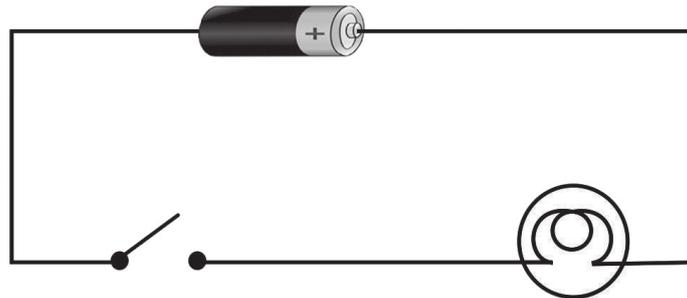


PHYSICS - X-PART-1 CLASS 01



Electric Circuit

\* Can you draw a circuit diagram in which a switch, cell, and a bulb connected in series?



\* What is the function of cell here?  
- To maintain the potential difference.

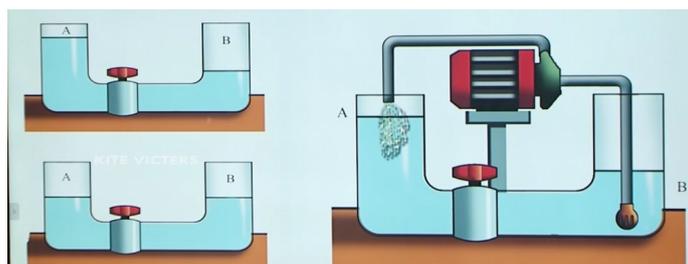
Electric Current

\* Current or intensity of current is the quantity of charge that flows through a conductor in a circuit in one second.

Current (I) = Quantity of charge / Time taken  
 $I = Q / t$

Unit of current = Unit of charge / Unit of time  
= coulomb / second = C / s = ampere(A)

Potential difference



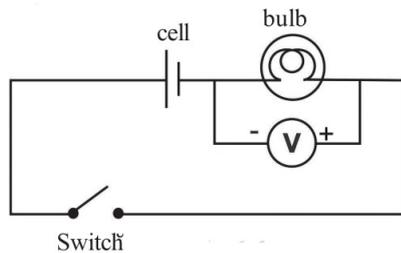
- \* There should be a potential difference between two points of a conductor, if there is to be a flow of current between them.
- \* Current flows from a point of high electric potential to a point of low electric potential.
- \* The unit of potential difference is volt (V).
- \* Voltmeter is the device to measure this.
- \* If 1 joule of work is done to move one coulomb charge from one point to another, then the potential difference between the points is 1volt.

Electromotive force- emf

- \* Electromotive force (emf) is the ability to maintain the potential difference between the ends of a conductor.
- \* The emf of a cell is measured in the unit volt.

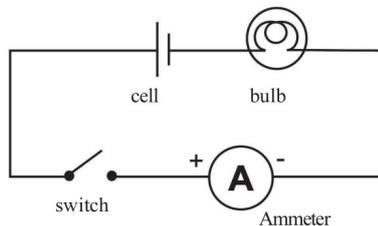
Voltmeter

- \* Voltmeter is a device used to measure the potential difference and emf.
- \* The symbol of voltmeter is 
- \* Voltmeter is connected in parallel with a circuit.



Ammeter

- \* Ammeter is a device used to measure the current in a circuit.
- \* The symbol of ammeter is 
- \* Ammeter should be connected in series in the circuit.



Assignment

- \* Make a simple circuit with a cell, a bulb and a switch.