MAGHULL HIGH SCHOOL – CURRICULUM MAP



HALF TERM 3.1 Apr - May	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
TOPIC (S)	Why have computers become so important	What role does hardware have in systems	What role does hardware have in systems	How does logic impact a program running	How do machines learn	Review of lessons taught
Knowledge & Skills development	Explain the difference between a general- purpose computing system and a purpose-built device	Describe the function of the hardware components used in computing systems Describe how the hardware components used in computing systems work together in order to execute programs	Analyse how the hardware components used in computing systems work together in order to execute programs Define what an operating system is, and its role in controlling program execution	Describe the NOT, AND, and OR logical operators, and how they are used to form logical expressions Use logic gates to construct logic circuits, and associate these with logical operators and expressions Describe how hardware is built out of increasingly complex logic circuits	Provide broad definitions of 'artificial intelligence' and 'machine learning' Identify examples of artificial intelligence and machine learning in the real world Describe the steps involved in training machines to perform tasks (gathering data, training, testing)	Demonstration of skills learnt in the unit of study
Assessment / Feedback Opportunities	Classroom activity Written assessment Class Discussion Questioning pupils Verbal Feedback					
Cultural Capital	How technology supports different groups					
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	 Listening to others Understanding of technology to support additional needs Responding suitable in discussions 					
Reading opportunities	Instructional readingKey word identification					
Key Vocabulary Digital Literacy	Computer, system, device, program, software, instructions, data, hardware, processor, memory, storage, communication, input and output, architecture, storage, operating system, Logical operators (NOT, AND, OR), logical expressions, truth values (true, false), truth tables, logic gates, logic circuits, hardware components, Artificial intelligence, machine learning, data, training, testing, programming,					

	Digital research methods		
	Use of range of software		
Careers	Data scientist; Software engineer, Machine learning engineer, Data engineer, Software architect, Natural language processing, AI research		