CURRIULUM SUMMARY - Computing

YEAR 9 – Computer Science GCSE AQA 8525

TERM 1	TERM 2	TERM 3
CONTENT Computational thinking Programming literacy Data types Variables and Constants Selection Sequencing Iteration Subroutines Error trapping 	CONTENT • Algorithms • Flowcharts • Pseudocode • Programming literacy • ROM and RAM	CONTENT Boolean and Logic gates Data representation Data compression Computational thinking Algorithms Flowcharts Pseudocode Programming literacy Logic circuits Binary Hexadecimal
ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment 	ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment 	ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment
 HOW PARENTS CAN SUPPORT LEARNING Check homework is completed Support pupils with written work Ensure pupils have access to a computer with Python installed and web access, so online resources can be used. Give pupils encouragement to get past the inevitable struggles and failures inherent in programming. 	 HOW PARENTS CAN SUPPORT LEARNING Check homework is completed Support pupils with written work Ensure pupils have access to a computer with Python installed and web access, so online resources can be used. Give pupils encouragement to get past the inevitable struggles and failures inherent in programming. 	 HOW PARENTS CAN SUPPORT LEARNING Check homework is completed Support pupils with written work Ensure pupils have access to a computer with Python installed and web access, so online resources can be used. Give pupils encouragement to get past the inevitable struggles and failures inherent in programming.

YEAR 10 – Computer Science GCSE AQA 8525

TERM 1	TERM 2	TERM 3
CONTENT Computational thinking Algorithms Flowcharts Pseudocode Programming literacy Logic circuits ROM and RAM Different programming languages Binary Hexadecimal 	CONTENT Data structures Trees and Huffman coding Understanding search and sort algorithms Algorithm efficiency Testing code Computer system's architecture Von Neumann Networks Embedded systems Memory ROM & RAM Secondary storage Flowcharts Pseudocode Programming literacy	CONTENT Fetch-execute cycle Encryption System security Social engineering and cyber security Ethics, the law and environment Software and its development Algorithms Flowcharts Pseudocode Programming literacy Databases
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YEAR 11 – Computer Science GCSE AQA 8525

TERM 1	TERM 2	TERM 3
CONTENT Algorithms Flowcharts Pseudocode Programming literacy Data structures Trees and Huffman coding Understanding search and sort algorithms Algorithm efficiency Testing code Computer system's architecture Von Neumann Networks Embedded systems Memory ROM & RAM Secondary storage 	 CONTENT Revision and preparation for final exam. Consolidation of programming knowledge. Fetch-execute cycle Encryption System security Social engineering and cyber security Ethics, the law and environment Software and its development Algorithms Flowcharts Pseudocode Programming literacy Databases 	CONTENT • Preparation for final exam
ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment HOW PARENTS CAN SUPPORT LEARNING	ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment HOW PARENTS CAN SUPPORT LEARNING	ASSESSMENTS Online tests Functionality checks of programmes (does it work and do what it was supposed to do). Peer assessment HOW PARENTS CAN SUPPORT LEARNING
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