

My steps through learning:

What I will know and understand

How I will show that I know it

Steps through Learning Computing: Programming Adventures - The MicroBit



Lesson 5

To know how to design a project that uses inputs and outputs on a controllable device

I can decide what variables to include in a project
I can design the algorithm and program flow for a project



Lesson 3

To know how to update a variable with a user input

I can use a condition to change a variable
I can explain that checking a variable doesn't change its value



Lesson 1

To know how to create a program to run on a controllable device

I can test my program on an emulator
I can transfer my program to a controllable device



What should I already know

- Understand how sequences, repetition and selection are used within programming
- Recognise the parts of a Micro:Bit
- Understand the Micro:Bit as an input, process and output device
- Have some familiarity with MakeCode coding environment

Lesson 6

To know how to develop a program to use inputs and outputs on a device

I can use a range of approaches to find and fix bugs
I can test my program against my design



Lesson 4

To know how to use a conditional statement
To compare a variable to a value

I can use an operand in an if, then statement
I can modify a program to achieve a different outcome



Lesson 2

To know that selection can control the flow of a program

I can use a variable in an if, then, else statement
I can determine the flow of an program using selection



National Curriculum:

KS2 - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

KS2. - use sequence, selection, and repetition in programs; work with variables and various forms of input and output

KS2 - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and create a range of programs

KS2 - Select, use and combine a variety of software (including the Internet) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information