

Ncert Solutions Class 6 Science Chapter 12

Ncert Solutions For Class 6 Science Chapter 12 Electricity & Circuits

1. Fill in the blanks :

- (a) A device that is used to break an electric circuit is called _____.
- (b) An electric cell has _____ terminals.

Answer

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

(b) An electric cell has

two

terminals.

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

- (a) Electric current can flow through metals.
- (b) Instead of metal wires, a jute string can be used to make a circuit.
- (c) Electric current can pass through a sheet of thermo col.

Answer

(a) True

(b) False

(c) False

3. Explain why the bulb would not glow in the arrangement shown in Fig. 12.13.



Fig. 12.13

Answer

Bulb will not glow in the arrangement because the holder of the tester used in the connection is made of plastic which is an insulator. Thus, current will not flow in the circuit.

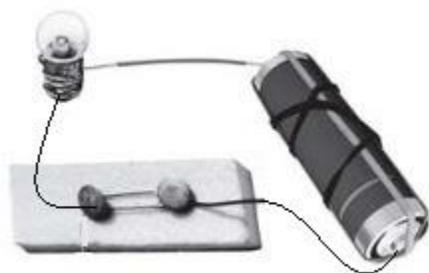
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4. Complete the drawing shown in Fig 12.14 to indicate where the free ends of the two wires should be joined to make the bulb glow.



Fig. 12.14

Answer



Earlier, the connection is not complete as one of the end of the cell is not connected to the switch and hence the bulb. Thus, there will be no flow of current in the circuit.

To complete the circuit, one of the end of the cell must be connected to the switch and then to the bulb. After this, bulb will start glowing as shown in the figure.

5. What is the purpose of using an electric switch? Name some electrical gadgets that have switches built into them.

Answer

An electric switch helps in making as well as breaking the circuit without removing the connection. When switch is ON, the current will flow and when switch is OFF, the current will not flow in the circuit. Thus, it also saves electricity and make the use of appliances easier.

Some electric gadgets are: Television, Iron, Washing Machine Refridgerator etc.

6. Would the bulb glow after completing the circuit shown in Fig. 12.14 if instead of safety pin we use an eraser?

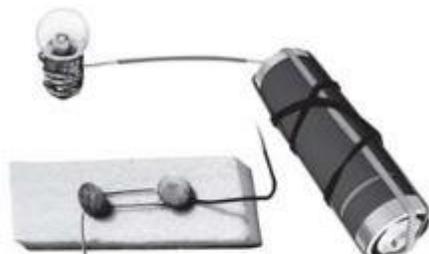


Fig. 12.14

Answer

No, the bulb will not glow when we will use an eraser instead of safety pin even after circuit is complete because rubber is an insulator and current will not flow through it.

7. Would the bulb glow in the circuit shown in Fig. 12.15?



Answer

No, the bulb will not glow because the wires from both terminals of the battery are connected to the one terminal of the bulb. In order to make the bulb glow, wires should be connected to the both terminals of the bulb.

8. Using the "conduction tester" on an object it was found that the bulb begins to glow. Is that object a conductor or an insulator? Explain.

Answer

That object must be an insulator because it allows the current to flow through it and thus helped in the glowing of bulb.

9. Why should an electrician use rubber gloves while repairing an electric switch at your home? Explain.

Answer

Rubber gloves are insulator which do not allow the current to flow through it. Therefore, an electrician use rubber gloves while repairing an electric switch at your home because it protect them from the shock of electricity and for the safety purpose.

10. The handles of the tools like screwdrivers and pliers used by electricians for repair work usually have plastic or rubber covers on them. Can you explain why?

Answer

The handles of the tools like screwdrivers and pliers used by electricians for repair work usually have plastic or rubber covers on them as plastic is an insulator which protect the electricians from severe electric shocks and accidents.