

**CP10a Magnets and magnetic fields**

Word	Pronunciation	Meaning
core		The innermost part of something e.g. the central part of the Earth.
induced magnet		A piece of material that becomes a magnet because it is in the magnetic field of another magnet.
magnetic field		The area around a magnet where it can affect magnetic materials or induce a current.
magnetic material		A material, such as iron, that is attracted to a magnet.
permanent magnet		A magnet that is always magnetic, such as a bar magnet.
plotting compass		A small compass used to find the shape of a magnetic field.

**CP10b Electromagnetism**

Word	Pronunciation	Meaning
electromagnet		A magnet made using a coil of wire with electricity flowing through it.
solenoid		A coil of wire with electricity flowing in it. Also called an electromagnet.
temporary magnet		A magnet that is not always magnetic, such as an electromagnet or an induced magnet.

**CP10c Magnetic forces**

Word	Pronunciation	Meaning
Fleming's left-hand rule		A way of remembering the direction of the force when a current flows in a magnetic field. The thumb shows the direction of the force, the first finger shows the direction of the magnetic field (N to S) and the second finger shows the current (+ to -).
magnetic flux density		A way of describing the strength of a magnetic field. It is measured in teslas (T).
motor effect		The force experienced by a wire carrying a current that is placed in a magnetic field.
tesla (T)		The unit for magnetic flux density, also given as newtons per ampere metre (N/A m).

**CP11a Transformers**

Word	Pronunciation	Meaning
<b>electrical power</b>		Power transferred by electricity.
<b>electromagnetic induction</b>		A process that creates a current in a wire when the wire is moved relative to a magnetic field, or when the magnetic field around it changes.
<b>induce</b>		To create. For example, a wire in a changing magnetic field has a current induced in it.
<b>potential difference</b>		The difference in the energy carried by electrons before and after they have flowed through a component. Another term for voltage.
<b>transformer</b>		A device that can change the voltage of an electricity supply.

**CP11b Transformers and energy**

Word	Pronunciation	Meaning
<b>alternating current</b>		Current whose direction changes many times each second.
<b>national grid</b>		The system of wires and transformers that distributes electricity around the country.
<b>step-down transformer</b>		A transformer that reduces the voltage.
<b>step-up transformer</b>		A transformer that increases the voltage.
<b>transmission lines</b>		The wires (overhead or underground) that take electricity from power stations to towns and cities.