

Year 9 Curriculum Overview [2022-2023]

Subject – Computing

Knowledge & Understanding			Literacy Skills	Employability Skills	Assessment Opportunities
Composites	Components [includes understanding of KEY concepts & subject specific vocab]	Formal Retrieval [if any]	Opportunities for developing literacy skills	Skills [if any]	
Half Term 1 and 2 (6 lessons) - Text based programming					
<i>National Curriculum links – 3.1, 3.2,3.3,3.8</i> <i>Taxonomy strands – AL, ET, DI, DD, ET</i> <i>Computing Strands – CS, DL, IT</i> <i>Education for a connected world</i>		<u>Lessons</u>			
Text based programming	<ul style="list-style-type: none"> ● Computational thinking ● Selection ● Iteration ● Variables ● Sequence ● Decomposition ● Abstraction 	<ul style="list-style-type: none"> ● Algorithms ● Loops ● Block-based programming (scratch) ● Sequence ● selection 	<ul style="list-style-type: none"> ● Accuracy of instructions ● Checking for mistakes ● Adapting others' work ● Keywords 	<ul style="list-style-type: none"> ● Programming ● Computational thinking ● Independent work ● Problem solving ● Resilience 	<ul style="list-style-type: none"> ● Number guessing game program. ● Theory assessment
Half Term 3 and 4 (6 lessons) - Networks and Security					
<i>National Curriculum links – 3.5</i> <i>Taxonomy strands – CS, NW, SS</i> <i>Computing Strands – CS, DL, IT</i> <i>Education for a connected world – 2,3,4,5,7</i>		<u>Lessons</u>			
<ul style="list-style-type: none"> ● Networks ● Security 	<ul style="list-style-type: none"> ● Hardware ● Data ● Passwords 	<ul style="list-style-type: none"> ● Hardware ● Software ● Acting responsibly online 	<ul style="list-style-type: none"> ● Writing concisely ● Self-reflection ● Listening to directions 	<ul style="list-style-type: none"> ● Systems knowledge ● Cyber Security ● Ethical issues 	<ul style="list-style-type: none"> ● Theory assessment

	<ul style="list-style-type: none"> • Network attacks • Hackers • Wired and wireless networks 	<ul style="list-style-type: none"> • E-Safety • Cloud computing 	<ul style="list-style-type: none"> • Keywords 	<ul style="list-style-type: none"> • E-safety 	
Half Term 5 and 6 (6 lessons) - <u>Data Representation</u>					
<i>National Curriculum links – 3.6</i> <i>Taxonomy strands – CS, DI</i> <i>Computing Strands – CS, DL, IT</i> <i>Education for a connected world – 5,6,7</i>		<i>Lessons</i>			
Data representation Understand how computers represent data.	<ul style="list-style-type: none"> • Denary/Decimal numbers • Binary digits • Character representation (ASCII) • Image representation • Sound representation# • Boolean Logic 	<ul style="list-style-type: none"> • Computational thinking 	<ul style="list-style-type: none"> • Subject keywords • Searching for information 	<ul style="list-style-type: none"> • Computational thinking • Problem solving • Resilience 	<ul style="list-style-type: none"> • Theory Assessment