R G B

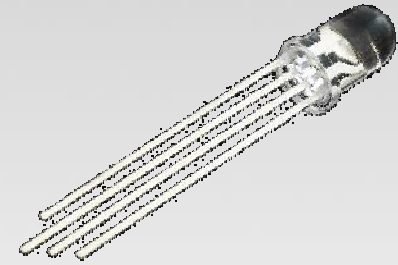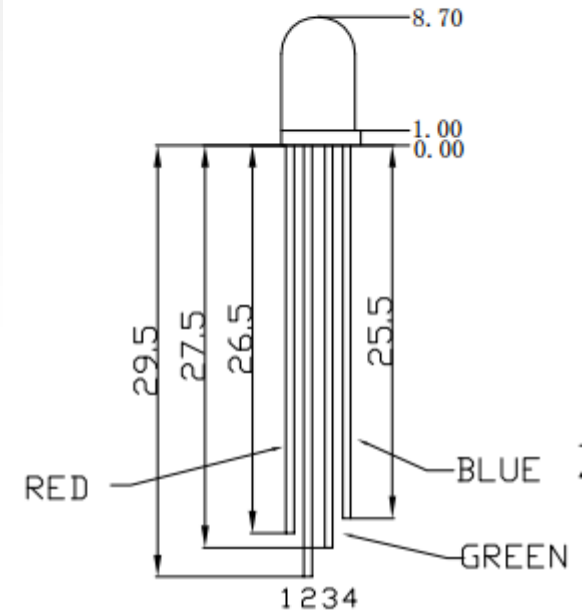# Color Mixing
Tri-color LED
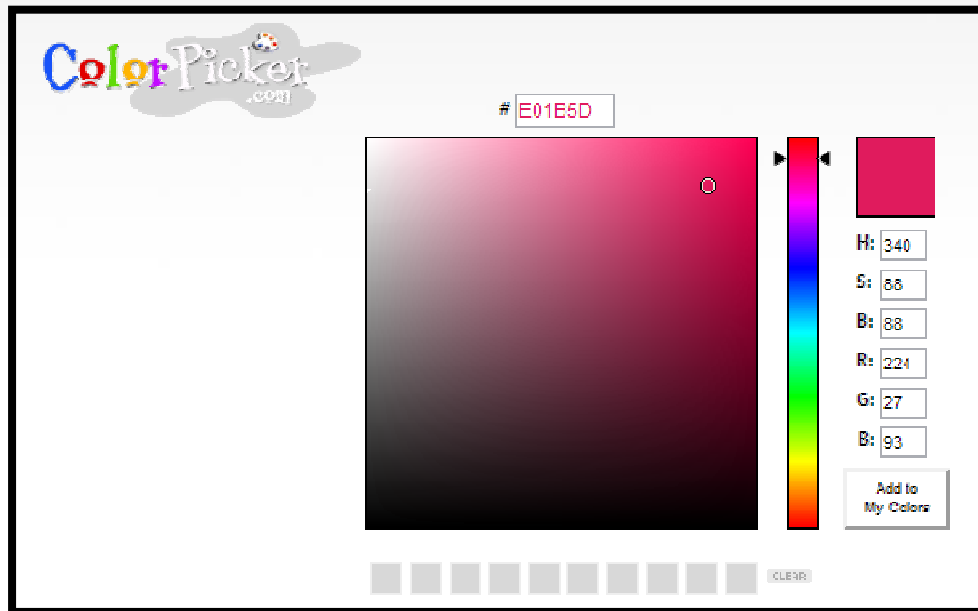
In the SIK, this is a standard – Common <u>Cathode</u> LED

This means the negative side of the LED is all tied to Ground.

8. 70

1. 00
0. 00

29.5 27.5 26.5 25.5

RED

BLUE

GREEN

1234

How many unique colors can you create?

$$\# \; of \; unique \; colors = 256 \cdot 256 \cdot 256$$
$$= 16{,}777{,}216 \; colors!$$

Use Colorpicker.com or experiment on your own.

Pick out a few colors that you want to try re-creating for a lamp or lighting display...

Play around with this with the `analogWrite()` command.

