Suzy's World

Magnetism - What makes a compass point North?

Fact

- A compass needle is made of a magnetised piece of iron with a south pole at the arrow or pointer end that can move freely to swing around to point to the north pole of earth.
- All magnets have two ends called a north and south pole.
 The North Pole is marked with a red mark or indentation.
- If you put the same poles (north / north or south/south) of two
 magnets together they will push apart or repel. If you put a
 south pole of a magnet near a north pole the 2 magnets will be attracted together.
- The earth's iron core acts like a big bar magnet with a north and South Pole.
- Magnets only pick up objects that contain iron.

Do you know

• A magnet has a force field around it. You don't have to touch an object with a magnet to be able to pick it up; sometimes the object will jump up to the magnet.

Experiments you can do

Test a magnet to find out what things are attracted to it. Try paper, paperclips, hair clips, a pencil, a rubber, a shoelace and your toys.



Other Investigations

Make your own compass at school or with the help of an adult. Get an adult to cut a centimetre off the end of a cork. Fill a plastic container with water. Open up a paper clip and rub it with a magnet. You need to rub the paper clip in the same direction every time – start at one end of the clip and slide the magnet along to the other, and do it about 50 times. Test it has become magnetic – see if it will attract another paperclip. Then get an adult to push the paper clip through the slice of cork and place it on top of the water. It will swing around and point north.