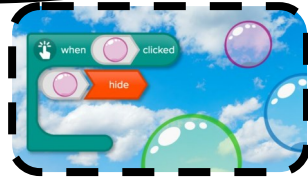


Year 3 & 4 Knowledge Organiser - Computer Science

Vocabulary

Instruction
Program
Rule
Design
Run
Code
Action
Execute
Program
Algorithm
Series
Value
Debug
Output
Input
Sprite
Horizontal
Vertical
Diagonal
Information
Repetition / Loop
Simulation
Logical Reasoning

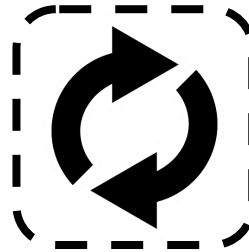
Coding



Children will learn how to use code to complete an action.

Code is a language that the computer understands. The computer will follow the instructions (algorithm) that is inputted to the computer. The output will show if the code has worked.

Repetition/Loop

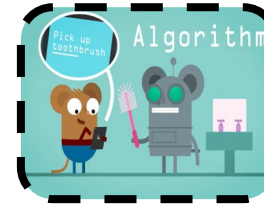


A repetition or loop tells the program to run a code a set number of times. Instead of writing the code several times you can write one line and set the **algorithm** to repeat.

Logical Reasoning



Logical reasoning is applying rules to a problem. When coding logical reasoning is used to predict what the **algorithm** will do when it is run.



Algorithms

An algorithm is a clear set of instructions to carry out a task in a specific order.

Follow a basic set of instructions.

Debug

Debugging is when you find a problem in the code that has been written and repair it.



To spot the mistake you have to go through each step of the **Algorithm**

Sprite



A **SPRITE** is the character children learn to code when using the program Scratch. It uses code to create an output for the character actions.