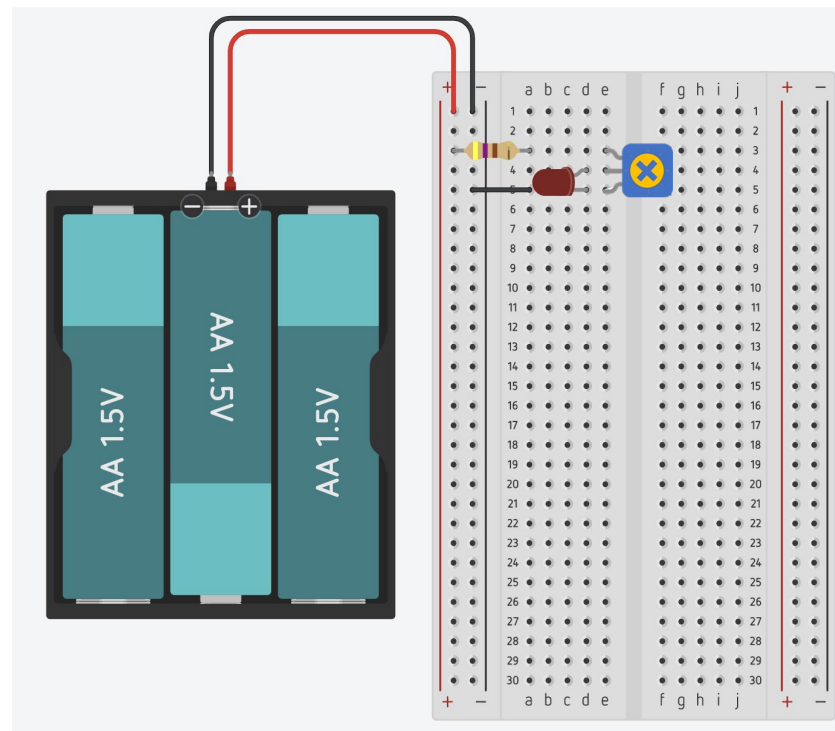
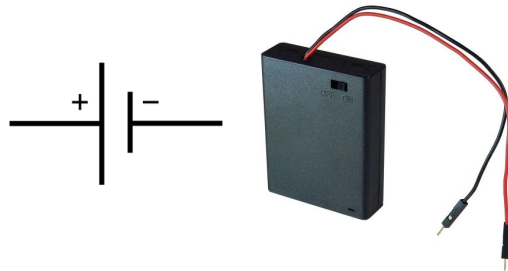


# Basic LED Circuit with a Potentiometer (POT)

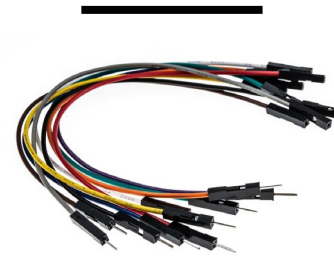


We will be building the Basic LED Circuit.  
Here are the components you will need.

