

Year 8 ICT/Computing Program of Study

In year 8 students build upon prior knowledge on Spreadsheets. E-Safety is an important topic, and with the increase in the amount of internet usage we feel this is important to focus a unit on this topic. With the ever changing nature of the curriculum students in year 8 are introduced to text based coding in Small Basic and Python. In year 9 students will move onto advanced text based coding concepts. Summative Assessment is carried out at the end of each topic.

<u>Term</u>	<u>Topic</u>	<u>What is Covered?</u>
Autumn 1	Creating Spreadsheets	<ul style="list-style-type: none"> • Formulas, Functions and Formatting • Conditional Formatting, CountIf and other Functions • Absolute Cell Referencing • Using Graphs to Analyse data • Percentages and Pie Charts
Autumn 2	Understanding Computers	<ul style="list-style-type: none"> • Elements of the Computer • The CPU • Understanding Binary • Binary Addition • Storage Devices • Convergence and New Technology
Spring 1	E-Safety	<ul style="list-style-type: none"> • SMART Thinking • Identify the risk whilst online • Cyber Bullying, Sexting • Cyber stalking, Cyber Slacking • Digital Imprint • Understand how to stay safe online
Spring 2	First Steps in Small Basic	<ul style="list-style-type: none"> • Introducing the Turtle • Using a For Loop • The Text Window • Using Variables • Conditions and Branching • Using Random Numbers
Summer 1	Introduction to Python	<ul style="list-style-type: none"> • Strings and Variables • Numbers and Arithmetic • Selection • Writing Algorithms • While Loop • Searching
Summer 2	Game Making in Kodu	<ul style="list-style-type: none"> • How Programs Work • Creating Landscapes • Navigation and Pathing • Clones V's Creatable • Pages and Selection • Game Depth and Complexity