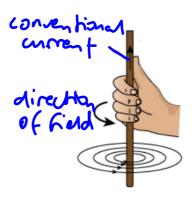


Magnetic field around a current-carrying wire.

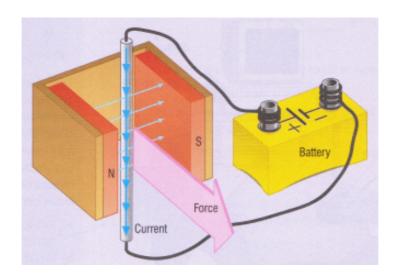
The field lines are circular, and the direction is determined using the right hand grip rule:

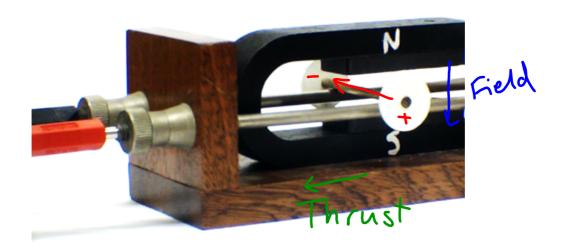


The motor effect

If a current carrying wire is placed in a magnetic field, the wire experiences a force.

This is called the motor effect.





The force can be reversed by:

reversing the current **OR** reversing the magnetic field.

The force can be increased by increasing the current or the magnetic field strength.

Fleming's left hand rule

Allows us to find the direction of the force on the wire.

Thumb Thrust

First Firger Field

(magnetic field from

N to S)

Se (and finger

connent

(conventioned
plus to minus)