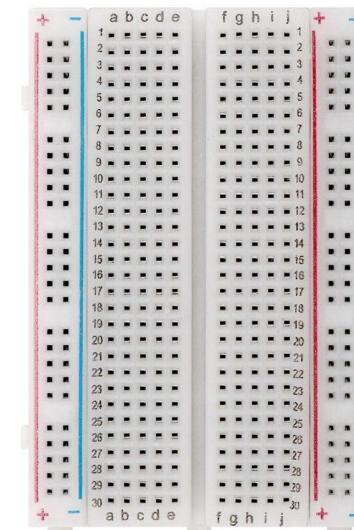
### 4.5V BATTERY PACK



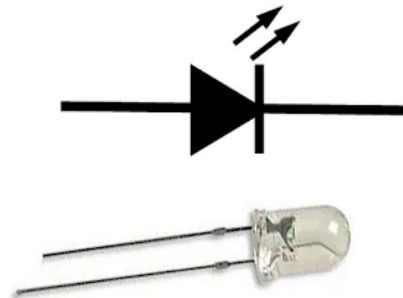
### WIRES



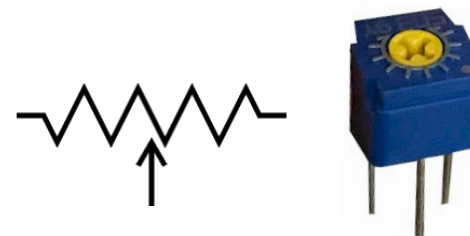
### BREADBOARD



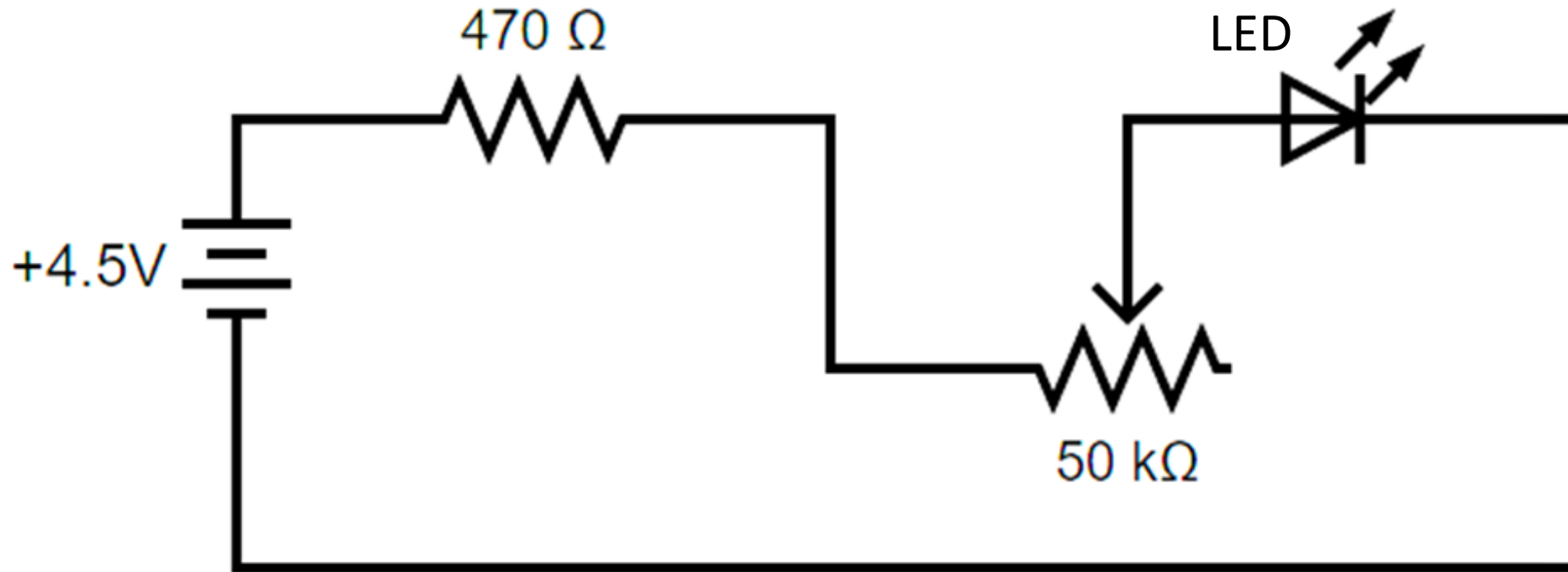
### LED (Light Emitting Diode)



