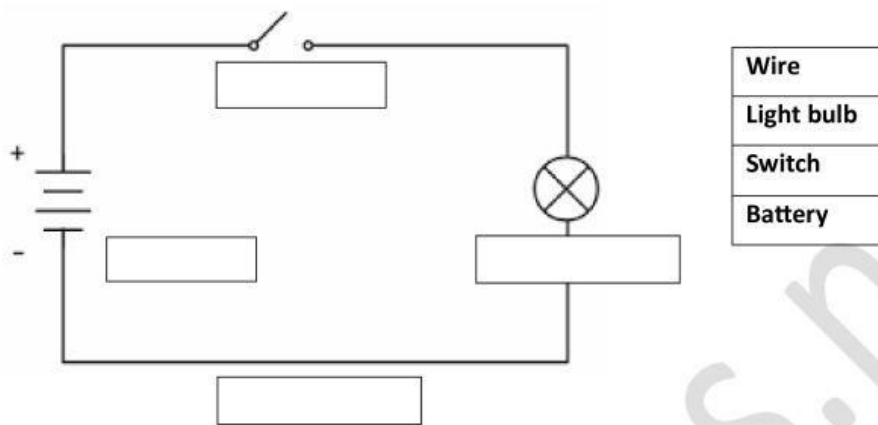


Learning Target S5P2.b: I will be able to design a complete, simple electric circuit, and explain all necessary components.

### Exploring Simple Electric Circuits Interactive Activity

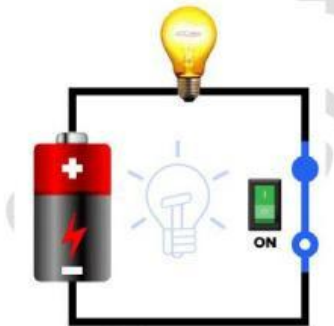
#### Part 1: Label the Diagram

Below is a diagram of a simple electric circuit. Drag & Drop or Label the following parts of the circuit:

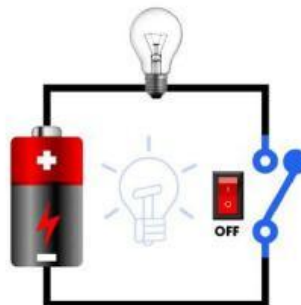


#### Part 2: Match the Circuit to Its Description

1. **Closed Circuit**
  - A circuit where all parts are connected, allowing electricity to flow.
2. **Open Circuit**
  - A circuit where a part is disconnected, stopping the flow of electricity.



Closed or open circuit? \_\_\_\_\_

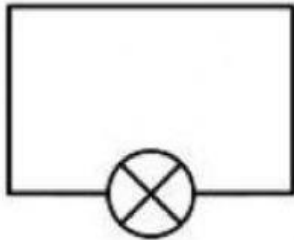


Closed or open circuit? \_\_\_\_\_

Learning Target S5P2.b: I will be able to design a complete, simple electric circuit, and explain all necessary components.

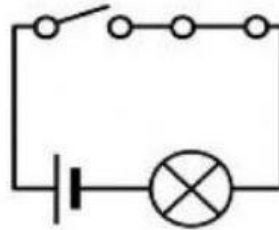
### Part 3: Complete the Circuit

Look at the incomplete circuit below. Select, Write, or Draw the missing or incomplete part to make the light bulb light up.



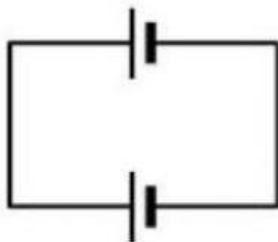
1. What is missing or incomplete?

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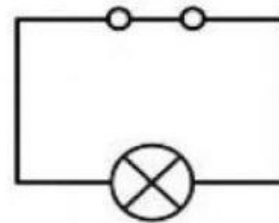
2. What is missing or incomplete?

---



3. What is missing or incomplete?

---



4. What is missing or incomplete?

---

### Part 4: Multiple-Choice Questions

1. What happens when a switch is turned off in a circuit?

- A. The light bulb glows.
- B. The circuit is closed, and electricity flows.
- C. The circuit is open, and electricity stops flowing.
- D. The battery stops working.

2. Which material would be the best conductor of electricity?

- A. Rubber
- B. Plastic
- C. Copper
- D. Glass

3. In a simple circuit, what is the source of energy?

- A. Switch
- B. Wire
- C. Battery
- D. Light bulb

Learning Target S5P2.b: I will be able to design a complete, simple electric circuit, and explain all necessary components.

### Part 5: Circuit Challenges

#### 1. Design Your Own Circuit

Draw a simple electric circuit that includes:

- A battery
- A light bulb
- A switch
- Two wires



#### 2. Test Your Understanding

If the light bulb in your circuit does not light up, what are three possible reasons why? Write your answers below:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

#### Bonus Activity: Explore Conductors and Insulators

Test the following materials to see if they conduct electricity or act as insulators. Write **C** for conductor and **I** for insulator:

- |                        |                        |
|------------------------|------------------------|
| 1. Aluminum foil _____ | 2. Paper clip _____    |
| 3. Wooden stick _____  | 4. Plastic spoon _____ |

