



**Our Vision:** Innovative education for a knowledge-based, pioneering and global society.

**Department of Science 2018 - 2019**  
**Second Term: Worksheet - 3**  
**L-5.1 & 5.2 Circuits**

Grade 2.....

Name:.....

Date: ...../...../2019

**Q.1. Fill in the blanks with the help of given words in the box.**

negative    break    path    complete    energy    electricity    positive    closed

- a. Circuit is a   **path**   that allows   **electricity**   to pass through it.
- b. Electricity always travels from the   **negative**   to the   **positive**  .
- c. Electricity can only move through a   **complete**   or   **closed**   circuit.
- d. If there is a   **break**   in the circuit, electrical   **energy**   cannot flow.

**Q.2. Briefly describe the function of the following circuit components.**

a.   **Battery is a power source.**  



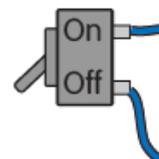
b.   **Metal wire carries electricity.**  



c.   **Bulb or lamp uses electricity to light up.**  



d.   **Switch controls the flow of electricity.**  

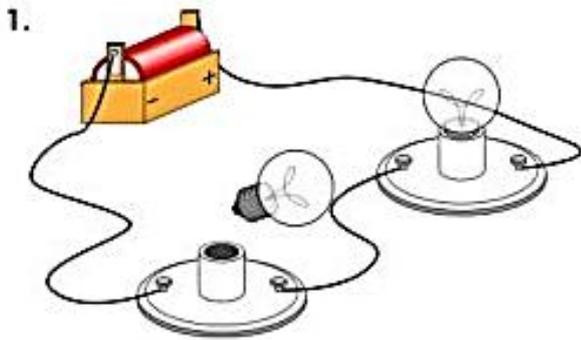


**Q.3. Explain why the light bulb will not light up in the given circuit.**

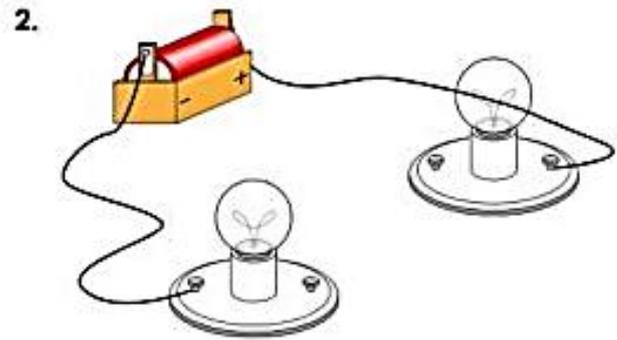
**Only one end of the bulb holder is connected to the wire. The other end is not connected so electricity will not flow through the bulb.**



**Q.4. Predict if the circuits will work. Write if the light bulb or light bulbs 'will light up' or 'will not light up' based on the circuit.**



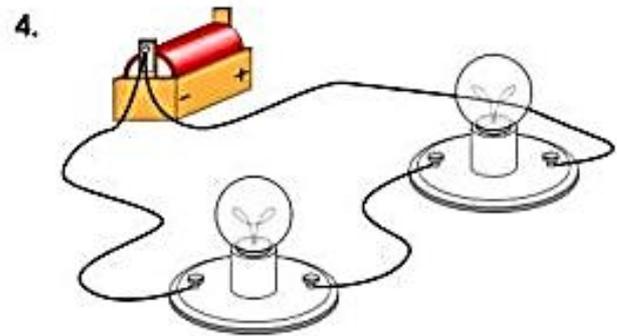
**will not light up**



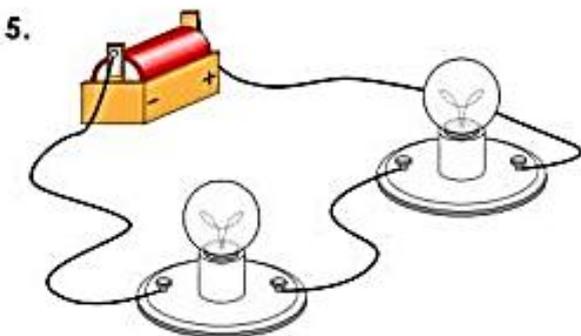
**will not light up**



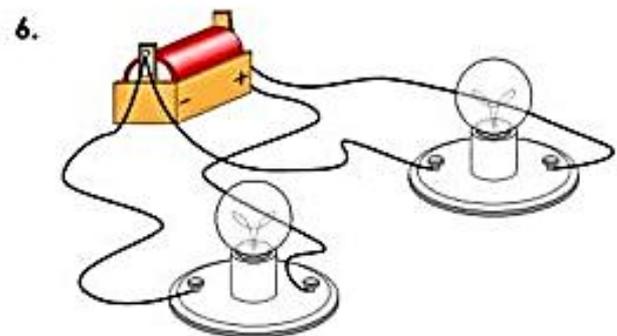
**will light up**



**will not light up**



**will light up**



**will light up**

Q.5. Name three objects that work with batteries.

mobile phone, torch, clock

Q.6. Name the components of a simple circuit.

1- battery 3- bulb / lamp  
2- wire 4- switch

Q.7. What do we call the part of the circuit that supplies the electricity?

battery

Q.8. What are the wires made of?

glass metal rubber

Q.9. Which metal are wires made of?

Copper Gold Iron



Q.10. What are wires covered with?

paper plastic glass

Q.11. Write True or False.

- 1- If there is a gap in the circuit the bulb will light up. False
- 2- The parts of the circuit are called the components of the circuit. True
- 3- Electricity can flow through a glass wire. False
- 4- Wires are covered in plastic to protect people from electric shocks. True
- 5- An incomplete or broken circuit has no gaps in it. False
- 6- Clamps are used to connect components in a circuit. True
- 7- Plastic allows electricity to pass through it. False