Programming

Curriculum links:

- Understand what algorithms are and how they are implemented as programs on digital devices and the programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.

Key Knowledge:

- Create a simple program on a digital device e.g. Bee Bot, iPad, Sphero
- Understand how to sequence in programs.
- Understand that programs follow precise instructions (algorithms).
- Locate and fix bugs in my program.
- Know how to debug programs of increasing complexity.
- Use logical reasoning to predict the outcome of simple programs.

Key Vocabulary:

Algorithm	Place a sequence of instructions in the correct order to make something work, such as programming a washing ma-
Debug	If the program does not work, can we find the error and correct it.
Execute	Run the program to see if it works.
Program	A set of instructions that makes something happen.
Sequence	Place instructions one after the other in the correct order, such as the sequence
Tinker	To play around and explore hardware to see how it works.

Possible programs/ websites:

- Scratch Jr
- Bee Bot
- Bee Bot app
- Sphero indi
- Sphero Edu Jr

We should already know:

- Direction arrows can move an on screen object.
- A sequence is simple instructions to make something work.
- Finding an error in code is called debugging.