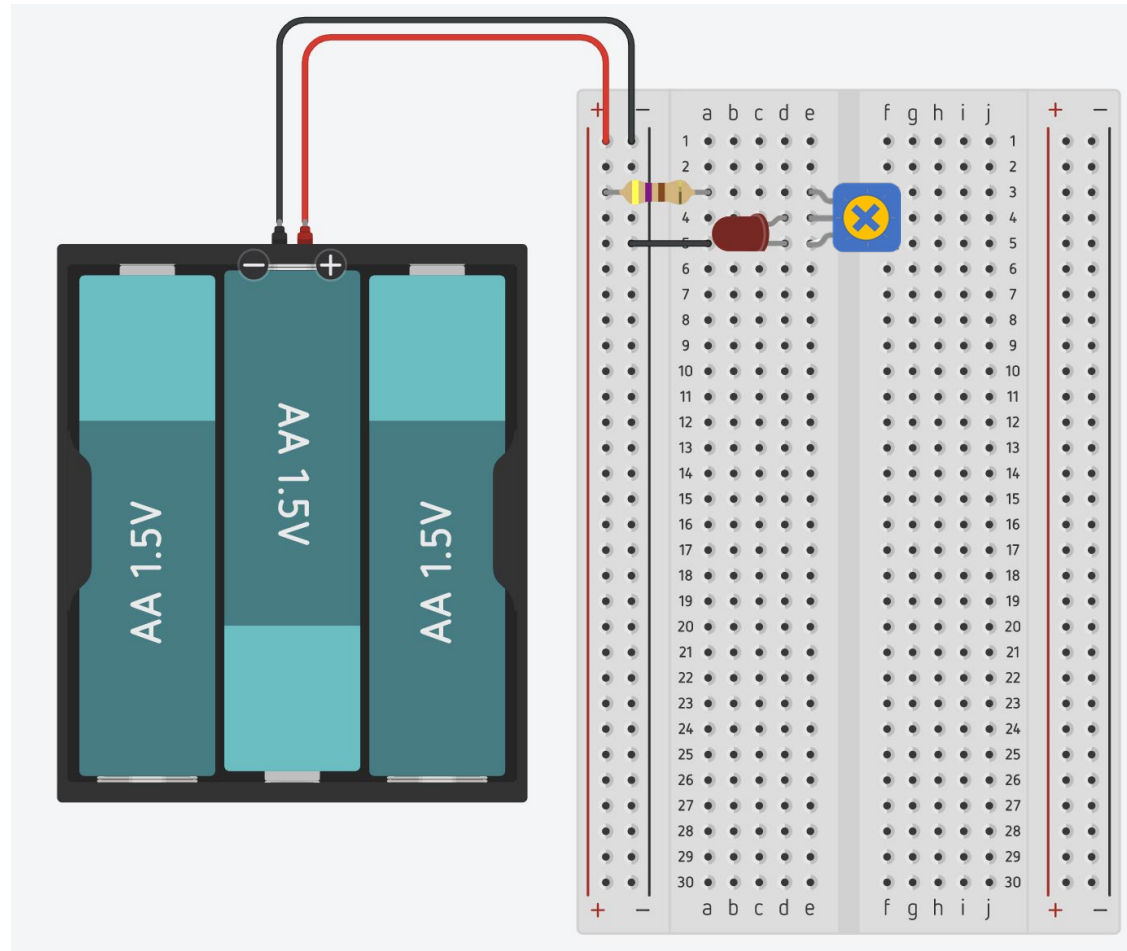
### Potentiometer

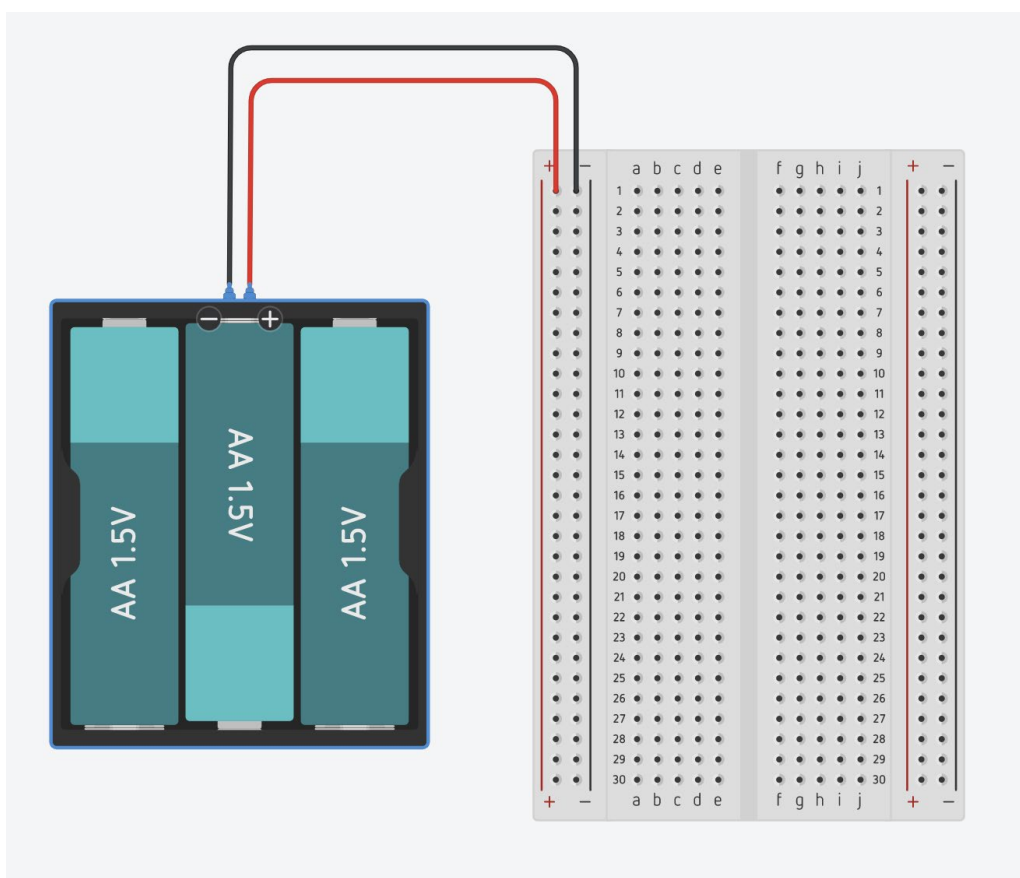


