



MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 2.2 Feb - Apr	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
TOPIC (S)	How do you write programs in Python	How does Python know if you want the value or character	How can a program change based on inputs	What if you want more than two responses	What are counters and how are they used	How does code work together to make a program
Knowledge & Skills development	Write simple Python programs that display messages, assign values to variables, and receive keyboard input Locate and correct common syntax errors	Use simple arithmetic expressions in assignment statements to calculate values Receive input from the keyboard and convert it to a numerical value	Use binary selection (if, else statements) to control the flow of program execution Generate and use random integers	Use multi-branch selection (if, elif, else statements) to control the flow of program execution Describe how iteration (while statements) controls the flow of program execution	Use iteration (while loops) to control the flow of program execution Use variables as counters in iterative programs	Combine iteration and selection to control the flow of program execution
Assessment / Feedback Opportunities	Classroom activity Class Discussion Questioning pupils Verbal Feedback					
Cultural Capital	Problem solving Impact of technology on the world					
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	<ul style="list-style-type: none"> Listening to others Responding suitable in discussions Taking part in group activities 					
Reading opportunities	Instructional writing Key word identification The Code Book: The Science of Secrecy from Ancient Egypt to Quantum Cryptography Hackers: Heroes of the Computer Revolution The Pragmatic Programmer: From Journeyman to Master					
Key Vocabulary	Algorithm, program, programming language, program translation and execution, interpreter, programming environment, input, output, variables, assignment, input, output, variables, operators, expressions, integer and string type, execution, walk-through, selection, relational (or comparison) operators, logical (or Boolean) expressions, conditions, randomness, execution, walk-through, Multi-branch selection, iteration, counting,					
Digital Literacy	Use of technology Digital research methods Use of range of software					

Careers	Python Developer – Product Manager – Data Analyst – Financial Advisor – Data Journalist – Data Scientist – Software Developer
---------	-------------------------------------------------------------------------------------------------------------------------------