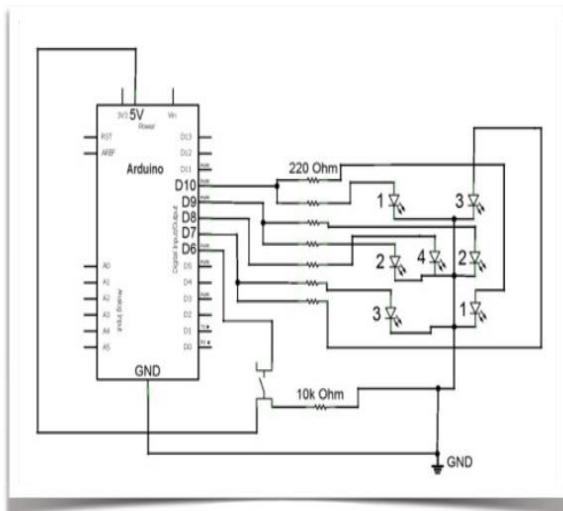


# Arduino

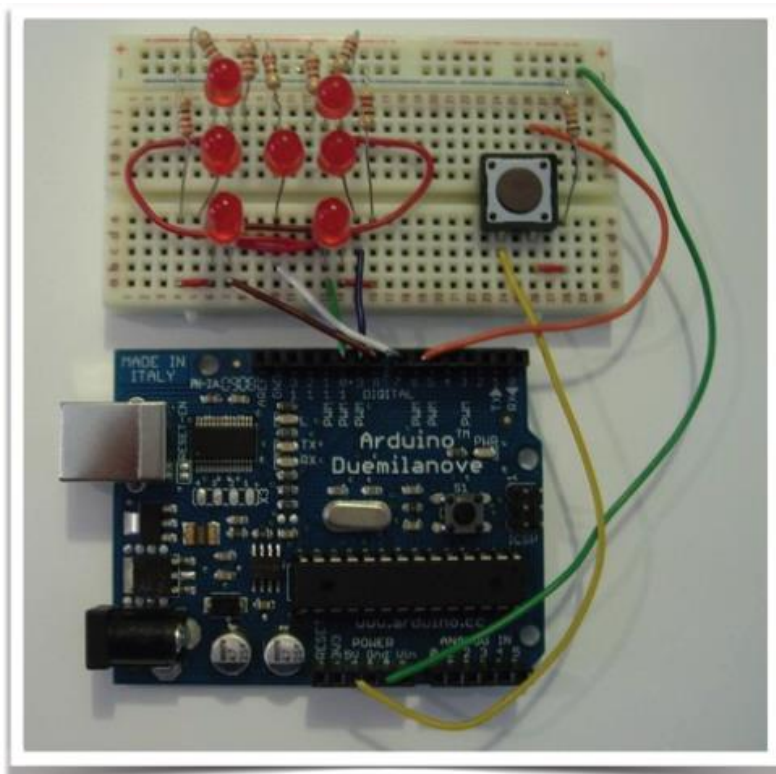


**I'm Learning about**  
Making a Dice from LED's  
Card **1** of **2**

- 1** Make sure you have mastered the LED Blink exercise before starting this exercise.
- 2** We are going to make this circuit using Resistors, LED's in the shape of an "H", a Switch and a Breadboard, wired up to an Arduino

