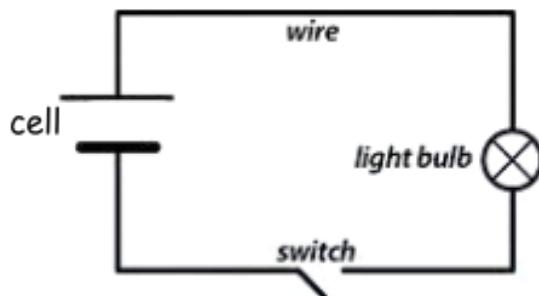


Date: _____

Chapter 8, lesson A: Simple circuits (8.A.1)

1. The components of a simple electrical circuit are:



Each component can be represented by a symbol.

Each component has a function in the electrical circuit.

Fill in the blanks.

- |— The _____ is the **source** of the electric current (electricity) in the electrical circuit.

- |— The _____ are responsible for **connecting** the electrical components that form an electrical circuit. The electric current **flows through** the wires.

- The _____ **controls the flow** of the electric current.
It opens or closes a circuit.

- ⊗— The _____ is an electrical component that **indicates the presence of the electrical current** by lighting up.

2. Three students are having a discussion about switches.



Aki

A switch can close a circuit to allow electricity to flow.



Kim

When we turn the switch off, the circuit is closed.



Ren

Switches are not useful because they break a circuit.

Only **one** student is correct.

Circle the name of the student who is **correct**.

Aki

Kim

Ren

3. Mary wants to make a circuit. She uses a lamp.

Which other parts should she use so that the lamp lights up?

Tick (✓) the **two** correct answers.

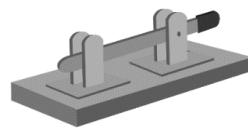
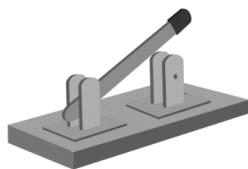
cell

wires

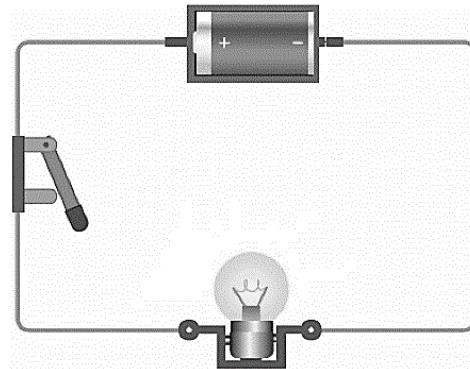
open switch

4. Which diagram shows a **closed** switch?

Tick (✓) the correct box.



5. Sanad makes a circuit.



a. He notices that the lamp does not light up.

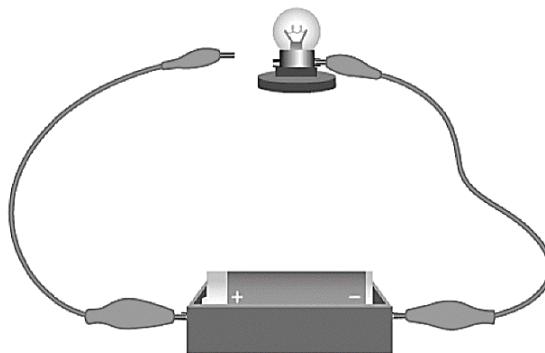
Explain why.

b. What can Sanad do to make the lamp light up?

Suggest **one** way.

6. Looking at this circuit, Tia notices a break in the electric circuit.

a. **Circle** where this break is.



b. **Explain** how a break affects the electric current.

Remember



The electric current is the electric energy that flows throughout the components in the electrical circuit.

The **electric current** flows out of the cell and moves through the wires, the switch and the lamp then back through the wires to the cell.