



### Computing

Computing		
Year 7	Topic	Programme of Study
Autumn 1	Clear Messaging in Digital Media	<p><b>Why This?</b> To ensure students know how to search for information safely using key search terms</p> <p><b>Why Now?</b> To promote positive online relationships, privacy and security.</p> <p><b>Key Knowledge</b> Understand a range of ways to use technology safely, respectfully, responsibly and securely including protecting their online identity and privacy, recognise inappropriate content and know how to report concerns. Create, reuse, repurpose digital artefacts for a given audience with attention to trustworthiness.</p> <p><b>Key Vocabulary</b></p> <ul style="list-style-type: none"> <li>• Logo</li> <li>• Complementary</li> <li>• Descriptive</li> <li>• Reflects</li> <li>• Communicates</li> <li>• Relates</li> </ul> <p><b>Sources</b> CEOP ThinkUKnow</p> <p><b>Curriculum Assessment tasks</b> Assessment rubric</p> <p><b>Personal Development links</b> To promote online safety and healthy relationships</p>
Autumn 2	What are Computers	<p><b>Why This?</b> To ensure that students know where computers come from throughout its history and how computer systems are maintained run in organisations.</p> <p><b>Why Now?</b> As students start their KS3 journey they need to have and understanding of programming origins and where computers came from before embarking on programming skills through visual programming (Scratch) and then on to text based programming (Python) in year 8.</p>



		<p><b>Key Knowledge</b></p> <ul style="list-style-type: none"> <li>• Key points in the history of computing.</li> <li>• Inputs and outputs.</li> <li>• Hardware &amp; software.</li> <li>• Networks.</li> <li>• Human Computer</li> <li>• Computer language – Binary/Denary.</li> </ul> <p><b>Key Vocabulary</b> Binary, Denary, inputs, Outputs, Sensors, Hardware, Software, Peripherals, CPU, Motherboard, RAM, Hard Drive, Bugs, Machine Code, ASCII.</p> <p><b>Sources</b> Teams/OneDrive Assignment – What are computers: Part 1 (History) &amp; What are computers: Part 2 (Computers).</p> <p><b>Curriculum Assessment tasks</b> Assessment Rubric in Teams/OneDrive. There is an assessment task for each of the two parts which are peer and teacher assessed (See Teams/OneDrive Assignment).</p> <p><b>Personal Development links</b> To understand how we use computers in everyday life and how systems work.</p>
<p>Spring 1</p>	<p>Programming essential in Scratch 1</p>	<p><b>Why This?</b> To build students confidence and knowledge of key programming constructs</p> <p><b>Why Now?</b> Build on KS2 curriculum and allows students the opportunity to expand their knowledge through this study</p> <p><b>Key Knowledge</b> Focuses on key techniques used in programming.</p> <p><b>Key Vocabulary</b> Subroutines Iteration Variable Operator</p> <p><b>Sources</b> Curriculum Assessment tasks Programming assessment</p> <p><b>Personal Development links</b> To enable students to be resilient learners</p>



Spring 2	Modelling Data – Spreadsheets.	<p><b>Why This?</b></p> <p>To introduce and build students confidence in using and manipulating spreadsheets, including as a database.</p> <p><b>Why Now?</b></p> <p>To have a specific focus on IT skills and improving their knowledge of software in preparation for further study in education and employment for the future.</p> <p><b>Key Knowledge</b></p> <ul style="list-style-type: none"> <li>• How to use a spreadsheet.</li> <li>• What are the key elements of a spreadsheet.</li> <li>• How to create functions and formula for automatic and repeating calculations (loops).</li> </ul> <p><b>Key Vocabulary</b></p> <p>Cells, Columns, Rows, Functions, Equations, Cell Reference.</p> <p><b>Sources</b></p> <p>Teams/OneDrive Assignment – Modelling Data Spreadsheets.</p> <p><b>Curriculum Assessment tasks</b></p> <p>Assessment Rubric in Teams/OneDrive. There is an assessment task which are peer and teacher assessed (See Teams/OneDrive Assignment).</p> <p><b>Personal Development links</b></p> <p>Understand how spreadsheets and databases are used in the workplace. Much of the work is based around vocational scenarios.</p>
Summer 1	Using Media – gaining	<p><b>Why This?</b></p>



	<p>support for a cause</p>	<p>To build students confidence in using word processing skills and to be able to use this in educational and professional arenas.</p> <p><b>Why Now?</b></p> <p>To have a specific focus on IT skills and improving their knowledge of software in preparation for further study in education and employment for the future. The use of the Word processor is particularly useful for completing coursework and assignments in education.</p> <p><b>Key Knowledge</b></p> <ul style="list-style-type: none"> <li>• Learning the features of a word processor.</li> <li>• Licensing of appropriate images.</li> <li>• Credibility of sources.</li> <li>• Blogging.</li> <li>• Promoting a cause.</li> </ul> <p><b>Key Vocabulary</b></p> <p>Fonts, Images, Licensing, Causes, Credibility.</p> <p><b>Sources</b></p> <p>Teams/OneDrive Assignment – Using Media, gaining support for a cause.</p> <p><b>Curriculum Assessment tasks</b></p> <p>Assessment Rubric in Teams/OneDrive. There is an assessment task which are peer and teacher assessed (See Teams/OneDrive Assignment).</p> <p><b>Personal Development links</b></p> <p>Understand how word-processing is used in the workplace. Much of the work is based around vocational scenarios.</p>
<p>Summer 2</p>	<p>Contingency and transition work</p>	<p>Contingency</p>