

## Learning Programme

### Scratch – 1<sup>st</sup> Year

Topic/Content	Objectives/Skills	Homework	Assessment	Success Criteria (for E/S/D at KS3)	Stretch & Challenge (Thirst for Learning)
Introduction to Scratch	<p>Know what computer programming is</p> <p>Create a simple computer program in Scratch</p> <p>Understand the programming language in Scratch</p>	Flowcharts homework worksheet	<p>The homework will be used when forming a judgement/grade for the end of unit mark.</p> <p>Students will be supplied with a number of different scenarios for games and they are to plan and create the game in scratch.</p>	See Below	<p>“Challenges” worksheet is on the shared area that students can complete</p> <p>Scratch is free to download and there is an online version so students can use at home to practise and create further games/animations.</p> <p>Use online video tutorials to learn new skills</p>
Simple Racing Game – IF statements	Create a racing car game using IF statements				
Iteration & Variables	<p>Understand what a variable is and how they are used</p> <p>Understand how to use loops effectively within scratch</p>				
Broadcasts	<p>Understand what a broadcast is and why they are only used in scratch</p> <p>Effectively use broadcasts within scratch to mimic an iPhone</p>		They should utilise most/all of the skills they have learnt in previous lessons to do so.		
Small Challenges	Students to complete a number of scratch based scenarios to build up the skills needed to create a game	Read the possible game scenarios or think of own game			

		Start to plan out the game ready to complete in more detail next lesson			
Creating a Game	Create a game/animation based around students own idea	Complete game and hand in			
Peer Assessment and Feedback	Know the different ways to test a computer game  Complete an evaluation on their own game				

Excellent	Secure	Developing
<ul style="list-style-type: none"> <li>• Use multiple “Variables” to keep numeric values in your game.</li> <li>• Evaluate computer games and explain what you like/dislike &amp; suggest valid improvements.</li> <li>• Can de-code and explain what some-one else’s algorithms will do before running the program.</li> <li>• Can develop, try out and refine procedures in own programs, looking for the most efficient way to improve my work.</li> </ul>	<ul style="list-style-type: none"> <li>• Use “Variables” to keep numeric values in your game.</li> <li>• Make improvements to games to make them more exciting</li> <li>• Create a computer game where the sprites interact with each other.</li> <li>• Evaluate computer games</li> <li>• Can select appropriate data types such as the types shown in Motion, Looks, Operators.</li> <li>• Can make use of different background for levels</li> <li>• Can use scripts to create solutions to scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Can import a sprite and make it move.</li> <li>• Can use the “If” statement to make a decision in a program.</li> <li>• Can use a “Forever” and “Repeat” loops.</li> <li>• Can write instructions to draw simple shapes.</li> <li>• State what was good and bad about a computer game</li> <li>• Can create and edit own sprites</li> </ul>

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| <ul style="list-style-type: none"><li>• Can make use of different background for multiple levels and info screens</li><li>• Can combine a number of suitable scripts to make advanced games/animations to set scenarios</li></ul> |  |  |
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