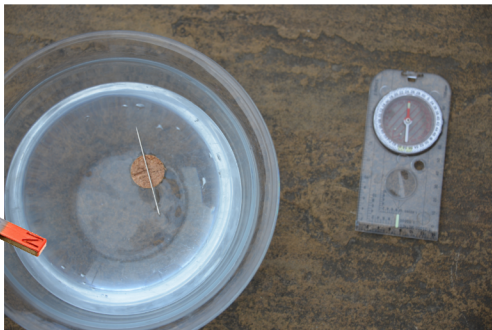


MAKE A COMPASS

You'll need

A bowl
Water
Magnet
Slice of cork
Steel needle



Instructions

Stroke the needle with one end of the magnet about 20 times.

Make sure you lift the magnet after each stroke.

Fill the bowl of water to near the top and place the cork slice on top so it floats.

Place the magnetised needle on top of the cork. The cork and needle will turn until the needle faces North - South. The needle lines up with the Earth's magnetic field. If you have a compass you can check this!

Make sure the magnet is far enough away to not interfere.

Why does this work?

The needle is made from steel which contains iron. Iron particles can be magnetised when stroked with a magnet. The effect is temporary, but lasts long enough for you to see the needle act like a compass.

Remember only iron, steel, nickel and cobalt are magnetic!

Science Sparks™

Adult supervision required. You are responsible for your own safety.

www.sciencesparks.com

