ROLL A DICE - 2

Make the micro:bit behave like a die when rolled on to a table: at random it shows one of six possible images.

1

You will use the micro:bit's **shake** sensor to choose a **random number** and display an image on the LEDs.

How to get a random number:

- Click on the **'get random number'** module.
- Link the WHEN tab to the shake sensor - choose 'is shaken' setting.
- From the ASSIGN tab, set **number** to a random number from 1 to 6.

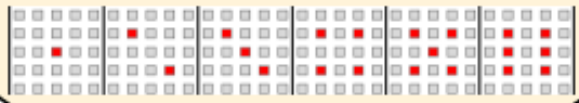
2

When the micro:bit is shaken, set number to a random number from 1 to 6.

How to create and display the images:

- Click on the **'show image'** module.
- Link OUTPUTS to the LEDs.
- Set the Display type to 'Image Array' - select frame index: *number*
- Create six images, copying these patterns:

3



The extra program script should read:

Show the LED array image (number) for 2 seconds.

4

Select **Control** mode to test the program.

Shake the micro:bit and wait for a number to appear.

ROLL A DICE

Make the micro:bit behave like a die when rolled on to a table: at random it shows one of six possible numbers.

1

You will use the micro:bit's **shake** detector to choose a **random number** and then display the number on the LEDs.

How to get a random number:

- Click on the **'get random number'** module.
- Link the WHEN tab to the shake sensor - choose 'is shaken' setting.
- From the ASSIGN tab, set **number** to a random number from 1 to 6.

2

When the micro:bit is shaken, set number to a random number from 1 to 6.

How to display the number on the LEDs:

- Click on the **'show number'** module.
- Link OUTPUTS to the LEDs.
- Set the Display type to 'Message' - select (number) from the list.

3

The extra program script should read:

Show the LED message (number) for 2 seconds.

Select **Control** mode to test the program.

Shake the micro:bit and wait for a number to appear.

4

Further challenge

Instead of showing the number, choose Display type 'Image array' to show an image with the correct number of spots. (Select frame index: ***number***.)