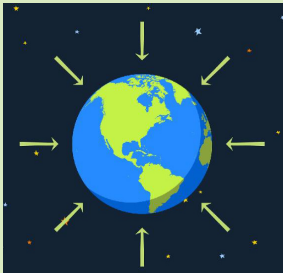


Vocabulary

Forces	Are a push or a pull on an object.
Contact forces	Act between two objects that are touching each other.
Non-contact forces	Act between two objects that are not touching each other

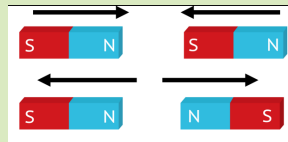
Non – contact forces

Gravitational force acts between any object and earth



All objects are attracted to the earth which means they are pulled down to its surface

Magnetic forces act between two magnets (when they attract OR repel) or a magnet and a magnetic material (when they attract).

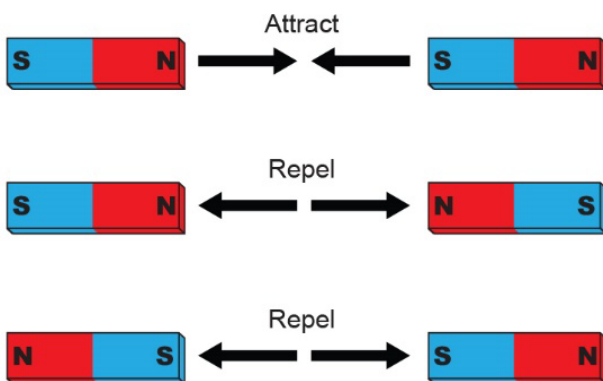


Iron, Steel and Nickel are examples of magnetic materials

Magnet

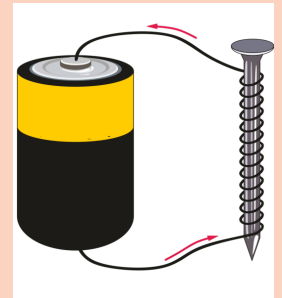
Magnets are objects that attract or repel other magnetic objects or materials.

Examples of magnetic materials include Steel, Iron, Cobalt and Nickel.



Electromagnet

An electromagnet is a magnet that can be switched on and switched off. It is made from a power source (like a battery), wire and a piece of iron.



Electromagnets are used in electronic locks, scrapyards cranes and in electric motors.

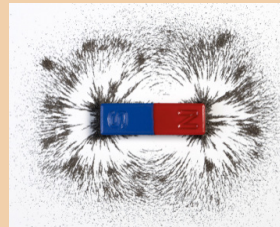
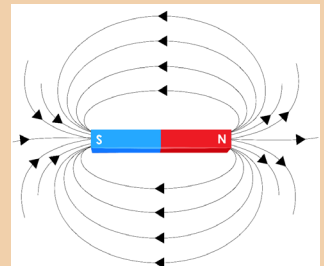
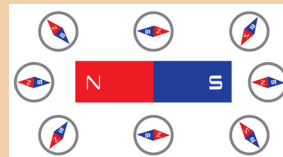
Magnetic Fields

Magnetic Fields - the field of a force is an area in which an invisible force will act.

Magnetic field diagram - this shows a map of how the magnetic force will act in different places around a magnet.

It can be mapped out by:

- Using iron filings on paper above the magnet
- Placing a compass in a range of positions around the magnet



Compass

How does a compass work? A compass is a small, thin magnet made from steel which is placed on a pivot.

The magnet spins to line up with the Earth's magnetic field to show where north is.

