



Be the best that we can be.



EBJ Knowledge Organiser Computing Year 5

Autumn 2

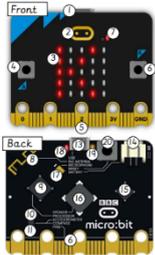
BBC Micro:bit



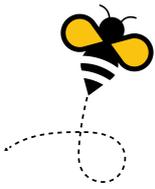
Overview

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.

1. USB connector.
2. Touch logo.
3. 25 LED lights.
4. Button A.
5. Button B.
6. Pins.
7. Microphone indicator.
8. Radio and Bluetooth antenna.
9. Processor and temperature sensor.
10. Compass.



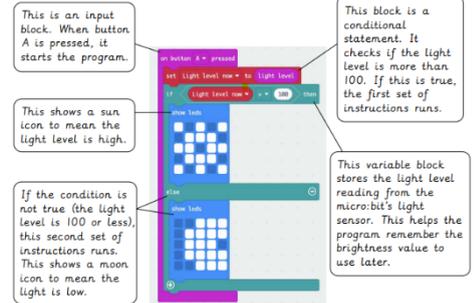
11. Accelerometer.
12. Micro USB socket.
13. Battery socket.
14. USB interface chip.
15. Speaker.
16. Microphone.
17. Red power LED.
18. Yellow USB LED.
19. Reset and power button.



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 LEDs.
- Pedometers – Count steps using the built-in motion sensor.
- Temperature monitors – Measure and display the temperature with the temperature sensor.
- 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.

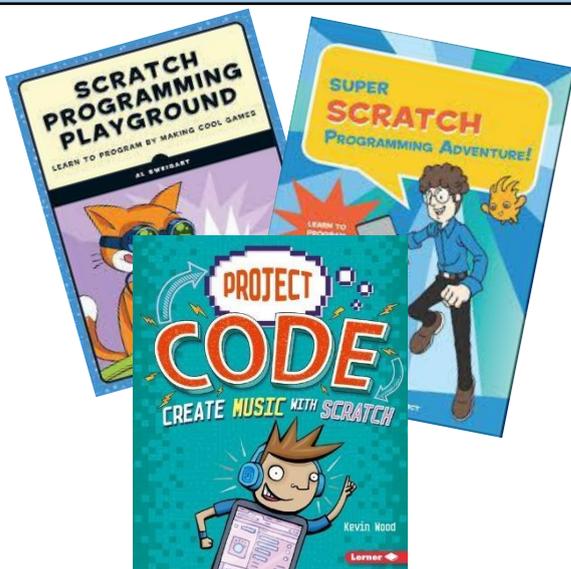


The Micro:bit is a great tool for creative, real-world programming and helps you learn how computers work by experimenting and testing your ideas.

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 reset – download your code again or press reset if it does not work

