

	Term 1		Term 2		Term 3	
Year 7 THEMES	<ul style="list-style-type: none"> <li>ICT network basics</li> <li>e-Safety 1 : Issues with gaming</li> </ul>	<ul style="list-style-type: none"> <li>Understanding algorithms</li> <li>Understanding flowcharts and sequencing 1 – Flowol</li> <li>Digital literacy IDEA award 1a</li> </ul>	<ul style="list-style-type: none"> <li>Understanding flowcharts and sequencing 1 – Flowol</li> <li>Digital literacy IDEA award 1b</li> </ul>	<ul style="list-style-type: none"> <li>Understanding block coding 1 – Scratch</li> <li>Digital literacy IDEA award 1b</li> </ul>	<ul style="list-style-type: none"> <li>Understanding text coding 2 – Small Basic</li> </ul>	<ul style="list-style-type: none"> <li>Application of practical block coding 2 – Microbit</li> <li>Digital literacy IDEA award 1c</li> </ul>
<p>Pupils will be taught the following key themes:</p> <ul style="list-style-type: none"> <li>School ICT network basics</li> <li>e-Safety 1 : Issues with gaming</li> <li>Understanding algorithms</li> <li>Understanding flowcharts and sequencing 1</li> <li>Introduction to block coding 1</li> <li>Introduction to text based coding</li> <li>Introduction to practical block coding 2</li> </ul> <p>Digital literacy IDEA award 1</p>	<p><b>WH ICT network basics</b></p> <p>Understanding of the WH network protocols and systems: usernames / passwords / e-mail / VLE / etiquette, file management etc.</p> <p><b>e-Safety 1: Issues with gaming</b></p> <p>Understanding the PEGI system</p> <p>Online gaming dangers regarding grooming (BB story)</p>	<p><b>Introduction to algorithms</b></p> <p>Understanding the concept of algorithms and how to break down a problem.</p> <p><b>Introduction to flowcharts and sequencing 1 – Flowol</b></p> <p>Understanding of flowchart symbols and practically applying their understanding of algorithms to solve problems using the Flowol program.</p> <p><b>Digital literacy IDEA award 1a</b></p> <p>Introduction to the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to flowcharts and sequencing 1 – Flowol</b></p> <p>Understanding of flowchart symbols and practically applying their understanding of algorithms to solve problems using the Flowol program.</p> <p><b>Digital literacy IDEA award 1b</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to block coding 1 – Scratch</b></p> <p>Development of Flowol sequencing project onto block based coding using Scratch to create functional coded programs and develop understanding further of practical coding.</p> <p><b>Digital literacy IDEA award 1b</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to text coding 1 – Small Basic</b></p> <p>Development of Scratch block based programming onto text based coding using Small Basic to create functional coded programs and develop understanding further of practical coding.</p>	<p><b>Introduction to practical block coding 2 – Microbit</b></p> <p>Continued development of block based coding skills using the Microbit and its onscreen interface. This is a practical application of coding that utilises the hardware Microbit mini-computer.</p> <p><b>Digital literacy IDEA award 1c</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>
Assessment	e-safety 1: Issues with gaming unit	<p>Introduction to algorithms unit</p> <p>Introduction to Flowol 1</p>	Introduction to Flowol 1	Introduction to Scratch unit	Introduction Small Basic 2 unit	<p>Microbit unit</p> <p>Progress of Digital Literacy IDEA program</p>

West Hill School ICT/Computer Science Department Curriculum Map (Academic Year: 2021/22)



