



YEAR 9 CURRICULUM SUMMARY



When?	Knowledge	Understanding	Unit Assessment
Autumn Term 1	Cybersecurity & Computer Legislation	<p>Data vs Information Worksheet – Customer Data</p> <p>Why is Customer Data valuable to a company?</p> <p>Privacy Policies Research – “What data do social media companies collect about their users?”</p> <p>Consequences?</p> <p>Social Engineering Worksheet – What three pieces of advice would you give someone to stop them from becoming the victim of a phishing attack?</p> <p>Malware Research – Discuss each of the 6 categories of Malware – Virus, Worm, Ransomware, Trojan, Spyware & Adware</p> <p>Investigate the various threats that an organisation faces by having network and online presence.</p> <p>Prepare a slideshow summarising these threats and identify what organisations can do to minimise the risks from such threats</p>	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p> <p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>
Autumn Term 2	Modelling Data using Spreadsheets – Advanced Features & Charts	<p>Use a range of spreadsheet scenarios to demonstrate a range of skills in using spreadsheet software</p> <p>Investigate how values change automatically in a spreadsheet when cell values are altered</p>	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p>



		<p>Devise complex formulas to solve mathematical problems quickly and efficiently in a software model</p> <p>Use wizards in spreadsheet software to create a range of charts</p> <p>Practise using the Chart Toolbar in Excel to create a range of effective charts</p>	<p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>
<p>Spring Term 1</p>	<p>Programming with Python II – File Handling</p>	<p>Python Challenges – using a variety of both built-in and user-created procedures and functions</p>	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p> <p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>
<p>Spring Term 2</p>	<p>Computational Thinking II – Logical Reasoning & Boolean Logic</p>	<p>Work through a series of exercises applying decomposition to break down larger problems into a series of smaller problems, noting any assumptions made</p> <p>Work through a series of exercises applying abstraction to enable problems to be modelled using computational methods, noting any assumptions made</p> <p>Work through a series of exercises to develop algorithms – a series of steps outlining the solution to the problem using computational methods, noting any assumptions made</p>	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p> <p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>



Summer Term 1	Programming with C++	C++ Challenges & compare with Python solutions from previously	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p> <p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>
Summer Term 1	Project Development	<p>Analyse a series of project proposals to develop a scope for the problem and design a solution</p> <p>Using the designs developed previously, develop a coded solution for the problem using a range of programming techniques developed earlier</p> <p>Using the designs developed and coded previously, develop a test plan to ensure that the solution works and evaluate the solution in a WWW EBI format</p>	<p>Homework tasks will be set each week which directly relate to the lessons. These can be found on the homework sheet.</p> <p>Pupils will sit an assessment at the end of the unit which will assess their knowledge, understanding and ability to evaluate the topics covered.</p>