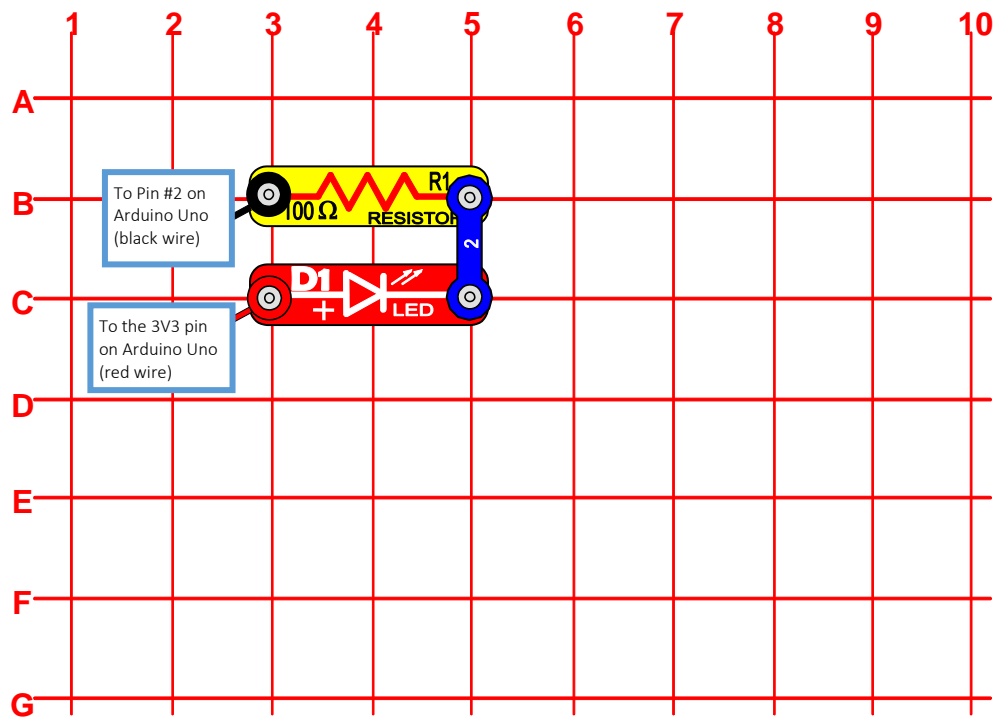


Breathing LED



OBJECTIVE: To show how to use an Arduino sketch to change the apparent brightness of an LED.

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 Ω Resistor | 6SCR1 |
| 2 | | Snap-to-Pin wire (red and black) | SCJW10 |

Step by Step Guide

- 1) Snap component **R1** between position **B3** and **B5**
- 2) Snap component **D1** between **C3** and **C5**
- 3) Snap a 2 snap wire over the components between **B5** and **C5**
- 4) Connect the snap end of a **red** wire onto the component at position **C3**
- 5) Plug the male pin end of the **red** wire from step 4 into the **3V3** pin on the Arduino Uno board
- 6) Connect the snap end of a **black** wire onto the component at position **B3**
- 7) Plug the bread board end of the **black** wire from step 6 into the **Pin 2** on the Arduino Uno board
- 8) Open the sketch for Breathing LED in the Arduino IDE and upload it to the board. Your LED will begin to appear to breath by changing its brightness.