

Magnetic field

Area surrounding a magnet that can exert a force on magnetic materials.



Non-contact force

Force exerted between two objects, even when they are not touching, such as the force of gravity.



Permanent magnet

Magnet made from a magnetic material. Its magnetism cannot be turned on or off, unlike an electromagnet.

Induced magnet

A temporary magnet, made from a magnetic material placed in a magnetic field. The induced magnetism is lost when moved out of the magnetic field.



Motor effect

The effect where a force is exerted on a wire carrying a current in a magnetic field.



Solenoid

A straight coil of wire which can carry an electric current to create a magnetic field.

Electromagnet

A magnet made by wrapping a coil of wire around an iron bar and passing an electric current through the coil.



Electromagnetic induction

The production of a potential difference (voltage) when a conductor, such as a wire, is moved through a magnetic field or exposed to a varying magnetic field. If the conductor is part of an electric circuit, an induced current will flow.



Generator effect

When motion between a conductor and a magnetic field creates electricity, ie a magnet is moved into a coil of wire.

Alternator

An electrical generator which produces alternating current, an ac generator.



Dynamo

An electrical generator which produces direct current, a dc generator.



Moving-coil microphone

A microphone in which electrical signals are produced when the pressure variations in sound waves vibrate a coil of wire within a magnetic field.

Transformer

An electrical device that increases, or decreases, the potential difference (voltage) of an alternating current.



Voltage

The potential difference across a cell, electrical supply or electrical component. It is measured in volts (V).



Alternating current

Also called ac. An electric current that regularly changes its direction and size.