



**Rainford High School – Department: Computer Science**

	<b>Year 8 Curriculum</b>					
	<b>Half-Term 1</b>	<b>Half-Term 2</b>	<b>Half-Term 3</b>	<b>Half-Term 4</b>	<b>Half-Term 5</b>	<b>Half-Term 6</b>
<b>Topic</b>	<b>Computer Systems</b>	<b>Spreadsheets</b>	<b>HTML</b>	<b>Web Development (Serif)</b>	<b>Python Turtle Programming</b>	<b>Digital Literacy and Environmental Issues</b>
<b>Essential knowledge, skills and understanding</b>	<ul style="list-style-type: none"> <li>- What e-safety is</li> <li>- How computer systems work</li> <li>- How ROM and RAM work and their functions</li> <li>- How to convert between binary and denary and vice versa</li> <li>- How to construct logic gates</li> <li>- How to construct truth tables from logic circuits</li> <li>- Identify network hardware and topologies</li> <li>- Identify different software and its purpose.</li> </ul>	<ul style="list-style-type: none"> <li>- What different types of storage devices there are</li> <li>- how to correctly send an email and how to use all of the other tools and features.</li> <li>- What compression is and how it is performed.</li> <li>- The different between the Internet and WWW</li> <li>- How to enhance your search results.</li> <li>- How to create a spreadsheet and use formulas to calculate values and model changes.</li> </ul>	<ul style="list-style-type: none"> <li>- What is e-safety, persuasive design and online scams.</li> <li>- What HTML is.</li> <li>- Create multiple webpages using HTML and using different.</li> </ul>	<ul style="list-style-type: none"> <li>- What makes a good website.</li> <li>- Develop website on Serif to meet a given brief.</li> <li>- Test and Evaluate website.</li> </ul>	<ul style="list-style-type: none"> <li>- What is e-safety, keeping data safe and intro to hacking</li> <li>- Intro to programming in Python Turtle</li> <li>- Application of Python Turtle Programming</li> </ul>	<ul style="list-style-type: none"> <li>- Jobs and careers</li> <li>- CV and cover letter writing</li> <li>- Environmental Issues</li> <li>- Intro to Caesar Ciphers</li> </ul>
<b>Assessments and assessment focus</b>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- e-safety</li> <li>- computer systems</li> <li>- creation of truth tables</li> <li>- creation of logic gates</li> <li>- networks</li> </ul>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- different storage types</li> <li>- email tools and features</li> <li>- compression</li> <li>- spreadsheets</li> </ul>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- e-safety</li> <li>- spotting errors in HTML code</li> <li>- writing HTML code</li> </ul>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- spotting errors in HTML code</li> <li>- writing HTML code</li> </ul>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- e-safety</li> <li>- hacking</li> <li>- Spotting errors in Python Turtle code</li> <li>- Working out what Python Turtle code will draw</li> </ul>	Retrieval testing at the start of each lesson: <ul style="list-style-type: none"> <li>- jobs and careers</li> <li>- environmental issues</li> <li>- Caesar ciphers</li> </ul>

	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- Workbook Completed</li> <li>- Assessment 8.1.1</li> </ul> <p>Independent study courses/ badges on www.code.org homework completed</p>	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- <u>Assessment Window 1</u></li> <li>- Workbook Completed</li> <li>- Assessment 8.1.2</li> <li>- Spreadsheet Created</li> </ul>	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- Workbook Completed</li> <li>- Assessment 8.2.1</li> <li>- HTML Website Created</li> </ul> <p>Independent study courses/ badges on www.code.org homework completed</p>	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- Workbook Completed</li> <li>- Assessment 8.2.2</li> <li>- Website created in Serif</li> </ul>	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- <u>Assessment Window 2</u></li> <li>- Workbook Completed</li> <li>- Assessment 8.3.1</li> <li>- Python programming completed drawing shapes in turtle</li> </ul> <p>Independent study courses/ badges on www.code.org homework completed</p>	<p><b>Formative assessment:</b></p> <ul style="list-style-type: none"> <li>- Workbook Completed</li> <li>- Assessment 8.3.2</li> <li>- CV and cover letter created</li> <li>- Environmental Issues Presentation created</li> <li>- Ceaser Cipher messages created</li> </ul>
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