

Computing Scheme of Work							Autumn Term	Year 3
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Key Learning		<ul style="list-style-type: none"> Pupils start to understand that users can create their own programs. Pupils can talk about coordinates. 	<ul style="list-style-type: none"> Pupils can talk confidently about inputs and outputs. Understands that algorithms are a precise set of instructions. 	<ul style="list-style-type: none"> Can uses 'if' statements and 'loop' within programs. 	<ul style="list-style-type: none"> Can detect and correct simple errors in code. Understands that computers need a precise set of instructions to follow. Discuss the sequence of instructions and the impact changes might have. 	<ul style="list-style-type: none"> To use a range of software with support to create, store and edit digital content. 		
Main Lessons	Online Safety: Lesson 1, SWGFL SofW.	Scratch: The slug game: Create slug character and path background. If time repeat in Revelation natural art and import. Show pupils the coordinates background. Discuss how the screen is layout using grid references.	Scratch: Demo how to make the slug move in response to selected keys (up, down, right, left arrows). Demo the goto command to move slug to starting position. Show pupils how they find the slugs coordinates. Demo how to position slug to face the correct way at start.	Scratch: Demo how to make the slug return home and face the correct way once it goes off the path. Create lettuce sprites for the slug to eat. Add command to each one so that if it is hit by the slug it disappears. More able could include a variable to record number of lettuces eaten.	Scratch: How to reset game on button press so that lettuces reappear and slug is positioned at start of game. Give pupils the time to play and suggest improvements.	Word: Show pupils how to open Word and their Scratch projects. How to move between them, copy print screen from Scratch to Word. Show them how to write up a guide to the game - how it was made, how the code works etc.	Webpage: Demo how to create a webpage with pictures, text and in a manner relevant to the audience. This could be an information page to show parents what they have, are learning within their topic. Could it include images from Google maps / Street View?	
Software		Scratch / revelation natural art.	Scratch			Word / J2E		J2E / Cloudu
Cross Curricula		Use Billy Bug to teach / practice coordinates. http://coolsciencelab.com/graphing_coordinates.html				English		

Computing Scheme of Work

**Summer
Term** **Year 3**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Key Learning		<ul style="list-style-type: none"> Pupils can talk confidently about inputs and outputs. Understands that algorithms are a precise set of instructions. Can 'loops' within their programs. 	<ul style="list-style-type: none"> Pupils are using the correct terminology, algorithm, Debugging. Can design, create and test simple algorithms to achieve a set goal. Can, with increasing confidence, predict the outcome of their algorithms. Can identify their own errors within their code. 			<ul style="list-style-type: none"> Can use a range of software to create, store and edit digital content with increasing independence and awareness of audience. Can talk about their work and make improvements based on feedback. 		Basic Word processing skills.	
Main Lessons	<p>Online Safety:</p> <p>Lesson 4, SWGFL SofW.</p>	<p>Probots:</p> <p>Revisit the parts of the car, inputs, outputs including the sensors.</p> <p>Demo how to put the pen in. Ask them to draw different shapes. Note the repetition of commands. Demo how to use the repeat function. Reduces code, makes errors less likely.</p> <p>Repeat shapes using the REPEAT command.</p>	<p>Probots:</p> <p>Discuss cm and degrees in relation to the cars movements. How to clear memory.</p> <p>Demo the car drawing a repeated square with a small turn in between. See pattern.</p> <p>Ask pupils to break down the program into small steps, eg draw a square, add turn, add repeat function around the whole lot. Pupils try to recreate patterns.</p>	<p>Probots:</p> <p>Pupils to write algorithm that will program the Probot to draw different shapes. Test and identify errors (debugging) in algorithms.</p>	<p>Probots:</p> <p>Continue previous lesson and test to see if changing the sequence of the code makes any difference?</p>	<p>Audio Books:</p> <p>Using tablets or easy mics get the pupils to record either their own or other sort stories. Add to Cloudu and share. Put up QR codes in library areas for others to listen to.</p>	<p>J2E / Word/ Publisher:</p> <p>Ensure pupils can save with appropriate name, open work, change fonts, size, centre text, insert images etc.</p> <p>Look at differences between online, Word and Publisher.</p> <p>Typing skills.</p> <p>Creating folders.</p>		
Software		Probots				Tablets, Yellow Microphones, CloudU		Publisher, Word, J2E	
Cross Curricula			Maths:	Maths:		English:		Topic:	