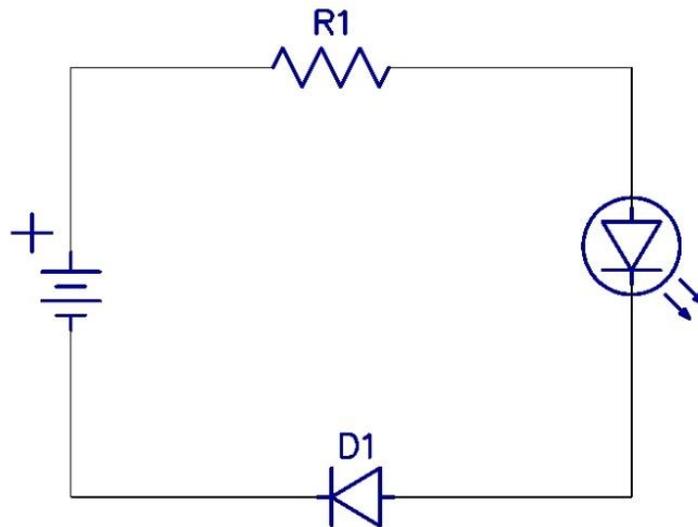
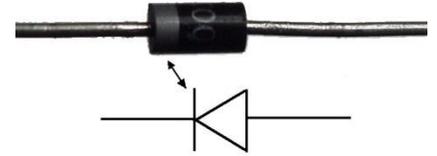


# Breadboard Lab #4

## *“How a diode works”*

1. Breadboard the following schematic diagram. Make sure your wires are flat! Make sure the CATHODE (end with the silver band) of the diode is connected to the negative. Set the Power Supply to 9 volts.



R1: 330 ohm (Orange, Orange, Brown, Gold)  
D1: 1n4002 - 1n4007 Diode

2. Now, switch the diode around so that the ANODE is connected to the negative. What is the difference? Use the [Electronic Components PowerPoint presentation](#) from class to answer to help.
3. Answer the following questions. Use your notes to help.
  - a) A diode allows current to flow through it in only \_\_\_\_\_ direction.
  - b) A diode has two ends, the \_\_\_\_\_ and the \_\_\_\_\_.
  - c) When the \_\_\_\_\_ is connected to negative, the LED will light up.
  - d) If the \_\_\_\_\_ is connected to negative, the LED will NOT light up.