Micro:bit - Create Your Own Output

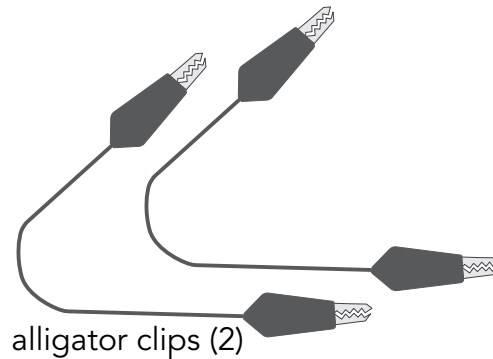http://dwig.lmc.gatech.edu/projects/prototypingpuppets/

This document will teach you how to connect one of our popsicle circuits to a micro:bit as an output. This output is the same light that can be used to make a rod puppet.
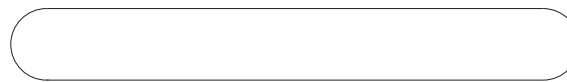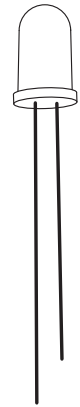
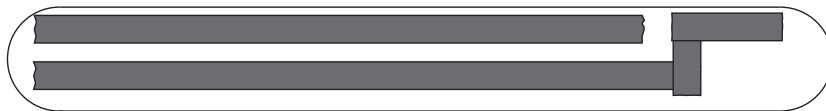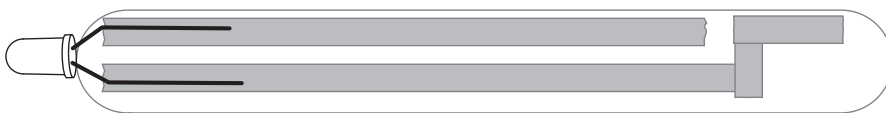## Materials:
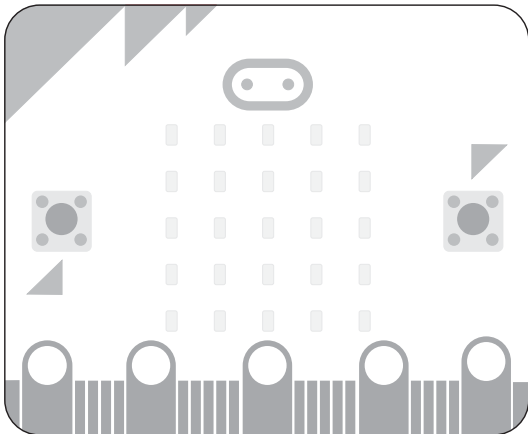
micro:bit

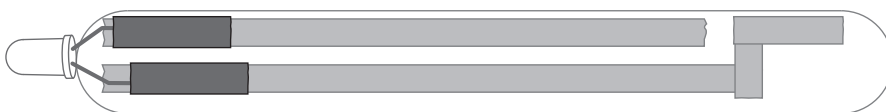alligator clips (2)

copper tape

large craft stick

LED

Instructions:

Step 1: _Attach_ **copper tape** to **craft stick** as shown in picture.

Note: In order to _lay_ corners, _use_ separate overlapping pieces of **copper tape**.
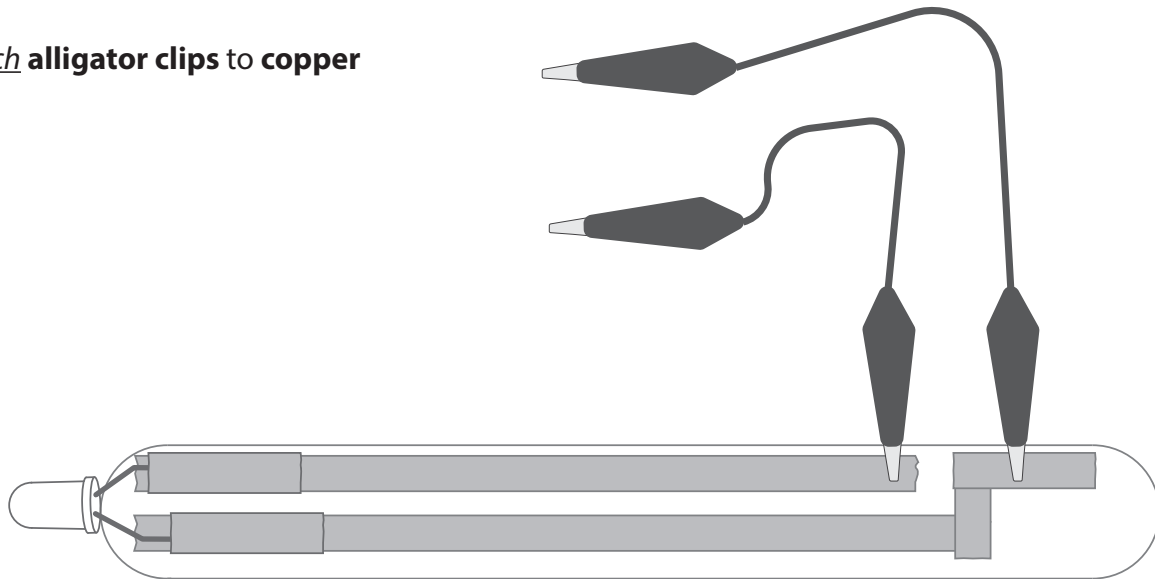
Step 2: _Spread_ the **LED legs** and _lay_ over **copper tape**. _Make sure_ that one leg is on each **strip**, and that they are _not overlapping_.

