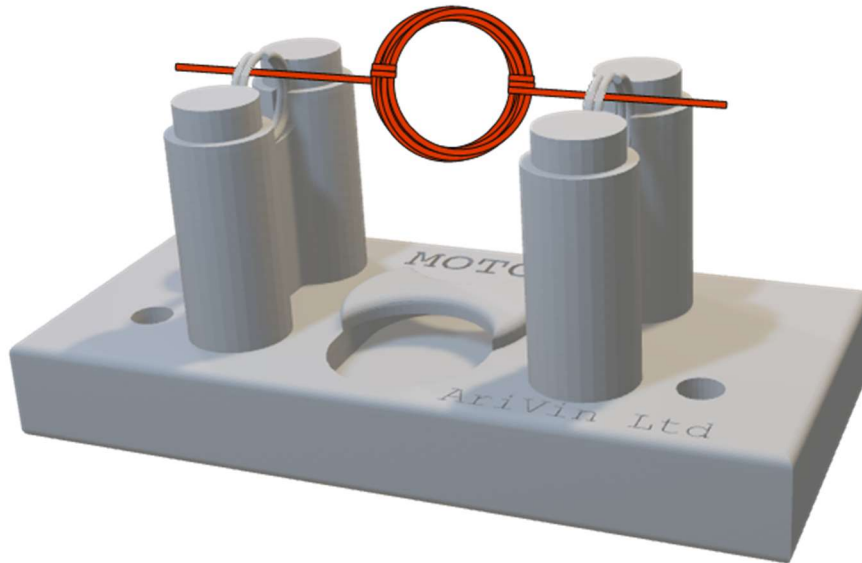




**Electrical Power**



**Mechanical Power**



## Introduction








The DC or Direct Current Motor is a very common electrical device that can be found in most products that we use in our daily lives. This includes the motors used in an electric car, hair dryer, electric drill, USB fan or even in elevators etc.

The way that the motor work is by using the concept of electromagnetic force which requires an electric current to create a magnetic field. A permanent magnet is used to interact with the electromagnet and create the movement. It is a conversion of electrical power to mechanical power.

This experiment can be used to introduce to students the basic principle of Lorentz force (or electromagnetic force) which explains the creation electromagnetic fields. The Fleming's left-hand rule could also be introduced to determine the direction of spinning of the motor. All this can be demonstrated in the working concept of a DC motor.



## Materials Supplied

	Name	Picture	Qty
1	Single Battery Holder		2
2	Switch Module		1
3	Wire Coil		1
4	Motor Module		1
5	Disc Magnet		1
6	Bar Magnet		2
7	Crocodile Clips (Colours may vary)		2

## Materials Required (Items that are not included)



**2 x 1.5 Volts AAA Battery**