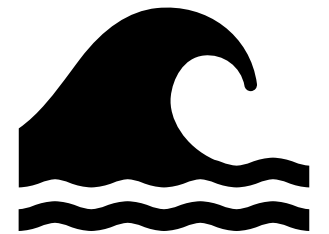
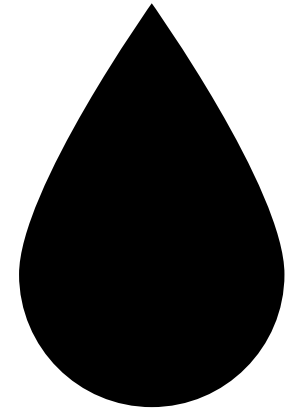
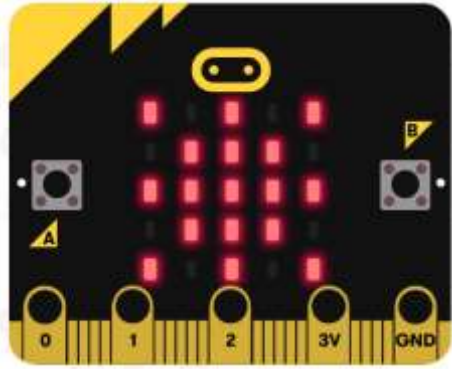


Clear or dirty water

- 1st micro bit shines bright light through a sample of water
- 2nd micro bit detects the amount of light received through water sample and sends the amount to the 3rd micro bit
- 3rd micro bit display the light value and indicates cleanish/not clean



