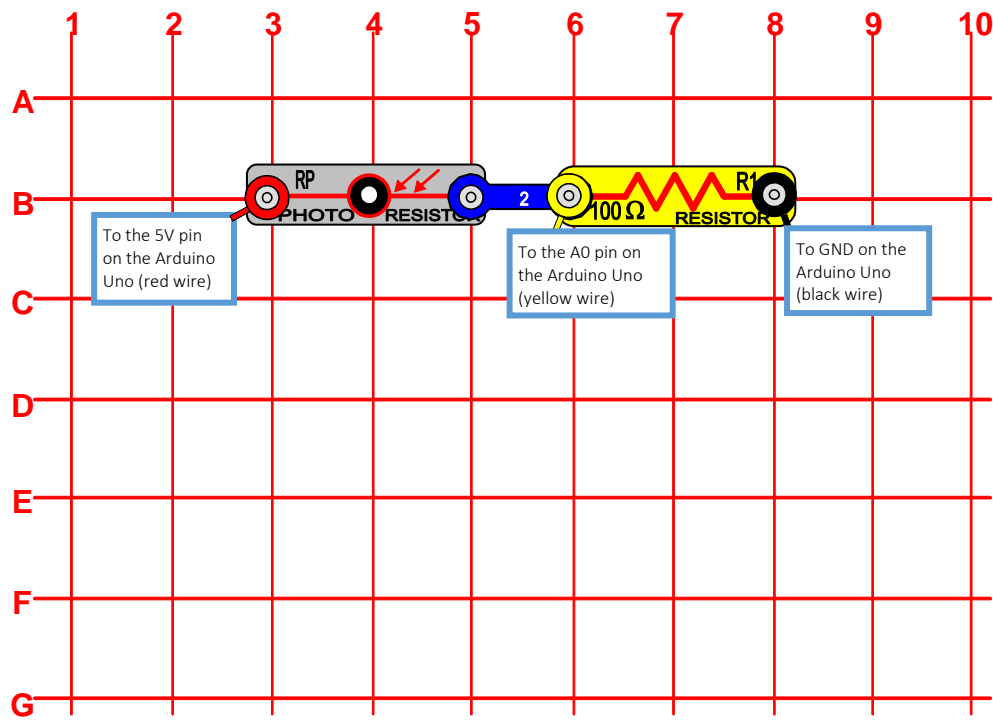


# Measuring Light



OBJECTIVE: To show how to use an Arduino sketch to measure light using a photoresistor.

## Parts List

Quantity	ID	Name	Part #
1		Base Grid Base Grid (11 x 7.7)	6SCBG
1		2-snap wire	6SC02
1	D1	Red LED	6SCD1
1	R1	100 $\Omega$ Resistor	6SCR1
3		Snap-to-Pin wire (red, black and yellow)	SCJW10

## Step by Step Guide

- 1) Snap component **RP** between position **B3** and **B5**
- 2) Snap component **R1** between **B6** and **B8**
- 3) Snap a 2 snap wire over the components between **B5** and **B6**
- 4) Connect the snap end of a **red** wire onto the component at position **B3**
- 5) Plug the male pin end of the **red** wire from step 4 into the **5V** pin on the Arduino Uno board
- 6) Connect the snap end of a **black** wire onto the component at position **B8**
- 7) Plug the bread board end of the **black** wire from step 6 into **GND** on the Arduino Uno board
- 8) Connect the snap end of a **yellow** wire onto the component at position **B6**
- 9) Plug the male pin end of the **yellow** wire from step 8 into pin **A0** on the Arduino Uno board
- 10) Open the sketch for Measuring Light in the Arduino IDE and upload it to the board. Use a flashlight to vary the light on the component RP and see what happens. Also try blocking the light completely by placing your finger over the hole.