Year 8 THEMES	<ul style="list-style-type: none"> <li>• ICT network basics (recap)</li> <li>• e-Safety 2 : Issues with trolling</li> <li>• Understanding computer hardware / software / binary 1</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding computer hardware / software / binary 2</li> <li>• Digital literacy IDEA award 2a</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding spreadsheets</li> <li>• Understanding flowcharts and sequencing 2 - Flowgorithm</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to text coding 2 – Small Basic 2 / Python</li> <li>• Digital literacy IDEA award 2b</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to website coding – HTML</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding QR codes and barcodes</li> <li>• Digital literacy IDEA award 2c</li> </ul>
<p>Pupils will be taught the following key themes:</p> <ul style="list-style-type: none"> <li>• e-Safety 2 : Issues with trolling</li> <li>• Understanding computer hardware / software / binary</li> <li>• Understanding spreadsheets</li> <li>• Understanding flowcharts and sequencing 2</li> <li>• Introduction to text based coding 2</li> <li>• Introduction to website coding</li> <li>• Understanding QR codes and barcodes</li> </ul> <p>Digital literacy IDEA award 2</p>	<p><b>WH ICT network basics</b></p> <p>Understanding of the WH network protocols and systems: usernames / passwords / e-mail / VLE / etiquette, file management etc.</p> <p><b>e-Safety 2 : Issues with online abuse</b></p> <p>Understanding the issues with online abuse and trolling</p>	<p><b>Introduction to computer hardware / software / binary</b></p> <p>Understanding the make-up of a computer and the function and operation of its main components eg: CPU, RAM etc. Basic understanding of the concept of binary in computers.</p> <p><b>Digital literacy IDEA award 2a</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to spreadsheets 1</b></p> <p>Understanding the MS Excel spreadsheet program and develop skills accordingly – Quiz project.</p> <p><b>Digital literacy IDEA award 2b</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to text coding 2 – Small Basic</b></p> <p>Continued development of understanding text based coding using Small Basic.</p> <p><b>Digital literacy IDEA award 2b</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to HTML tag mark-up coding language</b></p> <p>Continued development of understanding text based coding using HTML to create basic websites.</p>	<p><b>Introduction to QR Codes and Barcodes</b></p> <p>Practical understanding of how QR and barcodes work, why used and how they can be related to binary in computers.</p> <p><b>Digital literacy IDEA award 2c</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>
Assessment	e-safety 2: Issues with online abuse and trolling	Computer hardware / software / binary 1 unit	Spreadsheet quiz unit	Small Basic 2 unit	HTML unit	Progress of Digital Literacy IDEA program

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<p><b>Year 9 THEMES</b></p>	<ul style="list-style-type: none"> <li>• ICT network basics (recap)</li> <li>• e-Safety 3: Issues with sexting</li> <li>• Adapting flowcharts to text based programming</li> </ul>	<ul style="list-style-type: none"> <li>• Adapting flowcharts to text based programming</li> <li>• Understanding text based coding</li> <li>• Digital literacy IDEA award 3a</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding text based coding</li> <li>• Understanding networks &amp; the Internet</li> <li>• Digital literacy IDEA award 3b</li> </ul>	<ul style="list-style-type: none"> <li>• Digital literacy practical 1</li> <li>• Digital literacy IDEA award 3b</li> </ul>	<ul style="list-style-type: none"> <li>• Digital literacy practical 2</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding text based coding</li> <li>• Digital literacy IDEA award 3c (completion)</li> </ul>
<p>Pupils will be taught the following key themes:</p> <ul style="list-style-type: none"> <li>• e-Safety 3 : Issues with sexting</li> <li>• Adapting flowcharts to text based programming</li> <li>• Understanding text based coding</li> <li>• Understanding computer networks and the Internet</li> <li>• Digital literacy practical 1</li> <li>• Digital literacy practical 2</li> </ul> <p>Digital literacy IDEA award 3 (Completion)</p>	<p><b>WH ICT network basics</b></p> <p>Understanding of the WH network protocols and systems: usernames / passwords / e-mail / VLE / etiquette, file management etc.</p> <p><b>e-Safety 3 : Issues with sexting</b></p> <p>Understanding the issues with sexting and up-skirting.</p>	<p><b>Introduction to flowcharts and sequencing 2 – Flowgorithm</b></p> <p>Continue developing the understanding of flowcharts and practical application of using the Flowgorithm program.</p> <p><b>Introduction to text coding 3 – Python</b></p> <p>Continued development of understanding text based coding using Python.</p> <p><b>Digital literacy IDEA award 3a</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges</p>	<p><b>Introduction to text coding 3 – Python (cont.)</b></p> <p>Continued development of understanding text based coding using Python.</p> <p><b>Introduction to computer networks &amp; the Internet</b></p> <p>Understanding why we have computer networks (benefits/disadvantages) and an understanding of how the Internet functions.</p>	<p><b>Basic digital literacy skills 1</b></p> <p>Basic presentation skills on MS Office software preparation for KS4 courses.</p> <p><b>Digital literacy IDEA award 3b</b></p> <p>Continuance of the IDEA certificated award and completion of specific badges.</p>	<p><b>Basic digital literacy skills 2</b></p> <p>Basic presentation skills on MS Office software in preparation for KS4 courses.</p>	<p><b>Introduction to text coding 3 – Python</b></p> <p>Continued development of understanding text based coding using Python in preparation for GCSE Computer Science</p> <p><b>Digital literacy IDEA award 3c</b></p> <p>Completion of the IDEA certificated award.</p>
<p><b>Assessment</b></p>	<p>e-safety 3 Issues with sexting unit</p>	<p>Flowgorithm 2 unit</p>	<p>Introduction to text coding (Python) unit (Core assessment)</p>	<p>Progress of Digital Literacy IDEA program</p>	<p>Collation assessment of digital skills tasks</p>	<p>Introduction to text coding (Python)</p> <p>Completion of Digital Literacy IDEA program</p>

