



Glossary AQA GCSE

## P7: Electromagnetism

**Attraction:** Opposite poles will experience a force of attraction, meaning they will experience a force towards each other. The force between a magnet and magnetic material is always one of attraction.

**Current-Carrying Wires:** When current flows through a wire, a magnetic field is generated around it. The strength of the field is dependent on the magnitude of the current and the distance from the wire.

**Dynamo:** A device that makes use of the generator effect to generate direct current.

**Electromagnet:** A solenoid with an iron core.

**Induced Magnet:** A material that becomes a magnet when it is placed in an existing magnetic field, but loses its magnetism quickly once it is removed. Induced magnetism always produces attractive forces.

**Magnetic Compass:** A device containing a small bar magnet that points in the direction of the Earth's magnetic field.

**Magnetic Field Lines:** Lines representing the strength and direction of a magnetic field. The field line direction at any point is in the direction that a force would act on another north pole if placed at that point.

**Magnetic Field:** The region around a magnet in which another magnet or magnetic material will experience a force.

**Magnetic Materials:** Iron, steel, cobalt and nickel.

**Magnetic Poles:** The regions of a magnet where the magnetic forces are at their strongest.

**Microphone:** A device that uses the generator effect to convert the pressure variations of sound waves into variations in the electrical current of a circuit.

**Motor Effect:** When a current-carrying wire is placed in a magnetic field, a force will be experienced between the wire and the magnet responsible for the field.

**Permanent Magnet:** A magnet that produces its own magnetic field.

**Repulsion:** Like-poles will experience a force of repulsion, meaning they will experience forces in opposite directions.