## Figure A: Circuit Diagram or Schematic



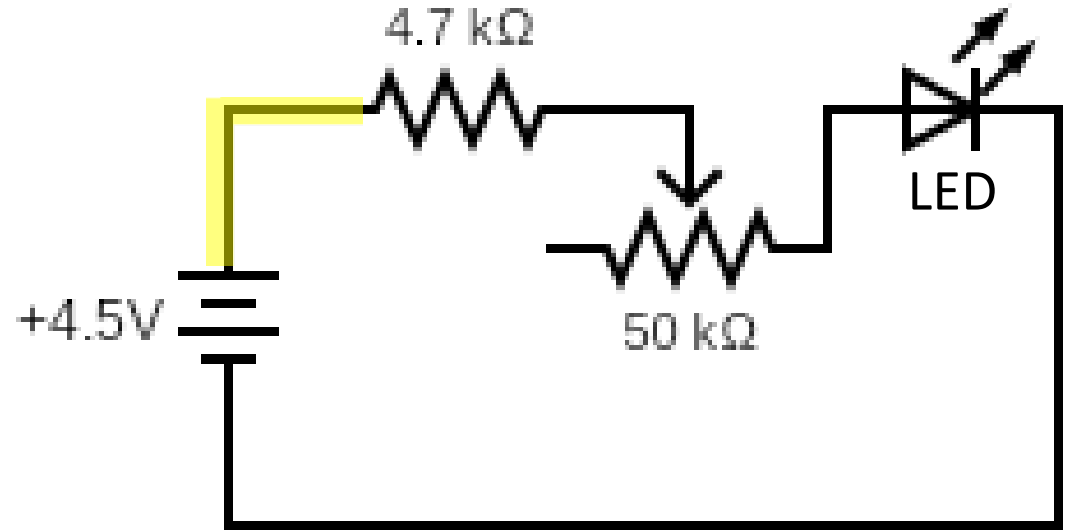