	Term 1		Term 2		Term 3	
Year 10 THEMES	<ul style="list-style-type: none"> <li>Understanding algorithms and computer data.</li> <li>Development of text based programming skills.</li> </ul>	<ul style="list-style-type: none"> <li>Understanding computer data.</li> <li>Development of text based programming skills.</li> </ul>	<ul style="list-style-type: none"> <li>Development of text based programming skills.</li> </ul>	<ul style="list-style-type: none"> <li>Understanding computer networks.</li> <li>Understanding HLL/LLL programming languages</li> </ul>	<ul style="list-style-type: none"> <li>Independent practical programming project and consolidation of programming skills</li> </ul>	<ul style="list-style-type: none"> <li>Understanding computer hardware and networks.</li> <li>Exam preparation – practical &amp; written</li> </ul>
<p>Pupils will be taught the following key themes (Edexcel GCSE (9-1) Computer Science specification 2020):</p> <ul style="list-style-type: none"> <li>Understanding algorithms and developing dissemination problem solving skills.</li> <li>Developing practical programming skills and understanding in Python.</li> <li>Understanding data in computing</li> <li>Understanding computer hardware and networks.</li> <li>Independent practical programming project work.</li> </ul>	<p>Students are introduced/re-introduced to basic algorithm theory: flowcharts, pseudocode.</p> <p>Students investigate the aspects of binary data as associated with computing.</p> <p>Students are given the opportunities to develop a comprehensive range of text-based coding skills utilising the Python programming language to develop skills and knowledge to help them solve and disseminate practical problems by producing efficient coding solutions.</p>	<p>Students investigate the aspects of binary data/logic systems as associated with computing.</p> <p>Students investigate the role of the CPU in a computer system as well as a basic understanding of logic gates and HLL/LLL programming languages.</p> <p>Students are given the opportunities to develop a comprehensive range of text-based coding skills utilising the Python programming language to develop skills and knowledge to help them solve and disseminate practical problems by producing efficient coding solutions.</p> <p>Students investigate the key aspects of computer networks and the associated cyber-security.</p>	<p>Independent practical programming project work.</p> <p>Students investigate the role of computer network, the Internet and the associated protocols.</p> <p>Preparation for the mock examinations – both the written exam and the practical on-screen programming exam.</p>			
Assessment	Algorithm assessment Practical project assessment	Computer data assessment Practical project assessment	Practical project assessment	CPU assessment	Project development Networks and cyber-security assessment	End of Year mock examination – theory and practical

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<p><b>Year 11 THEMES*</b></p>	<ul style="list-style-type: none"> <li>• Independent practical programming project work</li> <li>• Understanding computer data.</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the Communication and the Internet.</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding computer networks.</li> <li>• Understanding emerging Trends in relation to computing.</li> </ul>	<ul style="list-style-type: none"> <li>• External assessment</li> </ul>	<ul style="list-style-type: none"> <li>• External assessment</li> </ul>	
<p>Pupils will be taught the following key themes (Edexcel GCSE (9-1) Computer Science specification 2020):</p> <ul style="list-style-type: none"> <li>• Developing practical programming skills and understanding in Python.</li> <li>• Understanding the Communication and the Internet.</li> <li>• Understanding the Bigger Picture in relation to computing.</li> </ul>	<p>Independent practical programming project work.</p>	<p>Students investigate aspects of computer networks in relation to data transfer, network protocols and cyber-security.</p>	<p>Students investigate aspects of computer networks in relation to data transfer and network protocols.</p> <p>Students investigate emerging trends in computing that affect day-to-day life: ethical, legal, health</p>	<p>Preparation for external assessment: review of key exam topics/preparation for practical exam</p>	<p>Preparation for external assessment: review of key exam topics/preparation for practical exam</p>	
<p><b>Assessment</b></p>	<p>NEA practical project</p>	<p>Full Paper 2 'Mock' paper</p>	<p>Full Paper 1 'Mock' paper</p>	<p>Ongoing GCSE question answer analysis</p>	<p>Ongoing GCSE question answer analysis</p>	