



St John's Primary School Computing, Coding and Robotics Skills Progression

Neer A	Autumn			Spring		Summer		
Year A	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6		
EYFS	Use a simple program Play with the Beebots							
Υ1	 Term 6 Understand and use this language: algorithm, programming, coding, debugging. Think of an everyday algorithm (e.g for brushing teeth). Create simple sequence algorithms and follow algorithms by: Work in pairs to program each other as robots in the hall or playground, (forward 4 etc). Using the above language. Using counters on a treasure map or grid, write a simple algorithm and move counters to follow the algorithm. (e.g UP2, Left1 etc). Debug an algorithm that doesn't work. Using bee bots to: Write their own algorithm and put it into the beebot to reach a particular square. Create and debug simple programs on the beebot given by the teacher. As above using Bee Bot App/Daisy Dinosaur App/Scratch Jr App 							
Υ2	Term 6 Understand and use this language: algorithm, programming, coding, debugging, Scratch, Sprite, Script Blocks Revise using physical algorithms, either with children or counters, as above. <u>Scratch -</u> Scratch Cards to be covered in brackets to support with meeting these skills. Understand the following <u>event blocks</u> : When Space Clicked, When Green Flag clicked, When Sprite clicked. Understand the function of the <u>Control</u> script blocks: Wait, Forever loop, Repeat loop Insert and choose a Spite. Change the background. Make a Sprite change colour (Card 1) Animate a Sprite by Changing Costume (Card 2) Make a Sprite Say something (Card 3)							





	Animate a mo Make their or Debug their o	pice. nole class discussion.	lass discussion.			
Y3&4	NA	We are software designers (Light at the end of the tunnel) Maze game.Understand and use this language: algorithm, programming, coding, debugging, Scratch, Sprite, 	We are toy designers (Tomb Raiders) Egyptian Toy Continue skills learnt last term, left. AND: what is an input and output to a Computer. Using 'Broadcast' on Scratch to send a message to another sprite.	NA	Lego We Do Follow step by step instructions to build a robot. Enter and edit code to control their robot. Understand code: Forever Loops Debug their own problems. Use a sensor on the robot.	NA



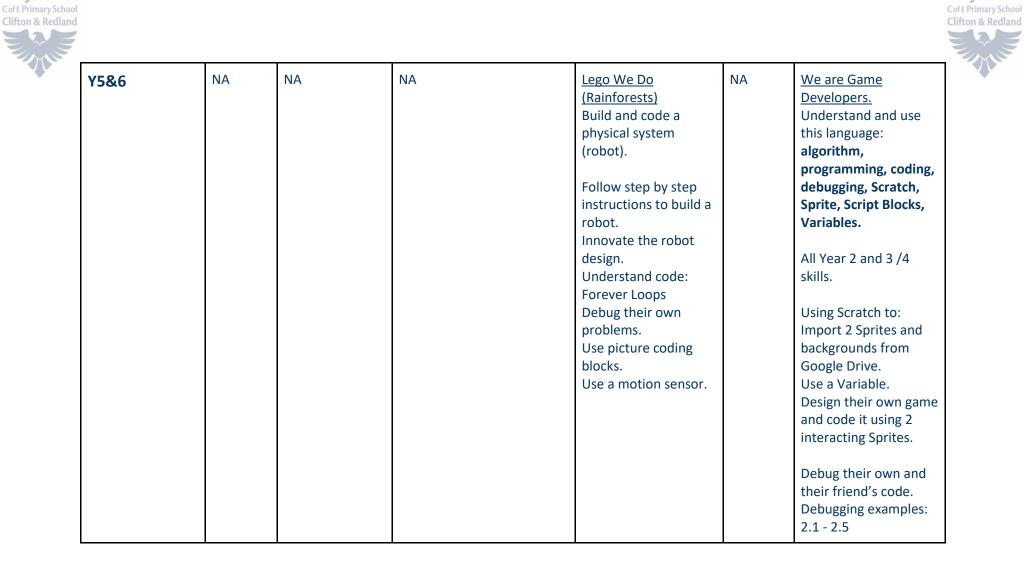


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		Use a variable, Score/Timer (Card 11) Use the above skills to create their own game.				
Y5&6	We are game developers (Anglo Saxons). Understand and use this language: algorithm, programming, coding, debugging, Scratch, Sprite, Script Blocks, Variables. All Year 2 and 3 /4 skills. Using Scratch to: Import 2 Sprites and backgrounds from Google Drive. Use a Variable. Design their own game and code it using 2 interacting Sprites.	NA	NA	NA	Lego We Do (Integalatic) Build and code a physical system (robot). Use a distance sensor and messaging code.	Code.org/Beb ras

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	Debug their own and their friend's code. Debug their own and their friend's code. Debugging examples: 2.1 - 2.5			

Year B	Autumn		Sprin	Summer			
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	
EYFS	Use a simple program Play with the Beebots						
Υ1	 Play with the Beebots Term 4 Understand and use this language: algorithm, programming, coding, debugging. Think of an everyday algorithm (e.g for brushing teeth). Create simple sequence algorithms and follow algorithms by: Work in pairs to program each other as robots in the hall or playground, (forward 4 etc). Using the above language. Using counters on a treasure map or grid, write a simple algorithm and move counters to follow the algorithm. (e.g UP2, Left1 etc). Debug an algorithm that doesn't work. Using bee bots to: Write their own algorithm and put it into the beebot to reach a particular square. Create and debug simple programs on the beebot given by the teacher. As above using Bee Bot App/Daisy Dinosaur App/Scratch Jr App 						
Y2	Term 4 Understand and use this language: algorithm, programming, coding, debugging, Scratch, Sprite, Script Blocks						

Y3&4	Scratch - S Understan Understan Insert and Change the Make a Sp Animate a Make a Sp Animate a Make their	cratch Cards to be o d the following <u>eve</u> d the function of th choose a Spite. e background. rite change colour (Sprite by Changing rite Say something moving Sprite (Card r own simple anima	Costume (Card 2) (Card 3)	vith meeting these skills. When Green Flag clicked prever loop, Repeat loop a Sprite of their choice.		



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