

The Flourish Federation—Knowledge Organiser

Brookfield Infant and Junior Schools

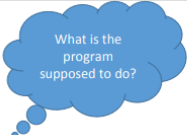
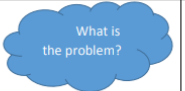
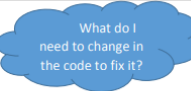
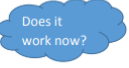
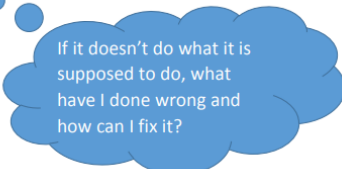


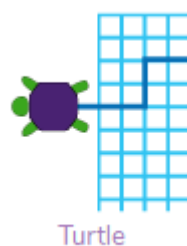
Computing Focus:	Computer Science— Programming and developing	Year 2	Term 3
What? (Key Knowledge)	What? (Activities)		
I develop my own program I.e. robots.			
I start to use 'what if' statements and loops within programs.			
I start to detect and debug simple programs.			
I use logical reasoning to predict the behaviour of simple programs.			
Useful Web Links			
https://www.purplemash.com/sch/brookfield-infant  Children all have home access. Log in details are in the front of Reading Record books.			
	I develop my own program I.e. robots.	Use beebots to navigate a maze around different obstacles on a grid. On 2 code 'turtle' work through objectives to programme turtle to move. They work through the objectives using commands learnt in previous unit such as 'when clicked' and arrow keys to make the turtle move. By the end of the challenge they create their own program making the turtle and food move using the skills learnt.	
	I start to use 'what if' statements and loops within programs.	Children use 2 code vehicles to investigate questions such as what if I want vehicles to move at different speeds/ different times 'Guard the castle' on 2 code provides challenges including creating loops.	
	I start to detect and debug simple programs.	In 'turtle' and 'vehicles' children have opportunities to try out ideas and fix code. They are given challenges to fix already written code by detecting errors in the algorithm.	
	I use logical reasoning to predict the behaviour of simple programs.	Children will understand that the computer will follow exactly the instructions given and can read blocks of code and use it to explain what will happen next,	

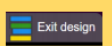
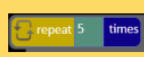
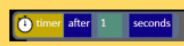
What? (Key Vocabulary)	
Spelling	Definition
Direction	A course along which something moves
Challenge	A task or situation that tests someone's abilities.
Arrow	A mark or sign resembling an arrow, used to show direction or position.
Undo	Cancel or reverse the instruction.
Rewind	Move back several steps or to the start.

What? (Key Vocabulary)	
Spelling	Definition
Debug	To find and remove errors from computer hardware or software.
Instruction	Information about how something should be done.
Algorithm	A precise, step-by-step set of instructions used to solve a problem or achieve an objective.
Forward	To move in the direction that one is facing or travelling.
Backward	To move in the opposite direction to which one is facing .
Right turn	To move the object in a clockwise direction
Left turn	To move the object in an anti-clockwise direction.

Visuals



Open the main menu	
Save your work	
Watch the instruction video	
Open design mode in 2Code	
Switch to code mode in 2Code	
A repeat code block	
A timer code block	
An object property	