



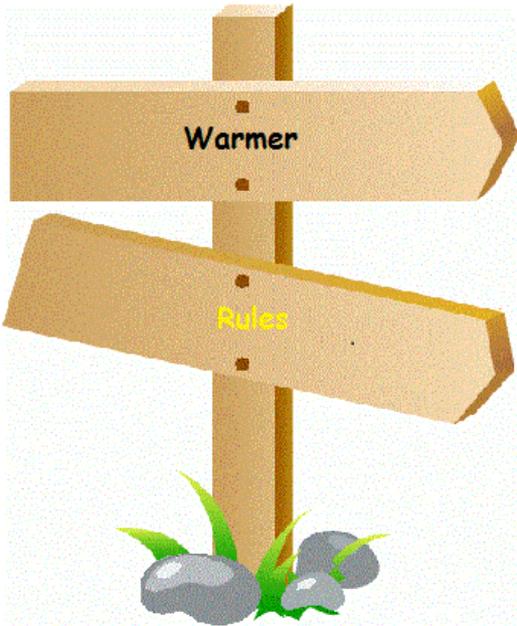
# Electricity



By the end of this session you will be able to:

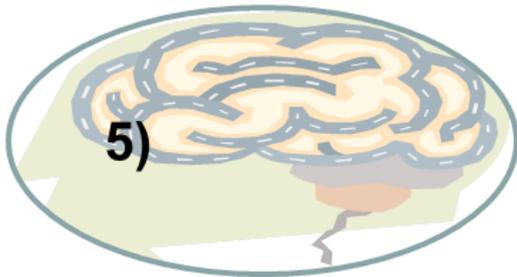
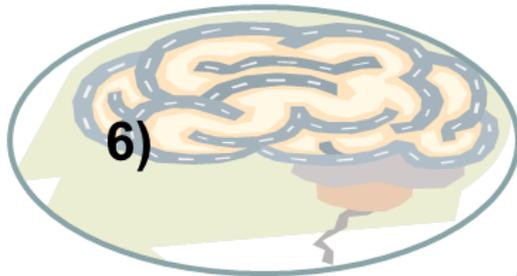
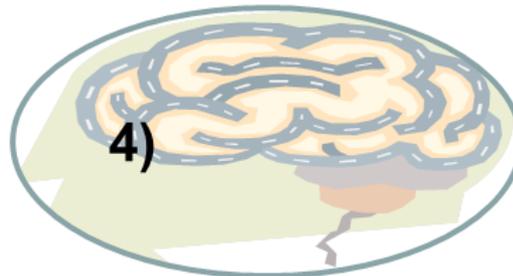
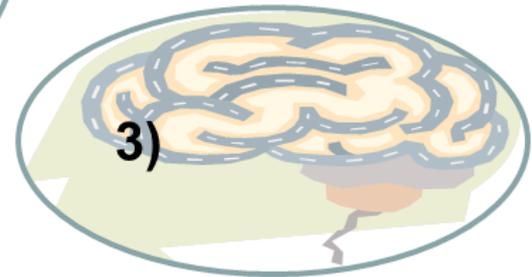
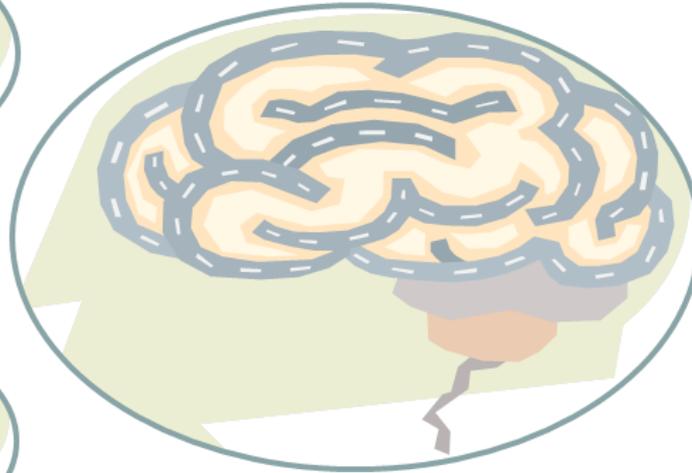
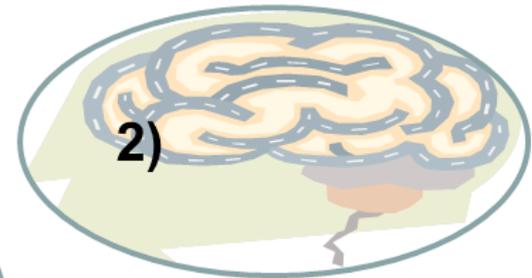
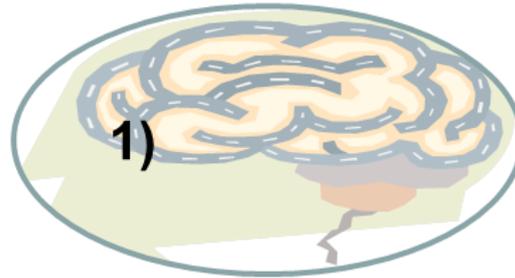
1) Define AC & DC.