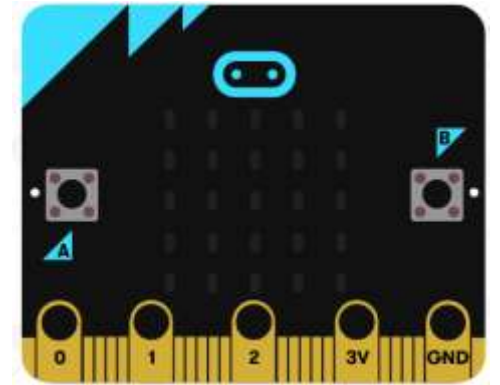
Light Source



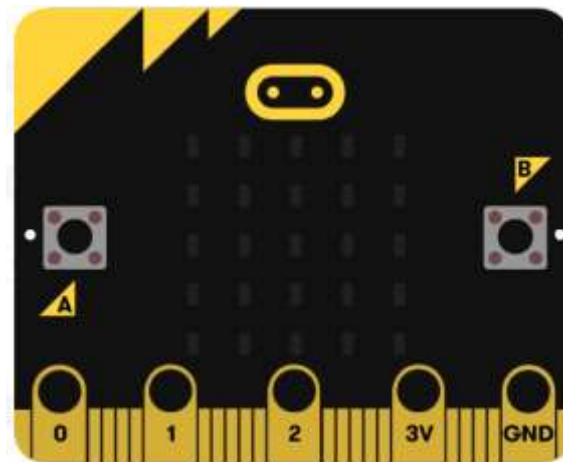
Water Sample



Light Sensor



Display Light Level



0 is dark – very little light detected
255 is light – a lot of light detected

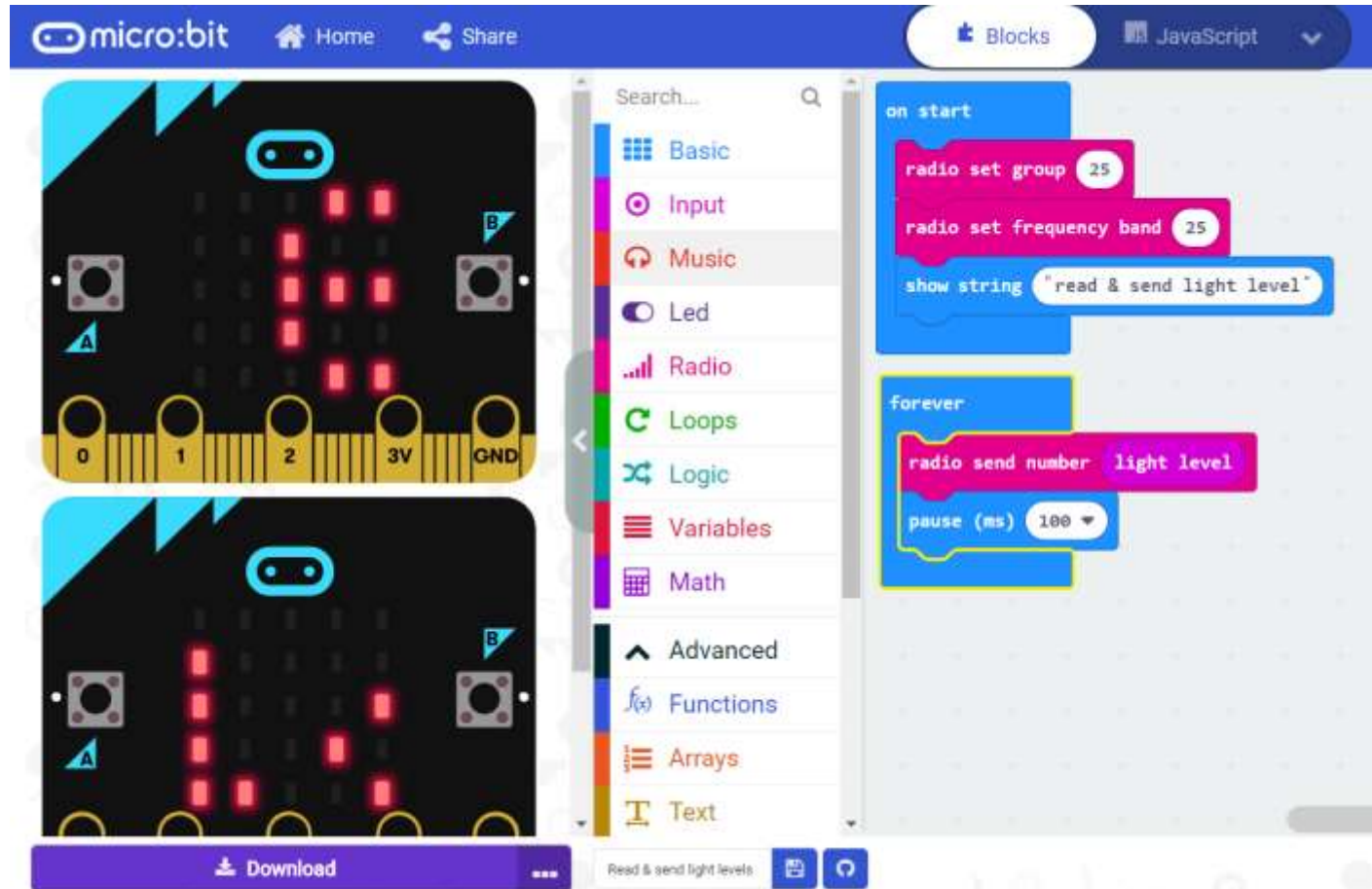
1st Micro bit shines light through water

<https://makecode.microbit.org/WsV9wUJpKAw0>

The image shows a screenshot of the Micro:bit MakeCode editor interface. At the top, there is a blue navigation bar with the 'micro:bit' logo, 'Home', 'Share', 'Blocks', and 'JavaScript' options. The main workspace is divided into three sections: a virtual Micro:bit board on the left, a block palette in the center, and a script area on the right. The virtual board shows a 5x5 grid of red LEDs. The block palette includes categories like Basic, Input, Music, Led, Radio, Loops, Logic, Variables, and Math. The script area contains a 'forever' loop block with a 'show leds' block inside. A yellow note on the right reads 'Light shining from Micro bit through water sample'. At the bottom of the board, there are control buttons for stop, refresh, play, and volume.

2nd Micro bit reads the light level through water

<https://makecode.microbit.org/UCU9tjWeT2ac>



3rd Micro bit shows results

<https://makecode.microbit.org/7g2LiY4wD1vP>

The screenshot displays the Microsoft MakeCode Micro:bit IDE interface. On the left, a virtual Micro:bit board is shown with its pins labeled 0, 1, 2, 3V, and GND. A central sidebar contains a search bar and a category menu with options: Basic, Input, Music, Led, Radio, Loops, Logic, Variables, Math, and Advanced. The main workspace is divided into two sections: 'on start' and 'on radio received'. The 'on start' section contains three blocks: 'radio set group' (25), 'radio set frequency band' (25), and 'show string' ('display'). The 'on radio received' section features a pink 'on radio received' block with a 'receivedNumber' variable. Inside, there is a teal 'if' block with the condition 'receivedNumber > 200'. The 'if' block has two paths: a 'then' path with 'show number' (receivedNumber), 'show icon' (dots), and 'show icon' (dots); and an 'else' path with 'show icon' (dots), 'show icon' (dots), and 'show number' (receivedNumber). On the right side, two yellow callout boxes provide instructions: 'drag and drop received Number from pink block to if blocks' and 'Light level of 255 is bright. More light is detected through water. Light level of 0 is dark. Less light is detected through water.' The bottom of the interface includes a 'Download' button, a 'Show results of light lev' button, and navigation icons.