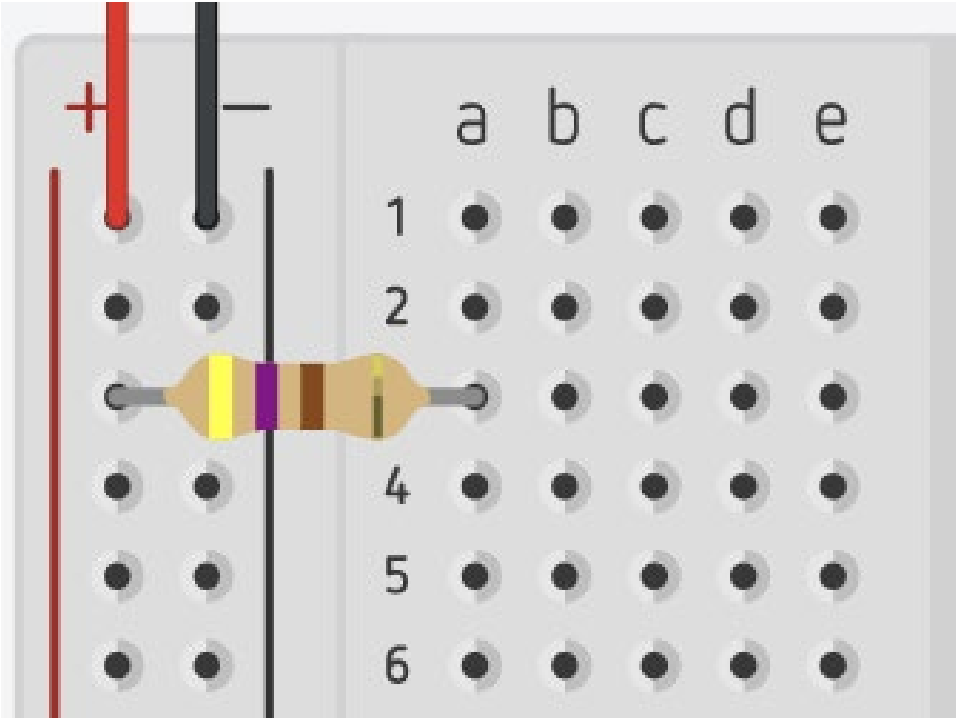
# Figure B: Drawing of your circuit