2) Describe transmission of electricity



There are three houses one is red one is blue and one is white. If the red house is to the left of the house in the middle and the blue house is to the right to the house in the middle where is the white house?

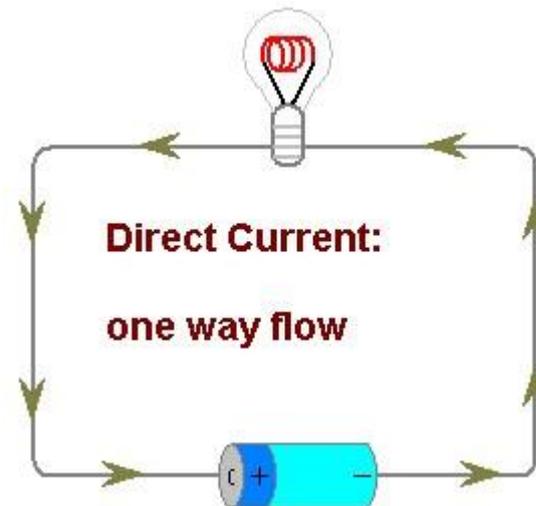
# Mind Maps





## What is Direct Current?

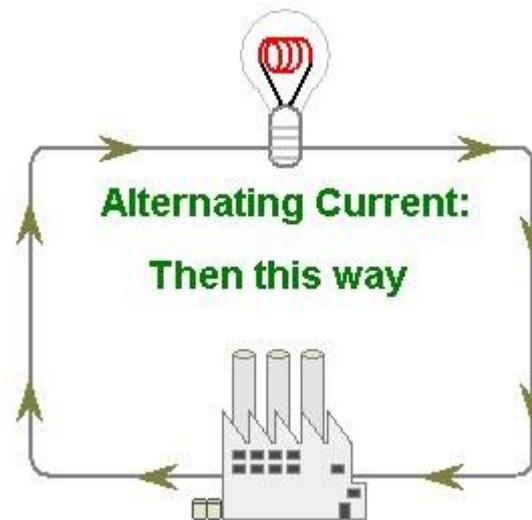
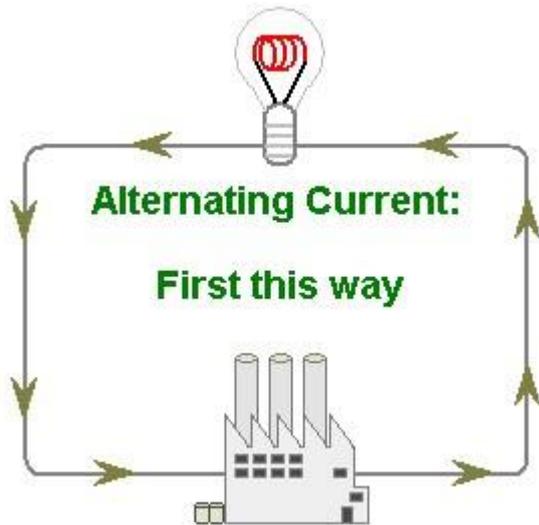
A Direct Current (or DC) power supply moves electrons through the wire in **ONE DIRECTION ONLY**. For an electron to deliver its energy to the device being operated (the light globe in the example below) it must travel the full length of the circuit.





## What is Alternating Current?

ALTERNATING CURRENT (AC) means that the flow of electrons is not in the one direction, but is constantly reversed. This can be likened to a boat being propelled by the rower continually pushing the paddle backwards and forwards.





