JAR OMPASS The Earth is a magnet. See how it works.

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MATERIALS

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- needle
- magnet
- scissors
- small piece of cardboard
- jar

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- thread
- pencil
- compass

DID YOU KNOW?

The magnetised needle is free to turn on its own and will always point north and south. The needle is acting as a magnet and is attracted to Earth's magnetic force.

STEPS

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1. Stroke the needle with the magnet to magnetise it.

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- 2. Tie one end of the thread to the small piece of cardboard and the other end to the pencil.
- 3. Push the needle through the piece of cardboard.
- 4. Suspend the piece of cardboard inside the jar by lying the pencil across the mouth of the jar so the thread is dangling. Do not allow the cardboard to touch the bottom.
- 5. The needle should be horizontal. You should try to get the middle of the needle to rest in the middle of the cardboard.
- 6. Leave to stand freely and the needle should point in the same direction as the compass.

WHY?

The two ends of a magnet are called poles. Magnets can be used as powerful tools because two north-seeking, or two south-seeking, poles of a magnet will always repel each other, and a north-seeking and a south-seeking pole will always attract each other. Magnet are used in electrical motors and generators that power everyday items such as televisions, computers and telephones.



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