



# Year 9 Curriculum

## Computer Science



	Term 1 (Autumn)		Term 2 (Spring)		Term 3 (Summer)	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	<b>Binary Numbers</b>  <b>Elements of a computer</b>  <b>Networks</b>	<b>Programming Concepts</b>	<b>AI &amp; Machine Learning</b>	<b>Control Flow &amp; Flowol</b>	<b>Computational Thinking</b>	<b>Computer Crime &amp; Security</b>  <b>Databases using MS Access</b>
Key Concepts	<ul style="list-style-type: none"><li>• Elements of a computer</li><li>• Understanding Binary</li><li>• Binary Addition</li><li>• The Internet</li><li>• Connectivity</li><li>• Client Server Technology</li><li>• Encryption</li></ul>	<ul style="list-style-type: none"><li>• Python – Programming tasks and development</li><li>• Python – Variables and constants (Different data types)</li><li>• Sequence</li><li>• Selection</li><li>• Python - Iteration</li></ul>	<ul style="list-style-type: none"><li>• What is AI?</li><li>• Machine Learning</li><li>• Ethics of AI</li><li>• Image recognition</li><li>• Turing tests and chatbots</li><li>• Rate a review</li></ul>	<ul style="list-style-type: none"><li>• Flowcharts</li><li>• Sequencing</li><li>• Sensors</li><li>• Subroutines</li><li>• Actuators</li><li>• Variables</li></ul>	<ul style="list-style-type: none"><li>• Logic Gates</li><li>• Abstraction, Decomposition and Abstraction</li><li>• Search and Sort</li></ul>	<ul style="list-style-type: none"><li>• Email Scams</li><li>• Computer Misuse</li><li>• Protecting personal Data</li><li>• Copyright</li><li>• Health and Safety</li><li>• Introduction to databases using MS Access</li></ul>




# Year 9 Assessment

## Computer Science



All pupils will sit an assessment and several knowledge tests in Year 9.

	Assessment	Knowledge Tests	Revision Resources
	Autumn Term	Spring Term	
Style of Assessment	Written multiple choice answer questions	Each knowledge test consists of 10 multiple-choice questions	<i>Kennet Resources</i> <ul style="list-style-type: none"><li>Year 9 Knowledge Organisers</li><li><a href="#">Learning Habits</a></li></ul> <i>External Resources</i> <ul style="list-style-type: none"><li><a href="http://www.bbc.com/bitesize">www.bbc.com/bitesize</a></li><li><a href="http://teach-ict.com">http://teach-ict.com</a></li><li>L:\Pupils\Subjects\Computer Science\3. Year 9\01. Lesson Resources</li></ul> <p>You can also find revision material on Frog</p> 
Topics Assessed	<ul style="list-style-type: none"><li>Computer hardware</li><li>Binary and ASCII</li><li>Memory and processing</li><li>Python</li></ul>	<ul style="list-style-type: none"><li>Core knowledge taught until that point in the academic year</li></ul>	