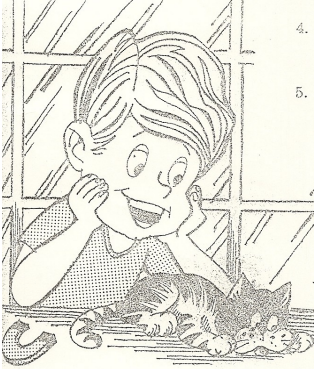


Summer Project for Kids - Compass In a Jar



4.

This summer, why not spend some quality time with your kids and work in a little bit of learning in the process. The four cardinal directions or cardinal points are North, South, East and West, commonly denoted by their initials - N, S, E, W. They are mostly used for <http://www.geographystoreonline.com> geographic orientation on Earth.

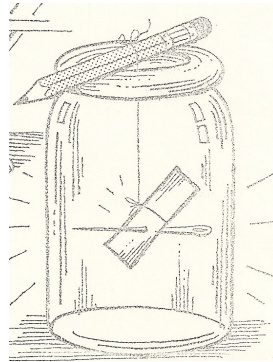
5.

On Earth an upright observer facing north will have south behind them, east on their right and west on their left. Most devices, including maps and other methods for orientation therefore operate by finding north first, although any other direction is equally valid, if it can be reliably located.

Making your own Compass in a Jar will allow you to reliably locate the cardinal point North, and so all the other points will be easy to recognize as well.

Here's what you will need to get started:

Needle
Magnet
Scissors
Index Card
Jar
Thread
Pencil



Instructions:

Magnetize a needle by stroking it several times with a magnet
Cut a small strip from an index card so that the strip will fit inside the jar.
Push the needle into the card - through the middle so half is sticking out on each side.
Tie one end of a piece of thread to the center of the strip and the other end, to a pencil.
Suspend the strip inside the jar by resting the pencil across the top opening.
The needle should rest horizontally - you can balance it by sliding it back or forth in the card strip.
Let the device come to rest.
You now have a compass, and the needle will point North and South.

This is What Happens:

The entire earth has a magnetic field surrounding it. The needle is a miniature magnet and it is attracted by the earth's magnetic forces. Since the needle is free to rotate, it always aligns itself in a North and South direction.

To find your way Stand with your body facing in the direction that the needle is pointing - North. Spread out your arms, so that your right hand is pointing at the rising sun and your left hand points towards the setting sun.

Congratulations, you now know your Cardinal Directions - North, South, East and West!