



Year 7	Introduction to programming		8 Lessons
Aims: This unit of work is designed to introduce students to the basics of computer programming. The planning and developing of a programme and the use of flow charts and pseudocode. The use of visual coding will be developed and students taught how to create a programme in a text based language.			
Links to KS4: Collection of Information (Computer programming) Planning / logic (Maths)			
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 ariseTo learn to use features within scratch and python to make successful programs		Key Words: Programming, Algorithms, Flow Charts, Variable, Procedure, Conditional Statement, Pseudocode, Loops, IDLE Shell Be able to understand how to plan and create a program using block/visual coding and convert into a text based language.	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 based on scratch and python.</p> <p>Knowledge</p> <ul style="list-style-type: none">Students will gain an understanding of how to begin creating a program using block/visual code and converting it into a text based coding 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 <p>Planning</p> <ul style="list-style-type: none">Students will be required to create a flowchart and pseudocode for their program <p>Skills</p> <ul style="list-style-type: none">Students should be able to demonstrate a range of skills in Scratch and Python programming <p>Evaluation</p> <ul style="list-style-type: none">Students should be able to assess the success of the game 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 thinkingEnglish – 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-confidenceOnline security features to be aware of when creating programsThe 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">Programming homework will be to research how programming is used in the real world, considering apps and websites the students use.Create a programming hint sheet using the key words and skills they have learnt in the paper-scratch-python unit.			