

## **IEEE's Hands on Practical Electronics (HOPE)**

### **Week 7: MOSFETs (nFET)**

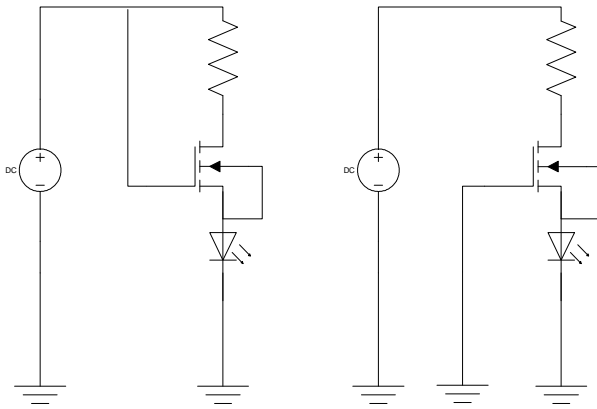
#### **Objective:**

Learn how NMOS work

#### **Materials:**

1 Breadboard  
1 9V Battery  
1 1k $\Omega$  Resistor  
1 nMOS  
1 LED

Build the following circuit:



#### **Questions:**

1. When you connect the gate to  $V_{\text{HIGH}}$  is the LED on or off?
2. Is current through the transistor on or off?
3. When you connect the gate to  $V_{\text{LOW}}$  is the LED on or off?
4. Is the current through the transistor on or off?