# Year 2 - Spring - Computing Knowledge Organiser

## What I already know...

In year 1, pupils will have experience of creating short programs and predicting the outcome of a simple program.

This unit progresses pupils' knowledge and understanding of algorithms and how they are implemented as programs on digital devices. Pupils will spend time looking at how the order of commands affects outcomes. They will use this knowledge and logical reasoning to trace programs and predict outcomes.

## What I will learn...

To describe a series of instructions as a sequence

To explain what happens when we change the order of instructions

To use logical reasoning to explain an outcome of a program

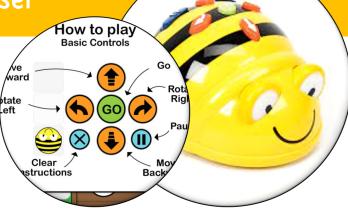
To design an algorithm

To create and debug a program

## Key Vocabulary

Instruction	
Sequence	A combination of several
Algorithm	A precise set of ordered instructions, which can be turned into code
Program	Series of commands
Commands	An order to a computer to perform
Prediction	Reasoned decisions rather than
Route	A path an object takes.
Debugging	Find and fix errors in their





#### Making a difference at The Merton and beyond

In our introduction to programming, pupils' understanding of instructions in sequences and the use of logical reasoning to predict outcomes will be developed. Pupils will use given commands in different orders to investigate how the order affects the outcome. Pupils will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those algorithms as programs and debug them.

#### How to be a programmer:

- To sequence instructions correctly.
- To read algorithms and predict what will happen
- To design and test an algorithm.
- To debug their algorithm to correct mistakes.

