Electricity and Magnetism.-

As you will see from these magnetic experiments, magnetism (the invisible force) can push and pull through some materials such as paper and plastic.

Paper clips are made of steel. If you hold a paper clip close to a magnet, you can feel the magnet pulling on the paper clip with an invisible force called magnetism.

All magnets have two ends or poles (North & South). If you put the poles of two magnets together, they will either pull together or push apart.

They will pull (attract) each other if the poles are different. They will push (repel) each other if the poles are the same.

How magnets pull: Magnets pull on magnetic materials, such as iron, nickel, cobalt and steel, but pull through non-magnetic things, like cardboard, glass, plastic and wood. Magnets can even travel through water.

Magnetic Facts

Only metals are attracted to magnets

No other materials are attracted to magnets i.e. wood, plastic, glass and everything else are not attracted to magnets.

Not all metals are attracted to magnets - iron and steel are attracted to magnets whereas aluminium, copper and brass are not attracted to magnets.

Some magnets are stronger than others. If one magnet hold more paper clips than another magnet then it is a stronger magnet.

A magnet can pick up some objects like paper clips without even touching them…an invisible force. This invisible force can pull through some materials such as paper and plastic.

Remember that only metals are magnetic, but not all metals are magnetic.

North Pole is Red and the South Pole is Blue

Opposite Poles Attract

Same Poles Repel

There are different types/shapes of magnets; Bar Magnets, Horseshoe Magnets and Ring Magnets

Electromagnetism describes the relationship between electricity and magnetism. Electricity and magnetism are interdependent because a changing electricity field generates a magnetic field, and a changing magnetic field generates a electricity field.