

## Class-VI (CHAPTER-12) ELECTRICITY AND CIRCUITS

### Questions

- Fill in the blanks:
  - A device that is used to break an electric circuit is called -----.
  - An electric cell has ----- terminals.
- Mark 'True' or 'False' for following statements:
  - Electric current can flow through metal.
  - Instead of metal wires, a jute string can be used to make a circuit.
  - Electric current can pass through a sheet of thermocol.
- Explain why the bulb would not glow in the arrangement show in Fig.



- Complete the drawing shown in Fig, to indicate where the free ends of the two wires should be joined to make the bulb glow.



- What is the purpose of using an electric switch? Name some electrical gadgets that have switches built into them.
- Would the bulb glow after completing the circuit shown in Fig in the Q.4 if instead of safety pin we use an eraser?
- Would the bulb glow in the circuit shown in Fig.?
- Using the "conduction tester" on an object it was found that the bulb begins to glow. Is that objected a conductor or an insulator? Explain.
- Why should an electrician use rubber gloves while repairing an electric switch at your home?
- The handles of the tools like screwdrivers and pliers used by electrician for repair work usually have plastic or rubber covers on them. Can you explain why?

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### Answers

1. Fill in the blanks:

(iii) A device that is used to break an electric circuit is called **switch**.

(iv) An electric cell has **two** terminals.

2. Mark 'True' or 'False' for following statements:

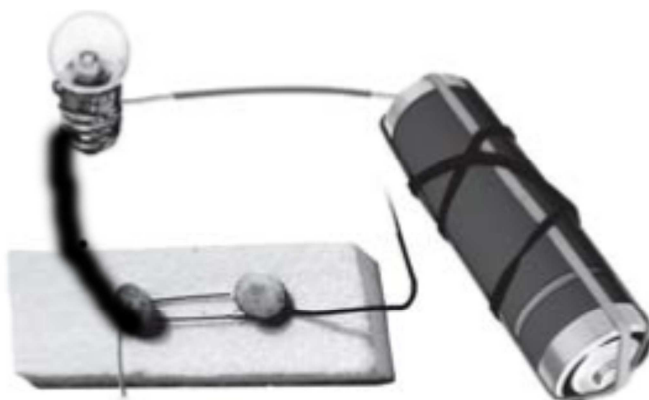
(d) Electric current can flow through metal. **True**

(e) Instead of metal wires, a jute string can be used to make a circuit. **False**

(f) Electric current can pass through a sheet of Thermocole. **False**

3. The bulb will not glow because the circuit is incomplete due to presence of insulator in between.

4.



5. Switch is a simple device that is used to either break the electric circuit or to complete it.

Electric gadgets that have switches built into them are microwaves, freezers, rice cooker, automatic electric iron, toasters etc.

6. No, because eraser is insulator.

7. No.

8. That object is conductor because electricity can pass through only a conductor and not through an insulator. Unless the object is conductor, the bulb could not glow.

9. The rubber gloves are insulators. This saves the electrician from getting an electric shock. That is why an electrician uses rubber gloves, while repairing an electric switch.

10. Plastic and rubber, both are bad conductor of electricity. Hence they protect against electric shock.