How to use the micro:bit in your primary classroom

Adam Sumner and Sophia Elhamid.

Housekeeping

- Your presenters today are Adam Sumner and Sophia Elhamid.

- They will be presenting slides on their screen.

- Your cameras and mics are automatically turned off.

- The session will finish with your questions.

- Please type any questions into the chat box any time during the session, they will be answered at the end.

- You will be able to request a Certificate Of Attendance. A form will appear after the webinar for you to complete AND it will be included in a follow up email.

- **Please note this session will be recorded.**

- **The recording and slides will be sent to all Kapow Primary members, and those on a free trial.**

Overview

- A run through of the features and functions of the micro:bit that could be useful in a primary classroom.

- A showcase of lessons in Computing and Design and technology that utilise the micro:bit.

- National curriculum coverage.

- Cross-curricular opportunities.

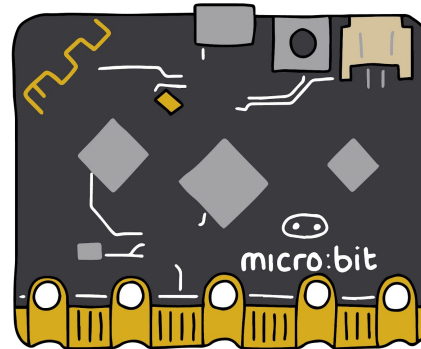- An opportunity to ask questions regarding the micro:bit.

Kapow
Primary

Functions and features

Front

- USB connector.
- Touch sensor.
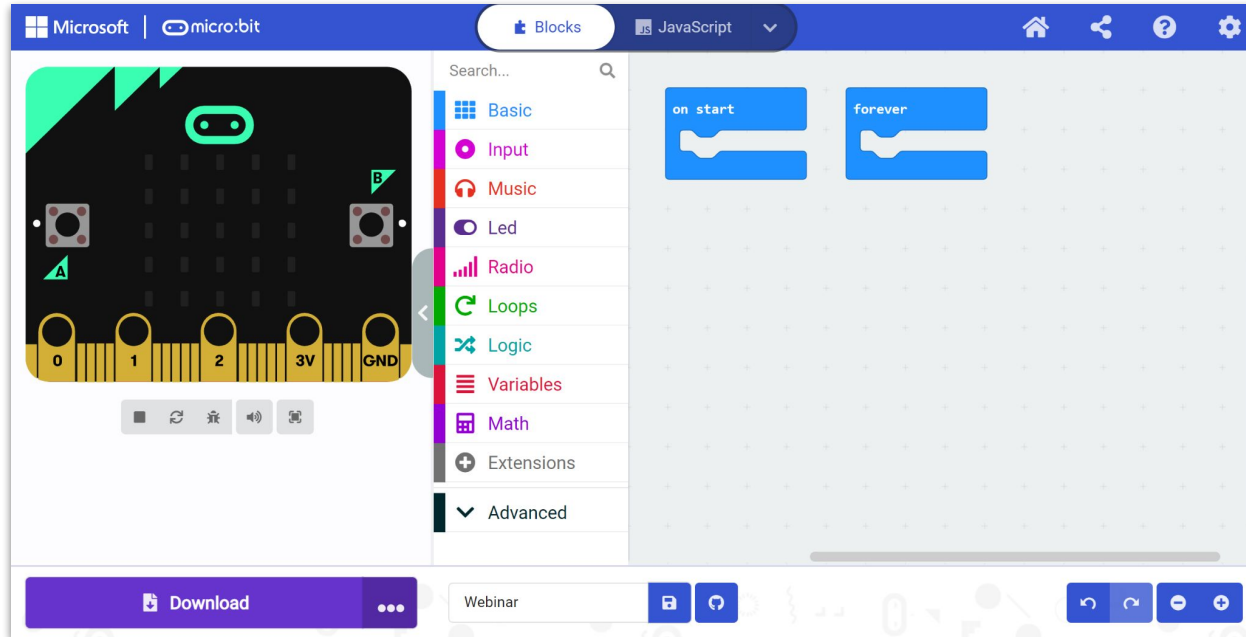- LED panel.
- Button A and B.
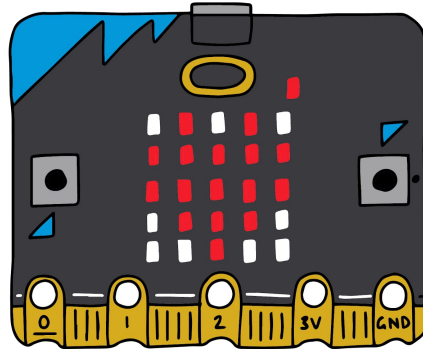
micro:bit

