central Processing Unit Hardware and Characteristics Memory Secondary Storage	2 - Lessons Esafety Image trustworthiness Basic Image Creation Image manipulation using fill Designing a poster	Print and Variables If statements and elifs For and While Loops Turtle Draw lines Turtle Basic Shapes + loops	Binary Conversions Binary Addition Hex Introductions Hex to Den Den to Hex Hex to Binary	Introduction to Spreadsheets Basic Formatting and Data Entry Working with Simple Formulas Introduction to Functions Creating Charts and Graphs Project and Review	Recap Drawing and colouring Resizing with variables Using Text and String Functions Arrays Objects

During the year pupils will be taught to:
Navigate digital environments safely and understand hardware fundamentals.
Manipulate images and assess their trustworthiness.
Learn Python programming through practical applications using the Turtle library.
Understand binary and hexadecimal systems, including basic conversions.
Master basic spreadsheet functionalities, including data entry and chart creation.
Begin JavaScript programming, focusing on creating interactive web content.

Why do students study this:
To acquire foundational digital literacy and computer science skills, fostering critical thinking, and preparing them for the modern digital landscape through hands-on experience with programming, image manipulation, and understanding hardware and software systems.

Assessment Dates - Can be found on the School Website
Assessment topics - A topic list to support revision can be found on the School Website