

Block

## Lab Title: Exploring Current

**Problem:** How does current around a circuit compare?

**Materials:** small light bulb, electric cells (2), electric cell holder, switch, connecting wires, ammeter, voltmeter

### Procedure:

1. Connect a light bulb to the electric cells with a switch in series. Connect the switch to the negative end of the source before the light bulb
  2. Insert an ammeter in to the circuit between the switch and the light bulb
  3. Draw a circuit diagram of your circuit.
  4. Draw an arrow to indicate the flow of electrons
  5. Close the switch. Measure the current entering the light bulb
  6. Open the switch, remove ammeter and place on the other side of the light bulb (between light bulb and positive terminal). Make a prediction on how the current on this side of the light bulb will compare to the current from the other side
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7. Close the switch and measure the current leaving the light bulb.

|                                   |  |
|-----------------------------------|--|
| <b>Drawing of Circuit Diagram</b> | <b>Measurement of Current Entering the Light Bulb (don't forget units)</b> |
|                                   | <b>Measurement of Current Leaving the Light Bulb (don't forget units)</b>  |

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**Results:**

1. How does the current entering the light bulb compare to the current leaving the light bulb?
2. Based on your results, draw a conclusion about how the electrons entering the light bulb compare to the electrons leaving the light bulb.