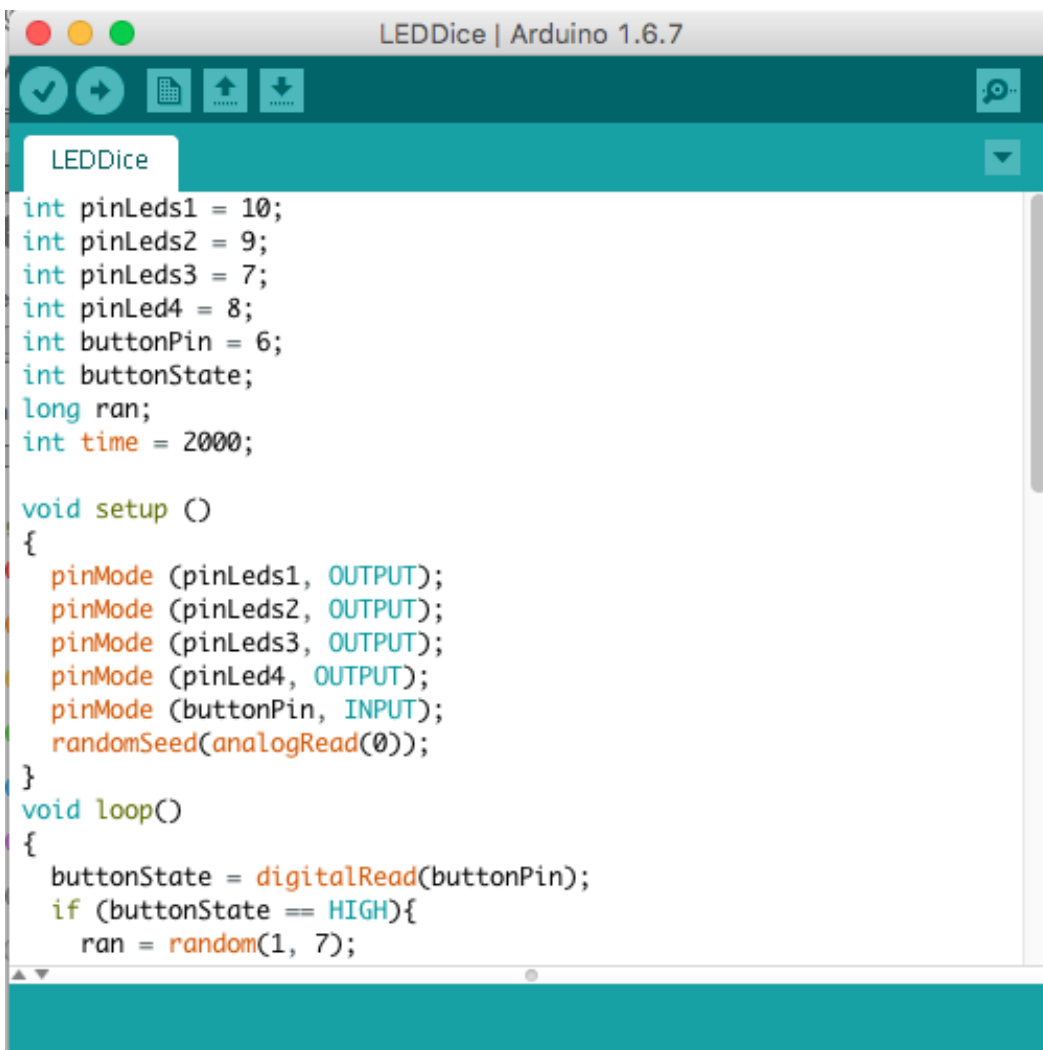


- 3** Continue to build out the circuit until you use all the components.



Don't Forget! - the LED's need to be positioned with the longer leg (Anode) on the + side of the circuit.

**4** Now review the code/Sketch (LEDDice.ino) that control the LED's. Review the code for the Pins Outs that matches the Breadboard Wiring, the detection of the button press, the use of a random number generator to decide which LED to light up and the initialization and de-initialization code!



```
LEDDice | Arduino 1.6.7

int pinLeds1 = 10;
int pinLeds2 = 9;
int pinLeds3 = 7;
int pinLed4 = 8;
int buttonPin = 6;
int buttonState;
long ran;
int time = 2000;

void setup ()
{
  pinMode (pinLeds1, OUTPUT);
  pinMode (pinLeds2, OUTPUT);
  pinMode (pinLeds3, OUTPUT);
  pinMode (pinLed4, OUTPUT);
  pinMode (buttonPin, INPUT);
  randomSeed(analogRead(0));
}

void loop()
{
  buttonState = digitalRead(buttonPin);
  if (buttonState == HIGH){
    ran = random(1, 7);
  }
}
```

What you could try next...

1. Randomly vary the time interval for the LED to light up
2. Make all the numbers light up after pressing pressing the button