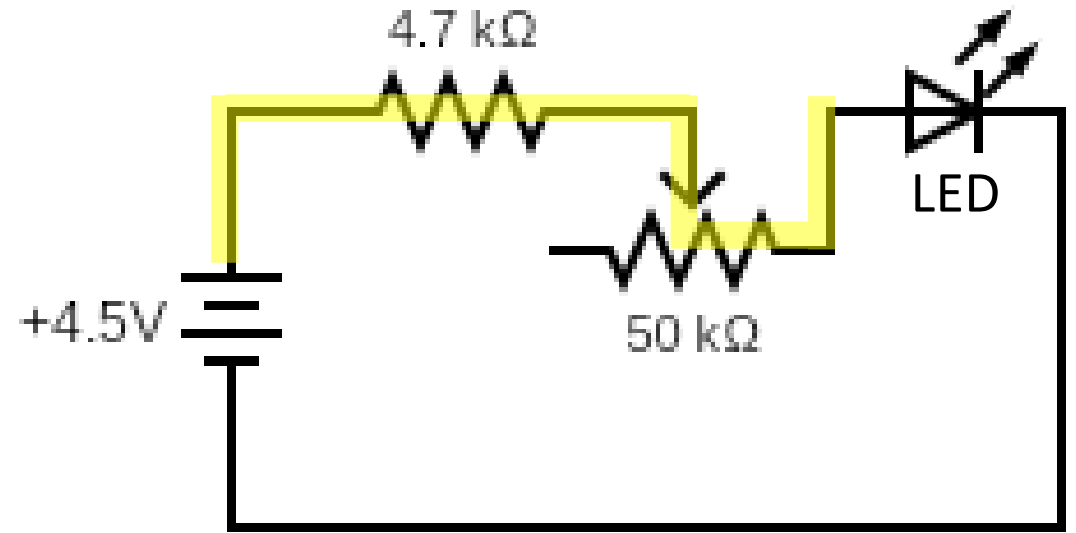
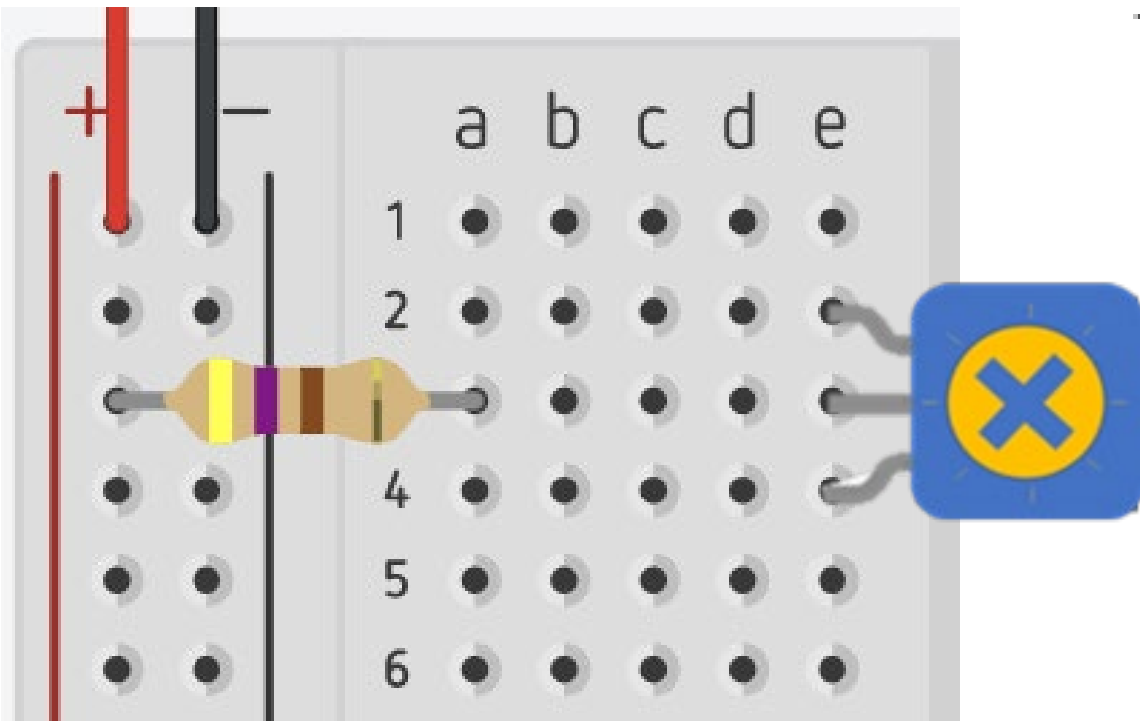


