## *TRY THIS: Measuring Currents*

**Skills Focus:** observing, predicting, measuring

In this activity, you will measure currents in a simple circuit using an ammeter.

**Materials:** small light bulb in a holder, electric cells in holders, switch, connecting wires, ammeter

1. Connect the light bulb to the electric cells with a switch in series. Insert an ammeter into the circuit between the switch and the light bulb (Figure 7).
2. Draw a circuit diagram of your circuit. Draw an arrow on your diagram to indicate the direction of electron flow.
3. Close the switch. Measure the current entering the light bulb.
4. Open the switch. Remove the ammeter and place it on the other side of the light bulb, between the light bulb and the positive terminal. Make a prediction about how the current on this side of the light bulb will compare with the current on the other side.
5. Close the switch and measure the current leaving the light bulb.

**A.** How does the current entering the light bulb compare with the current leaving the light bulb?

**B.** Based on your observations, draw a conclusion about how the electrons entering the light bulb compare with the electrons leaving the light bulb.

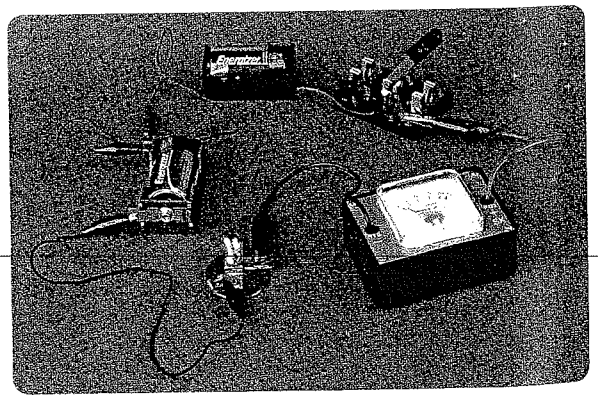

**Figure 7**