



Curriculum

Year 5 Scheme of Work		
Term: Spring 2		Topic: Computer Science
Key Skills and Knowledge:		
<p>National Curriculum Statement 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>Key skills and competences</p> <ul style="list-style-type: none"> • I know that many devices including computers are controlled using a programming language and that they rely on specific commands and rules. • I can use more advanced commands make my instructions or programme more efficient e.g. using the repeat command or loop to repeat the same sequence a number of times.to simplify instructions for drawing a repeating geometric pattern. • I can detect errors in algorithms (sequences of instructions) using the range of features I am familiar with and correct them. • I can accurately predict the outcome of a program or sequence of instructions that uses the range of commands I am familiar with. • I can design, modify and refine sequences of instructions • I can explain why I made changes and the stages I went through to do this. 	<p>Online safety – Using technology safely – Safer Internet Day Theme</p> <p>National Curriculum Statement use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <p>Online safety - *Safer Internet Day Theme ‘Want to talk about it? Making space for conversations about life online’.</p> <ul style="list-style-type: none"> • I know who I can talk to if I am worried about something that has happened online. • I know where I can get advice or help from if I feel unsafe because of something that happened online. <p>*Because this theme will bring different concerns up from the children, please refer to appropriate resources from Safer Internet Day and Project Evolve for other outcomes.</p>	
Reading and Writing Opportunities (Long and Short Activities)		
Creative Ideas and Hooks		
<p>Writing instructions to move around the school Write a guide to using Scratch Explain how your programme works</p>	<p>Creative ideas and hooks Use knowledge of the properties of shapes to draw a square/rectangle create a repeating pattern by continuing a castle turret pattern and rotating a square/rectangle</p>	
Links to PSHCE, Equality and British Values Work		
Link to safer internet day as appropriate		
Key Vocabulary:	Resources Available / Visits/Visitors	Useful Websites:
Repeat Sequence Internal angle. quarter turn, half turn, algorithm, debug, predict, efficient, loop, pen down, pen up	Scratchonline	Access the ProjectEvolve Toolkit ProjectEVOLVE