

Board – CBSE

Class – 6th

Topic –Electricity and Circuit

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

Ans: Electric switch is used to make an electric circuit open or closed for a particular appliance. Hence, with the help of a switch, we can use an appliance according to our use. Some appliances that have switches built into them are table fans, electric lamps and washing machines.

2. What is the direction of the flow of current in a dry cell?

Ans: The current flows in a closed circuit from +ve to -ve terminal of the cell.

3. What is an open circuit?

Ans: An electric circuit in which electrical contact at any point is broken is called an open circuit.

4. Write one use of insulators.

Ans: Insulators are used in making switchboards, handles of testers, screwdrivers.

5. Define conductors and insulators. Give one example of each.

Ans: A conductor is that which easily allows the passage of current through it.

Example: Aluminium or any metal.

An insulator is that which does not allow the passage of current through it. Example: Rubber.

6. Identify conductors and insulators from the following: Eraser, paper, matchstick, copper wire, pencil lead, polythene

Ans: Conductors: Copper wire, pencil lead.

Insulator. Eraser, paper, matchstick, polythene.

7. When the switch is on in an electric circuit, and the current flows through it, why do the wire, switches, bulb or devices become hot?

Ans: This is because electric energy changes into heat energy.

8. If you touch an electric wire carrying current, you get a shock, but if the birds sit on the same wire, they do not get any shock/current. Explain why?

Ans: When we hold the wire carrying current, then the circuit is closed. The current flows from our body and enters the earth, but the birds sitting on the same wire do not get any current as the circuit is not complete. If the bird touches the earth wire, it will also die due to electric shock.

9. Write down the Advantages of Electricity.

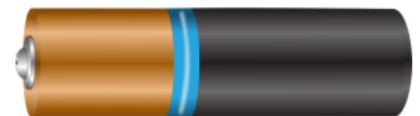
Ans:

- I. Light in our houses, offices, roads etc. even past sunset
- II. To operate pumps which in turn have a lot of applications
- III. Electrical appliances like refrigerators, fans etc.
- IV. It is used to build houses, installing equipment etc.

10. Write down Features of an Electric Cell.

Ans:

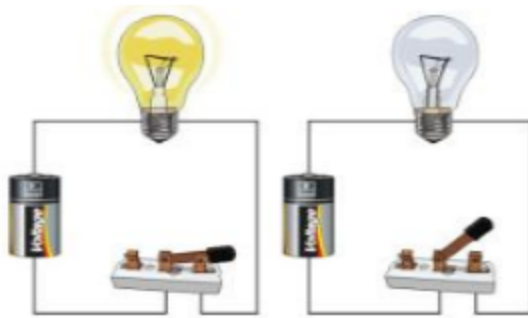
- I. It is a small cylindrical structure that helps in operating the devices.
- II. A small metal cap is placed on one side, and a metal disc is present on the other side.
- III. All cells have two terminals: Positive and Negative. The metal cap and metal disc are positive (+) and negative (-) terminals of the electric cell.
- IV. Chemical energy is converted into electrical energy inside a cell. When the chemicals are exhausted, the cell stops working.



Electric Cell

11. What is Electric Switch?

Ans: Switch is an integral part of an electric circuit. It is a simple device that breaks or completes a circuit. When the switch is 'on', the circuit is complete. When the switch is off, the current does not flow in the circuit. So an electric appliance will only work if the switch is 'on'.



Switch on and off respectively

12. A simple device that is used to either break or complete the electric circuit?

- (a) Switch
- (b) Terminal
- (c) Current
- (d) Conductor

Ans: (a) Switch

13. What is false of an electric cell?

- (a) Chemical energy is converted into electrical energy
- (b) It has a neutral terminal
- (c) It has a Positive Terminal
- (d) It has a Negative Terminal

Ans: (b) It has a neutral terminal

14. Which one of the following statements is false?

- (a) Eraser is a bad conductor of electricity.

- (b) Metals are good conductors of electricity.
- (c) Our body is a good conductor of electricity.
- (d) Plastic is a good conductor of electricity.

Ans: (d) Plastic is a good conductor of electricity.