

The Flourish Federation—Knowledge Organiser

Brookfield Infant and Junior Schools



Computing Focus:	Computer Science— Programming and developing	Year 1	Term 5
What? (Key Knowledge)	What? (Activities)		
I can complete a simple program on a computer or device	I can complete a simple program on a computer or device		
I demonstrate by creating simple programs i.e. on a programmable robot	Children explore the direction keys using the beebots /purple mash 2 go program and can follow a set of given instructions		
I execute, check and change programs.	I demonstrate by creating simple programs i.e. on a programmable robot		
I understand that programs execute by following precise instructions.	Using the beebots /purple mash 2 go program they use sequence their 'robot' to follow a given route. They begin to write their own algorithms.		
I begin to use logical reasoning to predict the behaviour of programs	I execute, check and change programs.		
Possible Writing Links	Working through the challenges on Purple Mash 2 go children progress at their own pace creating and run code changing any errors as they occur.		
Story writing-	I understand that programs execute by following precise instructions.		
Cross-Curricular Links	Children should understand that the square grids in the 2go program links to each move and number keys respond to how many times you want the object to move in a certain direction		
Art- design backgrounds for a program	I begin to use logical reasoning to predict the behaviour of programs		
Maths- direction, quarter turn, half turn, three	Using class discussion the children will read a set of instructions and be able to offer ideas about what will happen when the start button is pressed.		
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.			

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
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



Forward 3, turn left, forward 2, turn right, forward 1



Key Resources



Open, close or share a file.

Change the speed in which the screen object moves.

Rewind an instruction.

Undo an instruction.

Change the settings in 2Go.

Change the colour of the path that the object leaves in 2Go.

Control the direction in which the object moves.

