Y9 COMPUTER SCIENCE

Yardleys School
WORKING TOGETHER FOR A BETTER FUTURE

COMPUTER SCIENCE AT YARDLEYS
INTENT: Through our ambitious computing curriculum our learners will have access to a broad and balanced range of topics including: digital literacy, computational thinking and modern technology. Yardley's computing curriculum will provide students with an understanding of how computing underpins today's modern lifestyle and has made the world better, faster and more connected. We ensure that the students at Yardleys can develop to become masters and creators in this field, to aid them in their development of our rapidly changing technological world.
Y9 COMPUTER SCIENCE AT YARDLEYS
Students in year 9 will further enhance their ability to programme through the use of new programming software. They will spend time developing and understanding and the application of different algorithms.

Year 9			
	Introduction to Python programming Algorithms Programming fundamentals	**Algorithms Programming fundamentals**	**Algorithms Programming fundamentals**
SUBSTANTIVE KNOWLEDGE	Understanding and application of Python programming Lists: adding, removing, or modifying items; locating or counting occurrences of particular items Using a for and while-loop	Algorithms Pseudocode Awareness of syntax errors Data types Searching and sorting	Algorithms Pseudocode Awareness of syntax errors Data types
DISCIPLINARY KNOWLEDGE (primary focus in capitals)	Perform common operations Use of Programming language Role of Iteration	Use of Programming language Use simple arithmetic expressions in assignment statements to calculate values Sequencing and selection Understanding of Integers Role of Iteration How to complete a sort and search	Use of Programming language Use simple arithmetic expressions in assignment statements to calculate values Sequencing and selection Understanding of Integers Role of Iteration

We aim to provide students with a curriculum that educates the whole child, creating responsible and respectful citizens. Through the development of substantive and disciplinary knowledge students are given the tools that allow them to achieve excellence and be ready for life.