



## Curriculum

Year 6 Scheme of Work		
<b>Term: Autumn 1</b>		<b>Topic: Computer Science</b>
<b>Key Skills and Knowledge:</b>		
<p><b>National Curriculum Statement</b> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><b>Key skills and competences</b></p> <ul style="list-style-type: none"> <li>• I can write algorithms and programs to achieve specific goals</li> <li>• I can find errors in programs by checking each part of the program (debug)</li> <li>• I can use variables in my coding to control speed of a car</li> <li>• I can use sequences of algorithms to simulate a physical system – steering a car</li> <li>• I can explain how my algorithms work</li> <li>• I can write an algorithm to cause an event to happen in response to an input</li> <li>• I can write an algorithm</li> </ul>	<p><b>Online safety – Using Technology Safely risks online/secure websites</b></p> <ul style="list-style-type: none"> <li>• I know that sharing, publishing or uploading some files or comments may be a criminal offence.</li> <li>• I think carefully about the content of information I share online to ensure it is respectful, accurate and does not put others or myself at risk.</li> <li>• I understand that I may be held responsible for anything uploaded in my personal areas and pages.</li> <li>• I know that anything created using technology can be shared with others e.g. embarrassing videos and images. Please also see safe searching unit re: safe websites.</li> </ul> <p>This unit is likely to take more time whilst children are catching up with the skills. Complete this unit rather than start the Autumn 1 unit.</p>	
<b>Reading and Writing Opportunities (Long and Short Activities)</b>		
<b>Creative Ideas and Hooks</b>		
Write adverts/review for my online game		<p><b>Creative ideas and hooks</b> Create a racing game Test and debug the algorithms Evaluate and improve the game including adding points.</p>
<b>Links to PSHCE, Equality and British Values Work</b>		
Identify how much technology influences my life in terms of leisure social and how I see the world around me.		
<b>Key Vocabulary:</b>	<b>Resources Available / Visits/Visitors</b>	<b>Useful Websites:</b>
Variable Animate Input Loop Algorithm Debug speed	<p>Scratch See example game in scheme of work Y6 folder.</p> <p>Prior learning Animated and moved sprites in Y4/ directed a sprite and used repeat in Y5.</p>	<p><a href="http://Swiggle.org.uk">Swiggle.org.uk - Child Friendly Search Engine for Kids</a></p> <p><a href="http://Scratch-mit.edu">Scratch - Imagine, Program, Share (mit.edu)</a></p> <p><a href="#">Access the ProjectEvolve Toolkit   ProjectEVOLVE</a></p>