

Programming— Sensing Construction

Prior Knowledge

In KS1, the children have created an algorithm, that with a given command, can control and move a robot, described a series of instructions as part of a sequence and identified where an algorithm is wrong.

In KS2, they have explored new programming environments to identify commands that lead to an outcome and the importance of accuracy in programming a design.



My Component Knowledge:

Lesson 1: I can apply my knowledge of programming to a new environment

Lesson 2: I can use a variable in an 'if, then, else' statement to select the flow of a program

Lesson 3: I can use a condition to change a variable

Lesson 4: I can modify a program to achieve a different outcome

Lesson 5: I can design the algorithm for my project

Lesson 6: I can create a program based on my design

My Composite Knowledge:

I can effectively use a programming platform to create an algorithm and modify it to achieve different results.

My Powerful Knowledge:

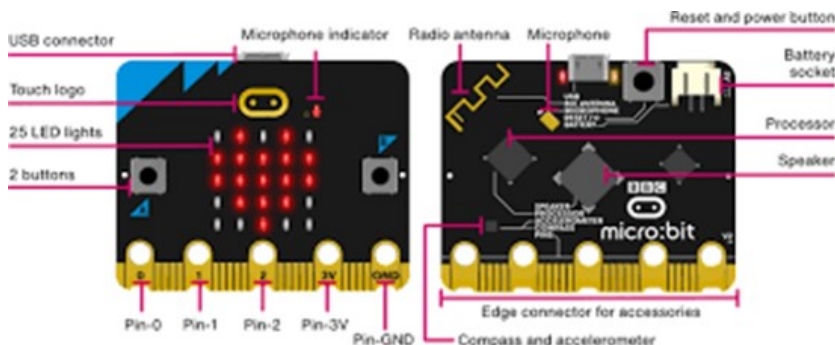
I can design, create and debug my algorithm, spotting and debugging problems that arise in my code.

Key Vocabulary

Tier 1: change, bugs, project, improve, share, data, movement, program, user

Tier 2: variable, evaluate, value, sprite, command, task, modify, conditions, input, output, outcome

Tier 3: algorithm, program flow, controllable device, micro:bit



What is a micro:bit?

How do I use inputs and outputs on a project?

How can I design and make a step counter?

What are controllable devices?