

YEAR 8 CURRICULUM INFORMATION – BUSINESS AND COMPUTING

	Summer 1	Summer 2
What will students be learning?	Students will study 'Computational Thinking' and 'Algorithms' to understand how computers think (abstractions) and how this relates to solving real world problems. By doing this, students will understand how computers use instructions (algorithms – pseudo-code/flowcharts) to help us programme and solve these problems.	Students will be using an online platform which utilises both block-based and text-based programming to develop a working application. They will learn the basic programming constructs (sequence, selection and iteration) to develop and refine their programs.
How will students be assessed?	Students will be assessed on each topic ('Computational Thinking', 'Algorithms' and 'Programming in AppLab' ) with a set of multiple-choice and short answer questions (10 marks).	
Literacy – What keywords will be taught?	<ul style="list-style-type: none"> <li>• Decompression</li> <li>• Patter Recognition</li> <li>• Abstraction</li> <li>• Algorithms</li> <li>• Flowchart</li> <li>• Bubble sort</li> <li>• Binary/linear search</li> <li>• Pseudocode</li> <li>• Iteration</li> <li>• Logical reasoning</li> </ul>	<ul style="list-style-type: none"> <li>• Javascript</li> <li>• Debugging</li> <li>• Variable</li> <li>• Variable re-assignment</li> <li>• Subroutine</li> <li>• Selection</li> <li>• Sequence</li> <li>• Iteration</li> </ul>
What employability skills are being developed?	Problem solving skills, logical reasoning, and numeracy.	
Wider Curriculum Links?	Numeracy, specifically calculating using formulae, adding, subtracting and logical reasoning within these topics.	
What useful websites are there for this topic?	<a href="#">KS3 Computer Science - BBC Bitesize</a> <a href="#">Cisco's Binary Number Game [Binary Blitz]. Penjee's adaptation.</a> <a href="#">How Computers Work - YouTube</a>	
What wider reading could be done for this topic?	<a href="#">Learn Computer Science - Code.org</a>	
What else can students be doing independently to develop their understanding of this topic?	Go onto Seneca Learning at complete the KS3 Computer Science course. <a href="#">Free Homework &amp; Revision for A Level, GCSE, KS3 &amp; KS2 (senecalearning.com)</a>	