Hook up your 4.5volt battery to the breadboard

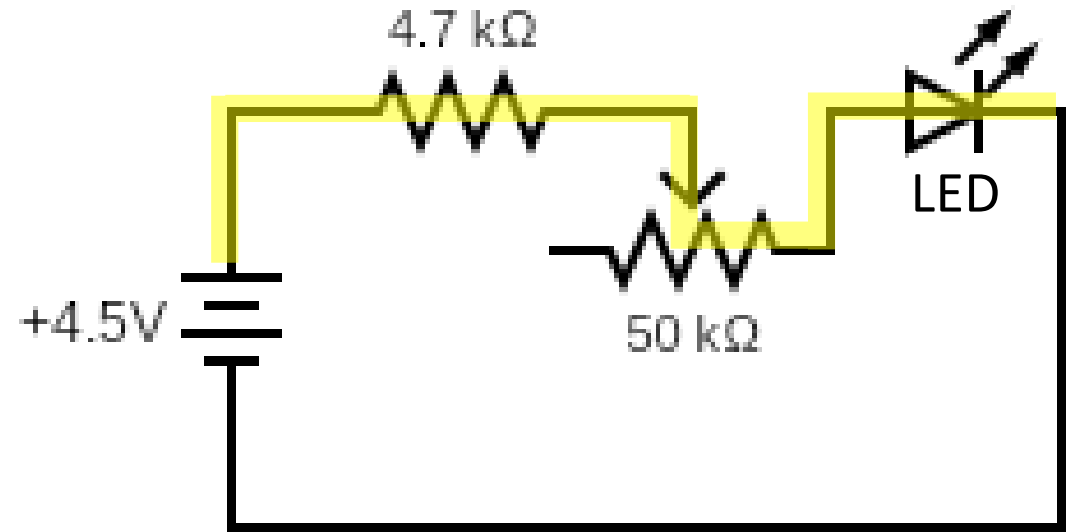
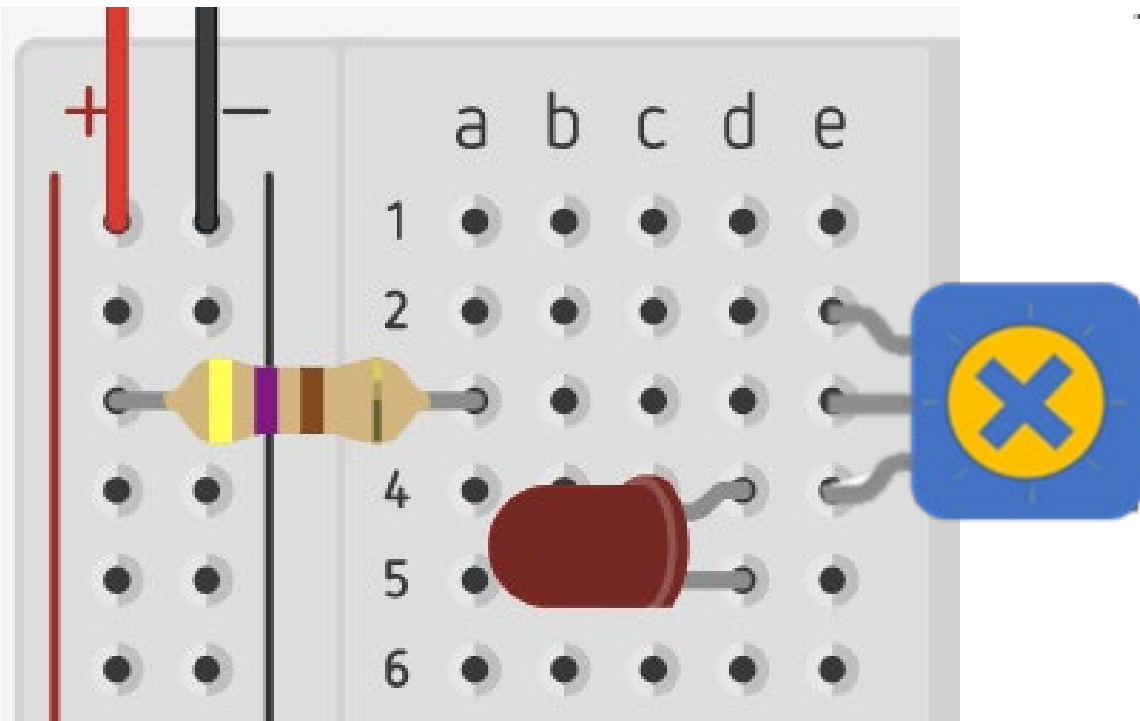
Make sure the positive (+) and negative (-) ends of the battery are connected to the appropriate (+) and (-) power buses on the breadboard. Make sure the battery is turned off! Only turn on the battery after the circuit is completed!



