

COMPUTING: Key Stage 3 Curriculum

Year 8

Content (Intent)	Links to prior learning	Skills and Assessment (Implementation)	Expected Learning Outcomes (Impact)
<p>Term 1/2</p> <p>What is a Computer System</p> <ul style="list-style-type: none"> - Hardware / Software - Peripheral Devices - Data Representation - Networks 	<p>Develop confidence in using different types of computers from Year 7 Term 6.</p>	<p>Skills:</p> <ul style="list-style-type: none"> - Data representation - Identification of hardware and software - Team working <p>Assessment:</p> <p>End of Topic Test on Teams, closed book</p> <p>Observation of group work</p>	<p>Can identify key component parts of a computer system and be able to explain how they combine to make a computer system</p> <p>Can explain how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits</p> <p>Understands simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers</p>

<p>Term 3/4 Spreadsheets</p> <ul style="list-style-type: none"> - Data vs Information - Formulas - Functions - Data Analysis 	<p>Build on use of spreadsheets Year terms 5/6, model are to be used to explore data rather than just inputting</p>	<p>Skills:</p> <ul style="list-style-type: none"> - Creating digital artefacts for a specific purpose / audience - Developing creative projects that use a range of different software or sources <p>Assessment: Spreadsheet portfolio of skills learnt</p>	<p>Can show an ability to be able to create, reuse, revise and repurpose digital artefacts for a given audience</p> <p>Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems</p>
<p>Term 5/6 Programming</p> <ul style="list-style-type: none"> - High Level Programming Languages - Programming Constructs - Integrated Development Environments 	<p>Development of text-based programming abilities as now being used in an online IDE</p>	<p>Skills:</p> <ul style="list-style-type: none"> - Use of Text based programming - Use of computational abstractions to model real world scenarios - <p>Assessment:</p>	<p>Use of a text-based programming language to solve a real-world problem.</p>

Resources and/or activities to support learning

You Tube: Excel for Beginners – The Complete course

Code Marker UK – 200+ Interactive coding challenges