

The Flourish Federation—Knowledge Organiser

Brookfield Infant and Junior Schools



Computing Focus:	Computer Science— Algorithms	Year 1	Term 2
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What? (Key Knowledge)
I begin to understand what an algorithm is.
I can write a set of instructions for a purpose
I understand that a computer needs precise instructions.
I start to show care and precision to avoid errors

Possible Writing Links
Story writing- linked to background, characters
Character/setting description

Cross-Curricular Links
Art- design backgrounds for a program
Maths- direction, size, shape

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? (Activities)	
I begin to understand what an algorithm is.	Children will use purple mash 2 code programme and learn how to code using 'fun with fish' 'bubbles' following the step by step stages to create code
I can write a set of instructions for a purpose	Using 2 code children will write instructions to complete coding activities at their own pace. Children will learn to make objects move,change direction and disappear. They will explore beebots and begin to write simple instructions to make them move in specific ways.
I understand that a computer needs precise instructions.	Working through 2 code children are guided through objectives and have opportunities to fix mistakes (debug) in code.
I start to show care and precision to avoid errors.	Children are taught to check code and 2 code highlights errors in code for the children.

What? (Key Vocabulary)	
Spelling	Definition
Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
Background	The part of the program design that shows behind everything else. It sets the scene for the story or game.
Button	An object on the screen, which can be clicked on.
Character	A type of object that can be programmed to change actions or properties.
Code	A group of commands that are joined together and are run when a specific condition is met or when an event occurs.
Design mode	Used to create the look of a computer program when it is run.
Input	Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
Scale	The size of an object
Stop command	A command that stops a character moving.

What? (Key Vocabulary)	
Spelling	Definition
Code design	Design what your program will look like and what it will do.
Coder	A person who writes computer code.
Coding	Writing instructions that can be interpreted by a computer to create a program.
Collision detection	Detecting when two characters on the screen touch each other.
Command	A single instruction in a computer program
Object	An element in a computer program that can be changed using actions or properties.
Program	Several commands that run purposefully together.
Properties	All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.
When clicked	An event command. It makes code run when you click on something (or press your finger on a touchscreen).
Sound	This is a type of output command that makes a noise.

Visuals

Open the main menu	
Save your work	
Watch the instruction video	
Get a hint when you are stuck in 2Code	
Open design mode in 2Code	
Switch to code mode in 2Code	
The background object	
A 'when clicked' code block	
An object property	
Sound output block	



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