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by science

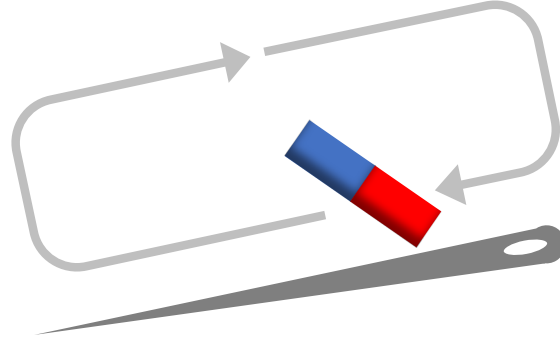


make your own compass

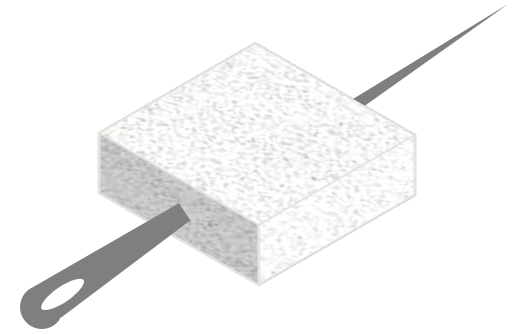
what you'll need

- Sewing needle, safety pin, or hair pin (Parental supervision may be required)
- Magnet
- Slice of cork
- Bowl
- Water

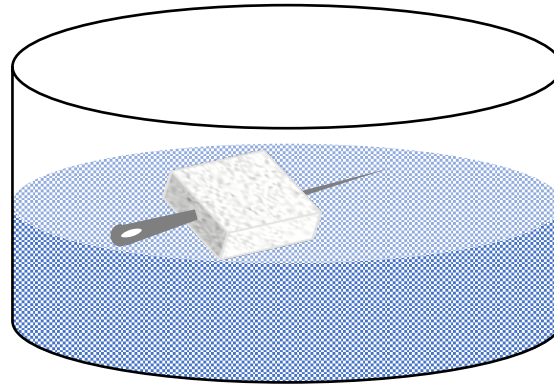
instructions



1. Magnetise the needle or pin by stroking it from one end to the other with the magnet in the same direction (30-40 strokes). Do not rub the two items back and forth.



2. Pierce the needle horizontally into the piece of styrofoam until it comes out the other side. Ensure that both sides of the needle are protruding out of the styrofoam.



3. Fill the bowl with water and lightly place the needle through the styrofoam on the water to float freely.

4. The magnetized needle will align itself with the Earth's magnetic field, pointing north to south. However, ensure that the bowl of water is still and that the area is not windy as water and wind movements can cause the compass to get blown in the wrong direction.