



## Chapter 12 Electricity and Circuits

### Notes:

- **Electricity** is the flow of electric current.
- Importance of electricity:
  - a) Used to operate pumps that lift water from well.
  - b) To light our homes, roads, offices, markets etc
  - c) Used to run many appliances like TV, Fan etc.
  - d) To run machinery in factories and Industries.
- **Electric cell** is a device capable of producing electricity from the chemicals stored inside it. It has a positive terminal (a metal cap) and a negative terminal (metal disc).
- **An electric bulb** is a device that produces light when electric current passes through the filament present inside it.
- **An electric circuit** is the pathway through which an electric current flow.
- **Type of electric circuit:**
  - a. **Closed electric circuit:** In closed electric circuit, the electric current passes from one terminal to the other terminal continuously without break.
  - b. **Open electric circuit:** In open electric circuit, the electric current passes from one terminal to the other terminal is not continuous, there is break in the flow of electric current.
- Electric current flows from positive terminal to negative terminal in an electric circuit.
- **A switch** is a simple device that either breaks the circuit or completes it.
- **Conductors** are the materials that allow electric current to pass through them.  
**Example:** Metals (Gold, Iron, Aluminium etc).
- **Insulators** are the materials that do not allow electric current to pass through them.  
**Example:** Rubber, Glass, PVC etc.