

Sum It Up »

On each numbered line, fill in the vocabulary term that matches the description.

1

a material that *cannot* carry electric charges

2

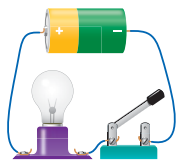
a material that *can* carry electric charges

An electric circuit is a path through which electric charges can flow.

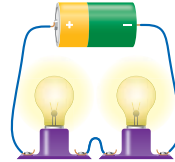
can be

can be a type called a

3



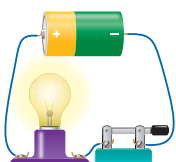
5



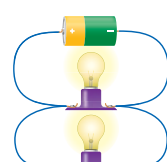
or

or a type called a

4



6





Name _____

Vocabulary Review

1

Unscramble the scrambled word in each sentence. Write the unscrambled word after the sentence. The first one is done for you.

A. In some circuits, electrical energy is transformed into light energy by a light lubb .	B U L B 6
B. The wires in a circuit are made of a material that is a doortuccn .	_____ 10
C. A path that an electric current can follow is an electric icuriect .	_____ 4 5
D. A circuit in which electric charges can follow several different paths is called a rallpale circuit.	_____ 8
E. If a wire is disconnected, the circuit is an enop circuit.	_____ 9
F. The covering on electric plugs and around wires is made of an rainulost .	_____ 2 7
G. A circuit in which all the devices are connected in a single path is a ressie circuit.	_____ 3
H. When a light is on, it is part of a scolde circuit.	_____ 1

Solve the riddle by writing the circled letters above in the correct spaces below.

Riddle: What is another name for a clumsy electrician?

A C B E K

 1 2 3 4 5 6 7 8 9 10



Apply Concepts

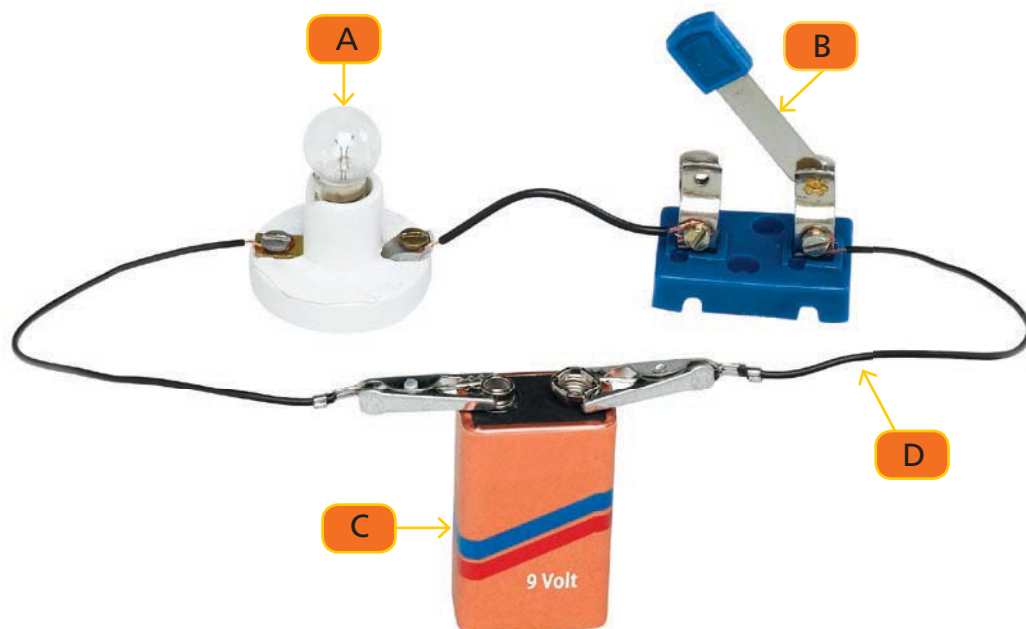
- 2 Draw a closed series circuit with two light bulbs, a battery, and a switch. What would happen if one of the light bulbs blows out?

- 3 Explain what causes an overloaded circuit. How can you prevent an overloaded circuit?

- 4 Write the word *conductor* or *insulator* on each of the lines. Then infer which type of material is inside the holes in the outlet. Explain your answer.

- 5** Suppose you are building a series circuit using a small battery and a small light bulb, and you run out of wire. What everyday objects could you use to connect the battery to the light bulb? Explain.

- 6** Identify each lettered part of the circuit, and explain what each part does.



A _____

B _____

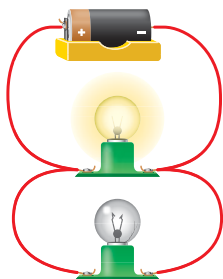
C _____

D _____

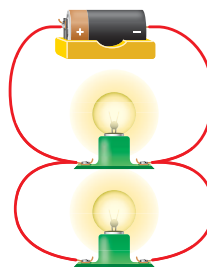
7 Study each of the following circuits.

- Make a check mark to show whether the circuit is open or closed.
- Draw the missing parts needed to make the open circuits work.
- Label each circuit as a series circuit or a parallel circuit.

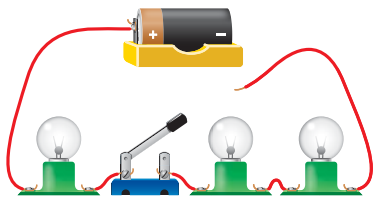
open
 closed



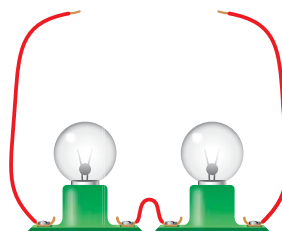
open
 closed



open
 closed



open
 closed



Take It Home!

Discuss with your family what you have learned about circuits. Gather some electrical devices and explain how they use electricity. Try flipping some switches in your home, and explain whether they are series circuits or parallel circuits.