- Pins.

Back

- Radio antenna.
- Microphone.
- Reset and power button.
- Battery socket.
- Processor.
- Speaker.
- Compass and accelerometer.

Microsoft Makecode for micro:bit

Virtual micro:bit [Makecode editor](#).

Design and technology – National curriculum

National curriculum

Design and technology

Pupils should be taught to:

Design

✔ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
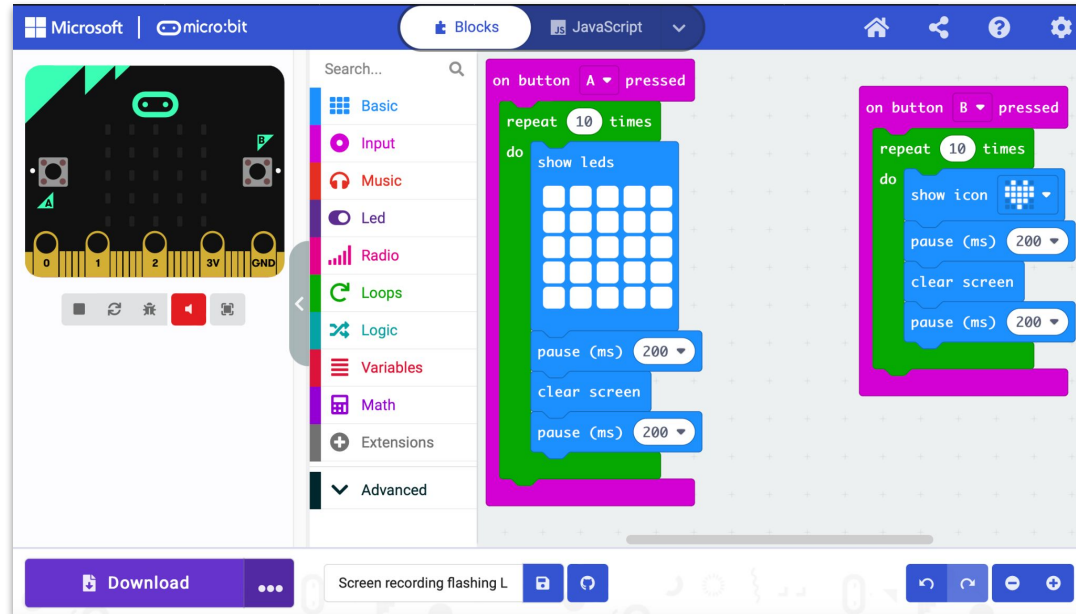
Technical knowledge

✔ apply their understanding of computing to program, monitor and control their products.

