



Year 8 Artificial Intelligence and chatbots		8 Lessons
Aims: This unit of work is designed to introduce students to the GCSE subject, Computer Science. In Year 7, students learnt how to use blocky programming with the use of Scratch – This year students will learn a text based programming language, Python. They will learn various skills through a project based task with a final outcome of being able to plan, design and create their own programmed chatbot. They will learn about Artificial Intelligence and the impact this has upon today’s society and economy.		
Links to KS4: Collection of Information (Computer programming) Planning (Maths) Problem solving		
Key Skills	Literacy Links:	Numeracy Links:
<ul style="list-style-type: none">⊕ To develop skills in logical thinking and the processes and planning involved.⊕ To learn how to problem solve and resolve issues that arise⊕ To learn to use features within python to make successful programs⊕ To learn how the computing world impacts the world around us	Key Words: Programming, Algorithms, Variable, Conditional IF Statement, Loops, IDLE Shell, Artificial Intelligence	Opportunity to problem solve and logical think.
Assessment	Cross-Curricular Links	
<p>Students will be assessed on their understanding of programming through planning and creating a practical task using python.</p> <p>Knowledge</p> <ul style="list-style-type: none">⊕ Students will gain an understanding of how to begin creating a program in a text based programming language.⊕ Students will be assessed on their understanding of the keywords throughout the unit <p>Research</p> <ul style="list-style-type: none">⊕ Students will consider how programming is used in the real world⊕ Students will consider how Artificial Intelligence has an impact on careers <p>Planning</p> <ul style="list-style-type: none">⊕ Students will be required to plan and design their own chatbot program <p>Skills</p> <ul style="list-style-type: none">⊕ Students should be able to demonstrate a range of skills in Python <p>Evaluation</p> <ul style="list-style-type: none">⊕ Students should be able to assess the success of the program they have produced and respond to any issues they may encounter making the appropriate corrections	<ul style="list-style-type: none">⊕ Maths – Problem solving and logical thinking⊕ English – speaking and listening.	
	SMSC opportunities and British values	
	<ul style="list-style-type: none">⊕ enable students to develop their self-knowledge, self-esteem and self-confidence⊕ Online Safety⊕ Online security features to be aware of when creating programs⊕ The laws of Copyright and hacking	
Opportunities for further learning		
<p>Homework will be given out twice during the unit to widen students understanding of programming and to consolidate knowledge gained.</p> <ul style="list-style-type: none">• Artificial Intelligence – researching and developing an information leaflet• Create a programming hint sheet using the key words and skills they have learnt throughout the python programming unit.		