**Dice**

## **Step 1: Make it**

### **What is it?**

Shake your micro:bit to make random numbers.

### **How it works**

1. Like the Get silly project this program uses the micro:bit’s accelerometer to make something happen when you shake it.
2. When you shake your micro:bit, the program selects a random number between 1 and 6 and shows it on the LED display.
3. It's really hard for computers to make truly random numbers because they’re machines that work precisely and regularly.
4. Make a tally chart of how often each number comes up. Are these numbers really random? Compare it with real dice.

### **What you need**

* micro:bit (or MakeCode simulator)
* MakeCode or Python editor
* battery pack (optional)
* real dice (optional)

## **Step 2: Code it**

A screenshot of a computer

Description automatically generated

## **Step 3: Improve it**

* Make the number appear for a few seconds, then clear the LED display to save batteries.
* Make it roll 2 dice. You can make a random number between 2 and 12, or you can make two random numbers between 1 and 6 and add them together.
* Try both methods and tally how often each score occurs. Does it make a difference? Do some numbers come up more often than others?