# 10.1 CHECK YOUR Understanding

1. Describe the major difference between static electricity and current electricity.
2. List the three parts of a circuit. Explain the function of each part and provide an example.
3. Why are circuit diagrams used rather than pictorial diagrams?
4. Draw a circuit diagram for a circuit that has two electric cells, a switch, and a light bulb.
5. Copy Figure 5 into your notebook. Label the components of the circuit. Label the positive and negative terminals of the two-cell battery on your diagram. Indicate the direction that the electrons flow.

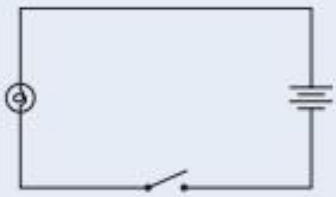

Figure 5

6. (a) Draw a circuit diagram of the circuit shown in Figure 6.
   (b) Explain the direction that the electrons flow in this circuit.

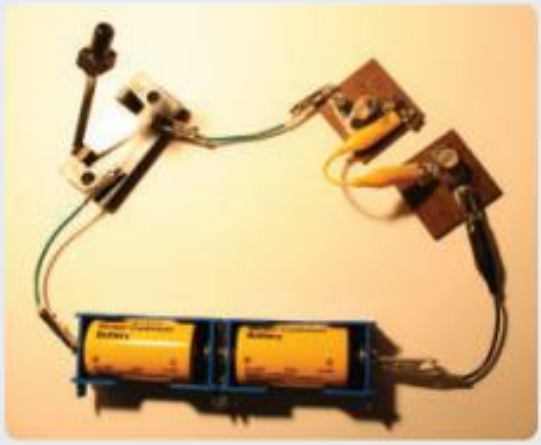

Figure 6

7. Draw a circuit diagram of the circuit shown in Figure 7.

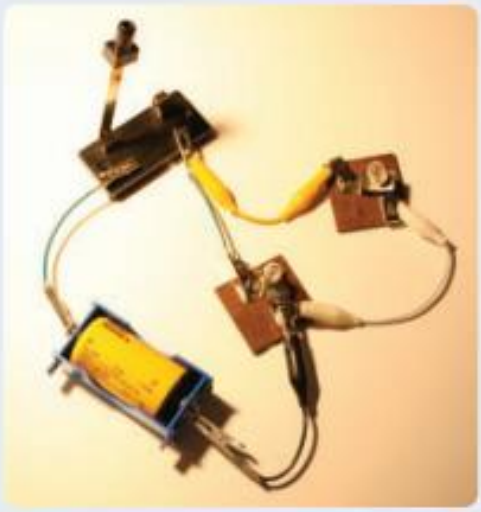

Figure 7

8. (a) What is the difference between a primary cell and a secondary cell?
   (b) What is the difference between an electric cell and a battery?
9. What are the three parts of a primary cell?
10. A smoke detector may use a rectangular 9 V battery that is composed of several electric cells. Is it correct to call it a battery or should it be called an electric cell?
11. Which part of a circuit converts electrical energy into another form of energy?
12. Give an example of an electrical load that converts electrical energy to light energy and an example of a load that converts electrical energy to heat energy. Which load do you think uses the most energy?