

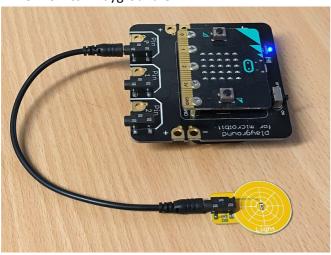
# Using the Light Sensor Gizmo with Playground for micro:bit

### **Requirements:**

- Playground for micro:bit, with micro:bit and batteries installed
- Light Sensor Gizmo
- 1 x Connection cable

#### **Connections:**

- 1. Switch Playground OFF
- 2. Plug connection cable into Gizmo and Pin 0 on Playground
- 3. Switch Playground ON



#### Without Software:

Cover the light sensor so it is dark and then gradually let more light reach it. Shine a torch directly at it for highest data reading

→ LED on Pin 0 of Playground will start lighting as the light gets brighter

#### **PXT Software Demo:**

We can use the same demo as for the Dial Gizmo, to display a number from 0 to 9

```
c forever

set item v to ( analog read pin P0 v ÷ v 100

show number (item v

pause (ms) 200
```



## MicroPython

We can do the same thing in micropython as follows:

```
from microbit import *
while True:
   value = int(pin0.read_analog()/100)
   display.show(str(value))
   sleep(200)
```

As before, we have to explicitly convert the result of the division into an integer so that only one digit is shown on the display.