



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



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">Year 9 Knowledge OrganisersLearning Habits
Topics Assessed	<ul style="list-style-type: none">Computer hardwareBinary and ASCIIMemory and processingPython	<ul style="list-style-type: none">Core knowledge taught until that point in the academic year	<i>External Resources</i> <ul style="list-style-type: none">www.bbc.com/bitesizehttp://teach-ict.comL:\Pupils\Subjects\Computer Science\3. Year 9\01. Lesson Resources