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)
- large craft stick
- copper tape
- 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.

```javascript
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