RGB LED Color Mixing

```
int redPin = 5;

int greenPin = 6;

int bluePin = 9;


void setup()
{
   pinMode(redPin, OUTPUT);

   pinMode(greenPin, OUTPUT);

   pinMode(bluePin, OUTPUT);

}
```

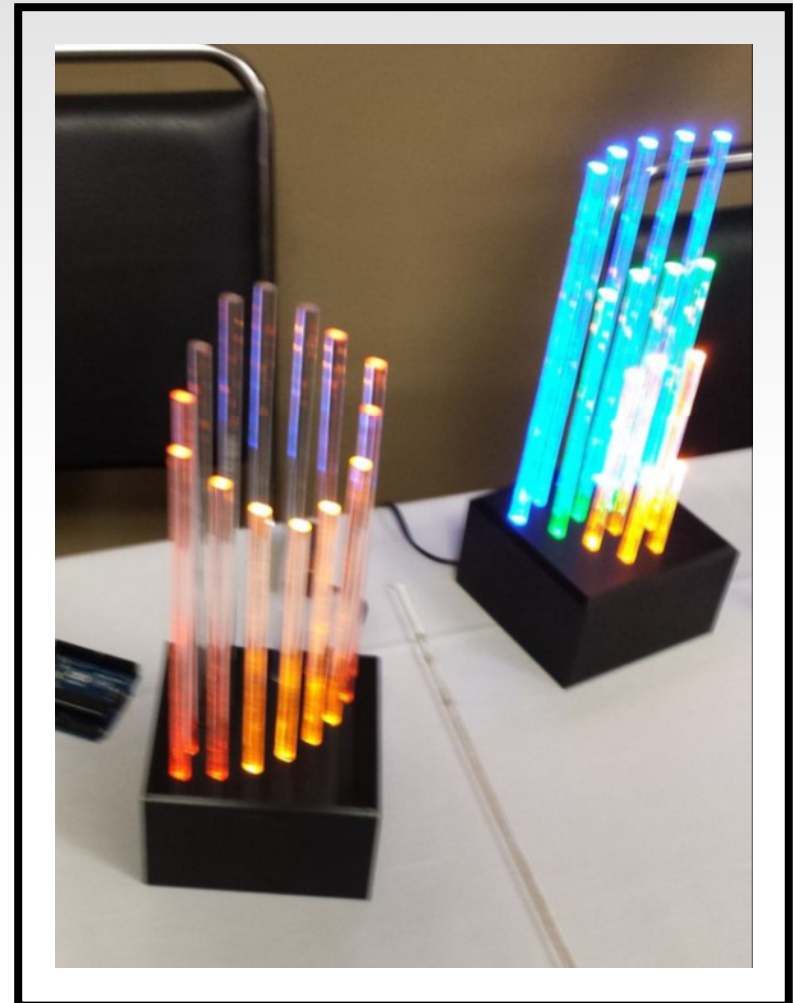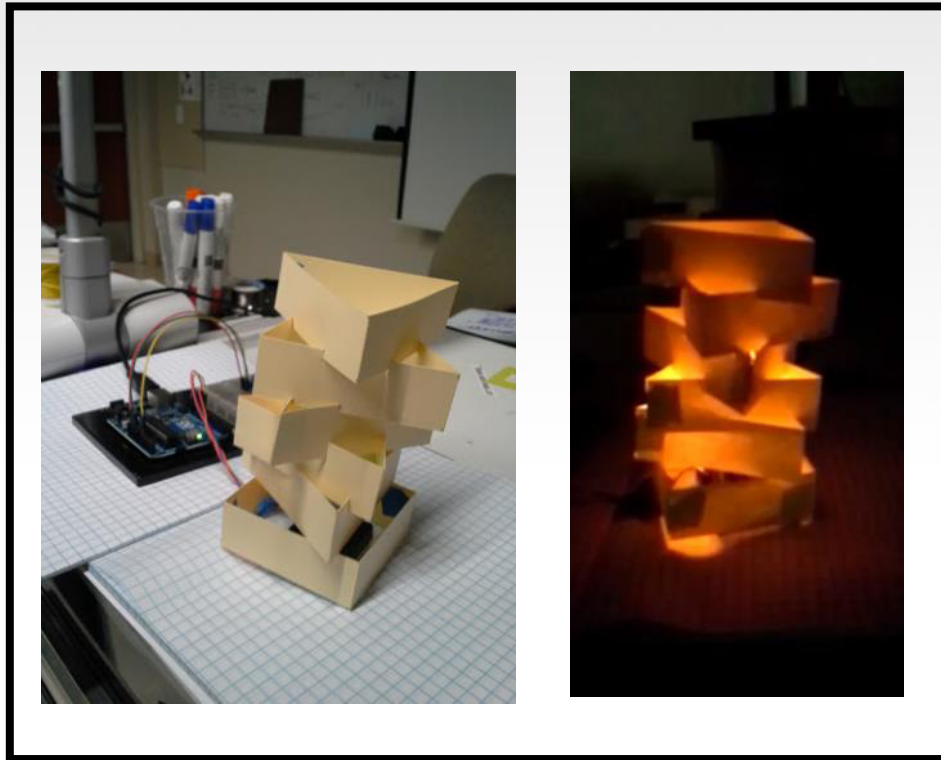# RGB LED Color Mixing

```
void loop()
{
   analogWrite(redPin, 255);
   analogWrite (greenPin, 255);
   analogWrite (bluePin, 255);
}
```

Project: Mood Lamp / Light Sculpture