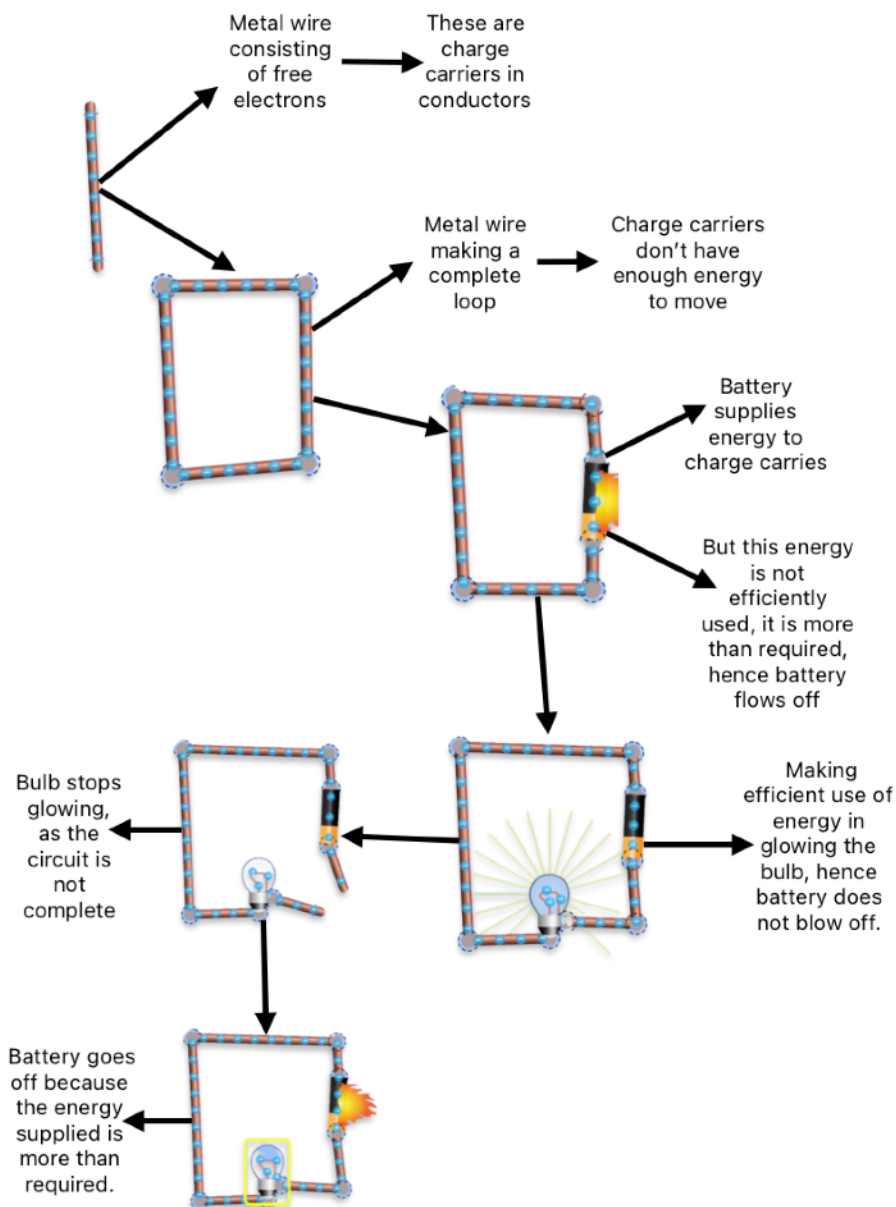


Learning goals - Students will be able to understand the basic components of current electricity and the relation between them.

Concept focus - energy of moving charges.

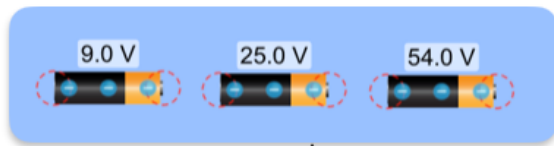
Note - few screenshots of PHET simulations are added to assist in better understanding of the students.

Follow the below flow chart to figure out what made the bulb to glow !



What is needed for the bulb to glow ?

- Charge carriers (conductor)
- Charge carriers supplied with required amount of energy (Battery connected to conducting wire such that it supplies the required amount of energy)
- Continuous loop (complete path)

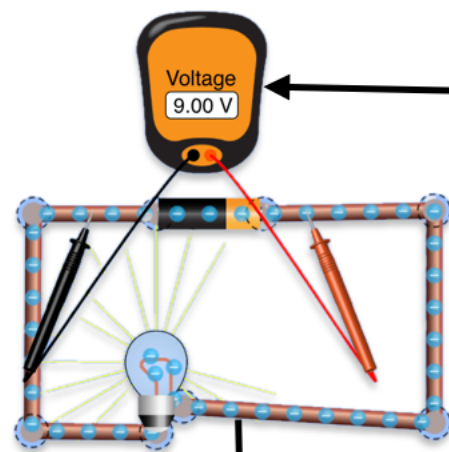


Battery is specified with a value which states how much joules of energy it will transfer to one charge carrier

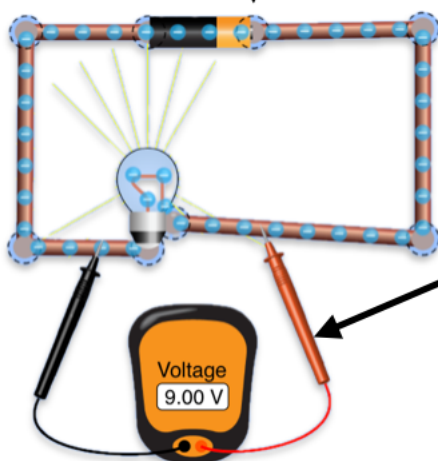
9 V (Volt) battery means it will transfer 9 joules of energy to one charge carrier in completing one complete loop.

It is termed as emf (electromotive force) of the battery. Its unit is Volt (V)

When



It is measured with the device called ' voltmeter ' attached between two end of the battery



When it is used to find the energy transferred from one end to other end of any component, it is termed as potential difference of the component (here PD between two ends of the bulb is 9 V)