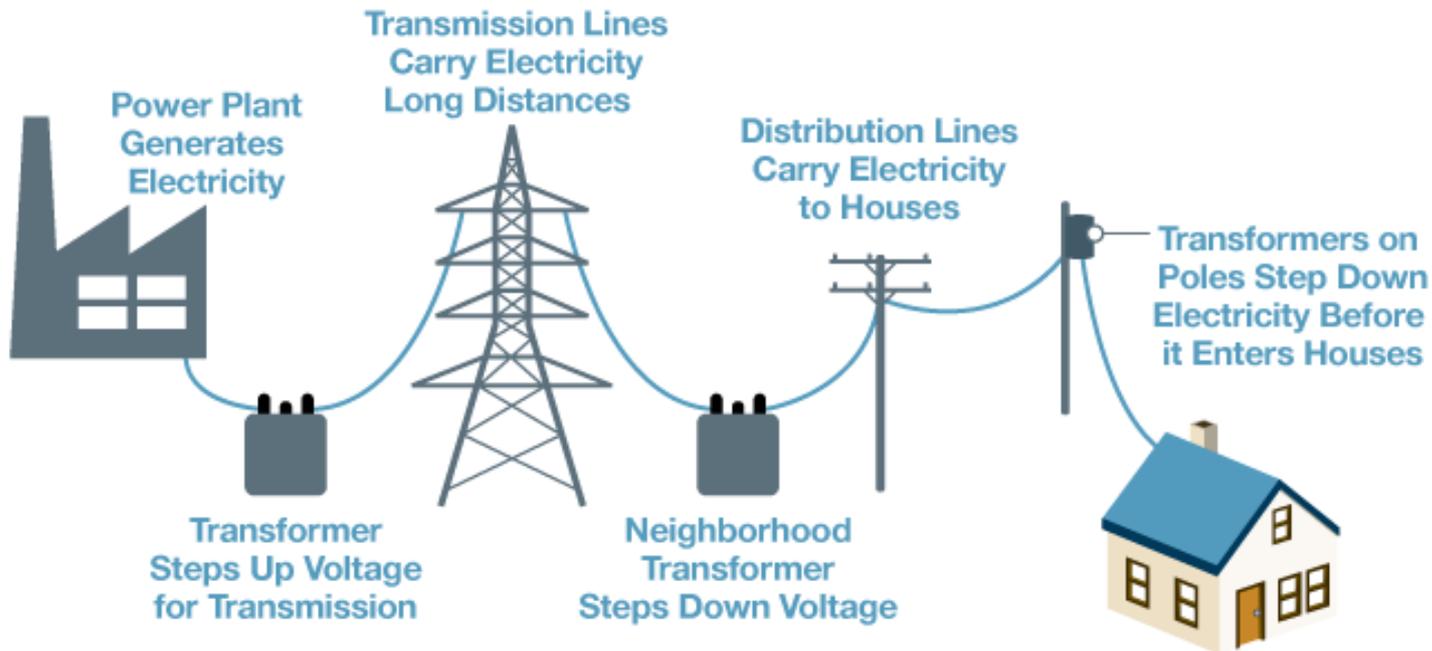
## Difference between AC & DC

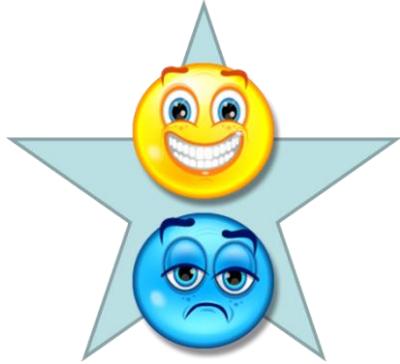
	<b>Alternating Current</b>	<b>Direct Current</b>
<b>Amount of energy that can be carried</b>	Safe to transfer over longer city distances and can provide more power.	Voltage of DC cannot travel very far until it begins to lose energy.
<b>Cause of the direction of flow of electrons</b>	Rotating magnet along the wire.	Steady magnetism along the wire.
<b>Frequency</b>	The frequency of alternating current is 50Hz or 60Hz depending upon the country.	The frequency of direct current is zero.
<b>Direction</b>	It reverses its direction while flowing in a circuit.	It flows in one direction in the circuit.
<b>Current</b>	It is the current of magnitude varying with time	It is the current of constant magnitude.
<b>Flow of Electrons</b>	Electrons keep switching directions - forward and backward.	Electrons move steadily in one direction or 'forward'.
<b>Obtained from</b>	A.C Generator and mains.	Cell or Battery.



# Transmission of Electricity

## Electric Power Generation, Transmission, and Distribution





## The Comprehension Line





## Revisiting Learning objectives

By the end of this session you are able to:

- 1) Define AC & DC.
- 2) Describe transmission of electricity