See National curriculum - Design and technology - Key stages 1 and 2.
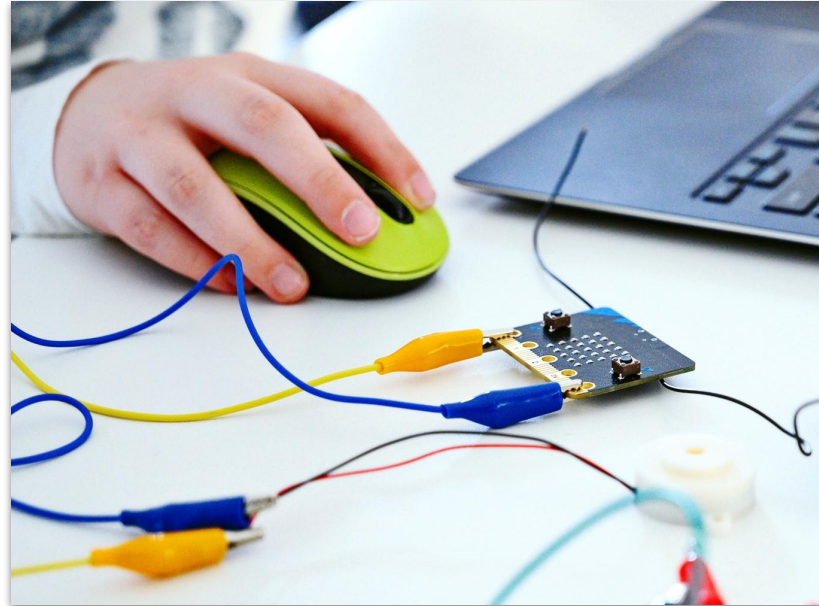
Design and technology - virtual micro:bit

Makecode editor

Design and technology - Lesson showcase

Year 3, Digital world: Wearable technology, Lesson 3: Programming wearable technology

Kapow
Primary

Design and technology - cross-curricular opportunities

Computing.

Year 4, Digital world: Mindful moments timer - Wellbeing.

Year 5, Digital world: Monitoring devices - Science, Maths.

Year 6, Digital world: Navigating the world - Geography, Maths.

# Computing: National curriculum

National curriculum

Computing

Pupils should be taught to:

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

✔ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

✔ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

See National curriculum - Computing - Key stages 1 and 2.

Computing- Lesson showcase

Computing> Year 5: Micro:bit> Lesson 4: Programming a pedometer
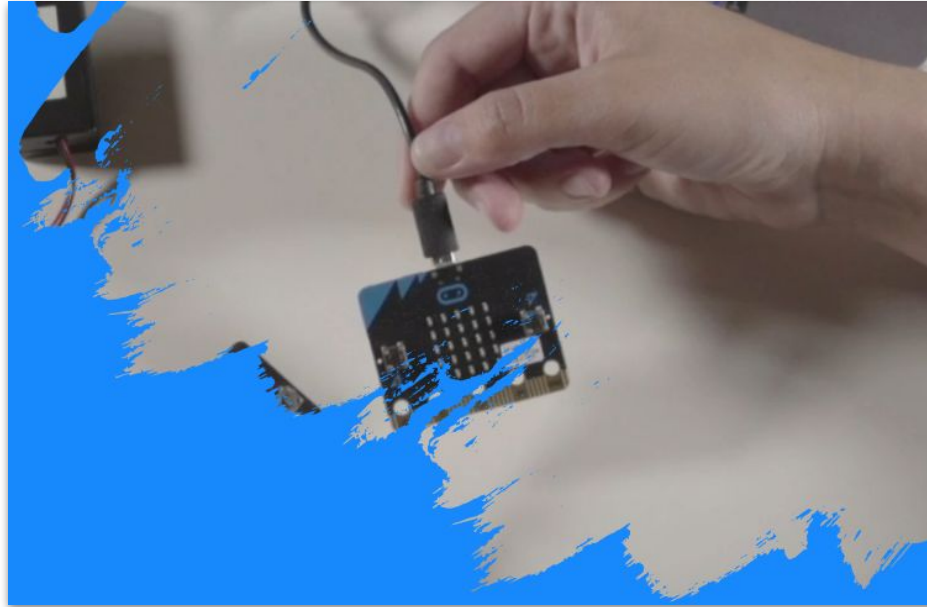
Computing – Cross curricular opportunities

- [Lesson 3: Polling program](#)- create a poll for any area of the curriculum. This is a great tool for discussion around certain teaching points.

- [Lesson 4: Programming a pedometer](#)- PE, Wellbeing.

- [Lesson 5: Programming a scoreboard](#)- create a scoreboard for cross curricular games, plenaries etc.

Kapow
Primary

Any questions?

Kapow
Primary