

Knowledge Organiser Computing Year 5

Autumn 2

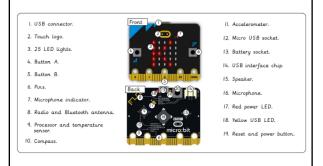
Programming 2 -**BBC Micro:bit**

This block is a conditional statement. It checks if the light level is more than

This variable block stores the light level reading from the micro:bit's light sensor. This helps the program remember the brightness value to use later.

Overview

The BBC Micro:bit is a small, programmable device that lets you create interactive projects using code. It can react, display, sense and play sounds in response to inputs. By combining input, output, variables, and conditions, the Micro:bit allows you to design and test real-world programs.



What the Micro:bit Can Be Used For

The BBC Micro:bit is a small, versatile device that can be used to create many different types of projects. Some examples include:

- Games Design simple games using the LED screen and buttons.
- Animations Display pictures, text, or moving patterns on the

This is an input block. When button A is pressed, it starts the program.

light level is high

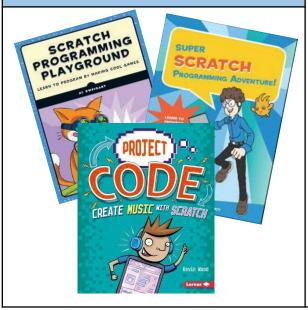
- Pedometers Count steps using the built-in motion sensor.
- Temperature monitors Measure and display the temperature with the temperature sensor.
- If the condition is not true (the light level is 100 or less; this second set of instructions runs. This shows a moon icon to mean the Music and sound – Play tunes or sounds using the Micro:bit's buzzer or connected speakers.
- Interactive projects Combine inputs, outputs, variables, and conditions to make projects that react to the user.

The Micro:bit is a great tool for creative, real-world programming and helps you learn how computers work by experimenting and testing your ideas.

Key vocabulary

debug, genre, input, loop, nested loop, output, pitch, program, remixing, repeat, rhythm, tempo, soundtrack

Read all about it. Can you find these books in the local library?



Mission: Debug and evaluate!

Test in steps – run one part at a time to check what works **Check your blocks** – look carefully to see if any blocks are missing or in the wrong place

Check conditions - make sure your conditional statements are correct

Try the emulator – test your code in MakeCode before using the Micro:bit

Re-run and rest - download your code again or press reset if it does not work