**Step 3:** _Attach_ **copper tape** over the **LED legs** to secure them to the **copper tape** underneath.

Step 4: _Attach_ **alligator clips** to **copper tape.**

Step 5: _Attach_ other end of each **alligator clip** to **micro:bit**.

Now you have created your own output for your microbit!

Note: The pins will depend on how you program your microbit. To follow the example code below, attatch the clips to **pin0** and **GND**.
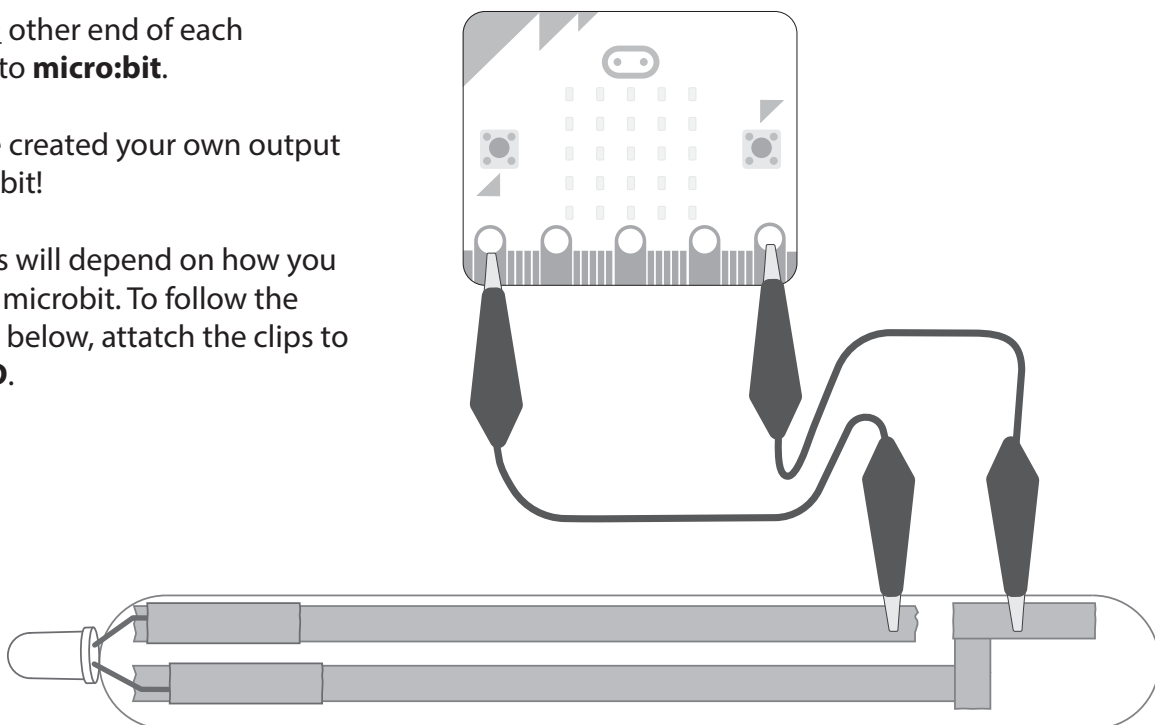
Here is an example of code that works with this configuration using **pin0** and **GND**.

When this code is downloaded on your **micro:bit**, pressing button A will turn on the light, and pressing button B will turn it off.

```
input.onButtonPressed(Button.A, function () {
    pins.digitalWritePin(DigitalPin.P0, 1)
})
input.onButtonPressed(Button.B, function () {
    pins.digitalWritePin(DigitalPin.P0, 0)
})
basic.forever(function () {

})
```

program at:
https://makecode.microbit.org/#editor