Connect a resistor from the (+) power bus to 3A on the terminal strip.

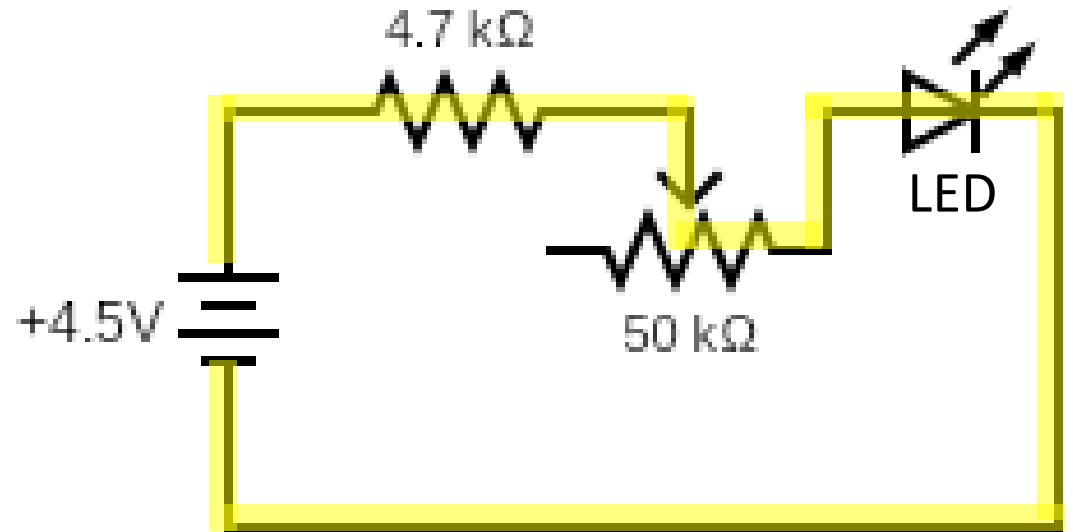
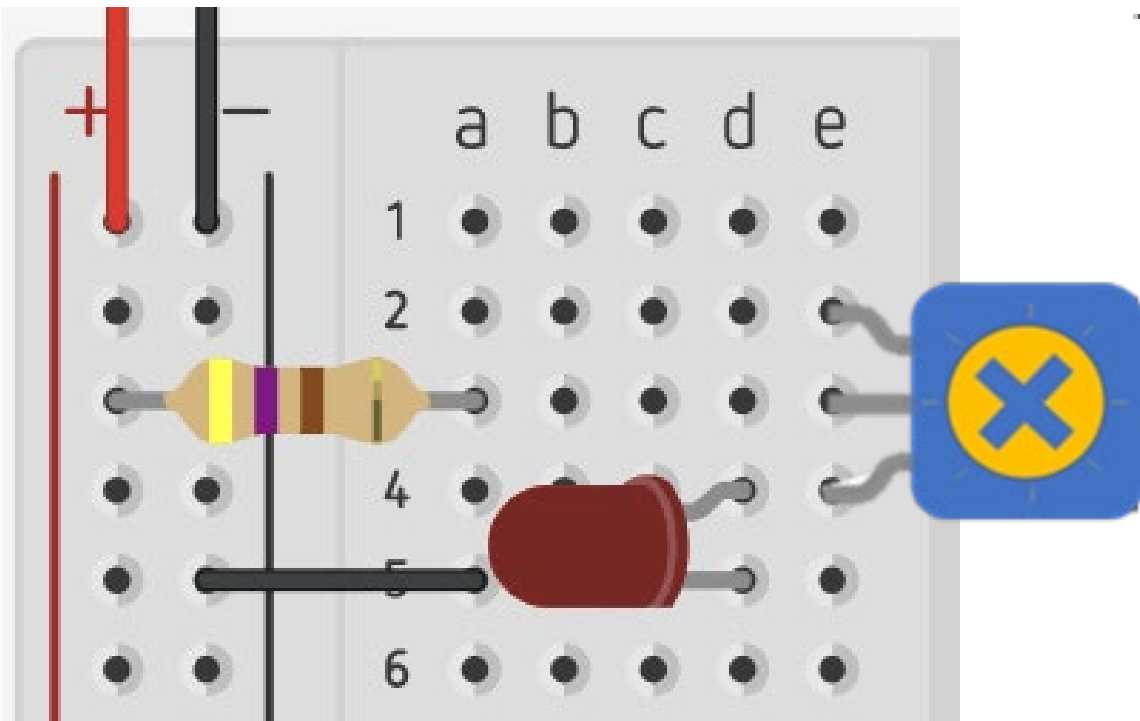


Connect the POT so that the middle pin is in 3E and the other two pins are in 2E and 4E.

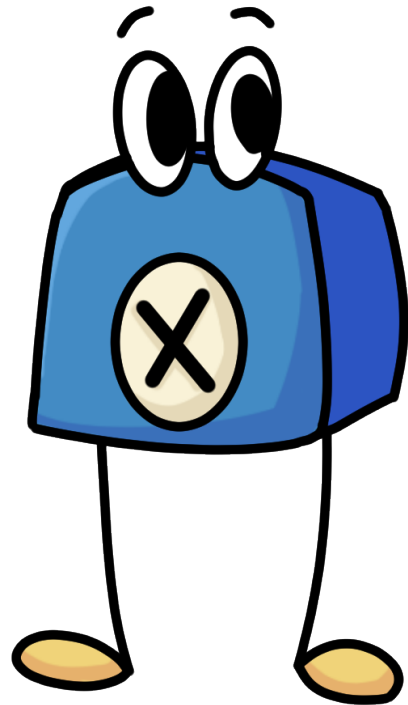


Connect the (+)  
leg of the LED to  
4D and the other  
leg (-) to 5D





Connect the LED to ground by connecting one end of the wire to 5A and the other end to the (-) power rail.



Use the potentiometer (POT) to adjust the brightness of the LED!

In your kit you will find a Phillips screwdriver that has a plus shaped end to adjust the POT.

Make sure one of your connections is to the middle pin of the POT.

# SQUARE BRAIN

BASIC LED CIRCUIT  
WITH A POTENTIOMETER (POT)

