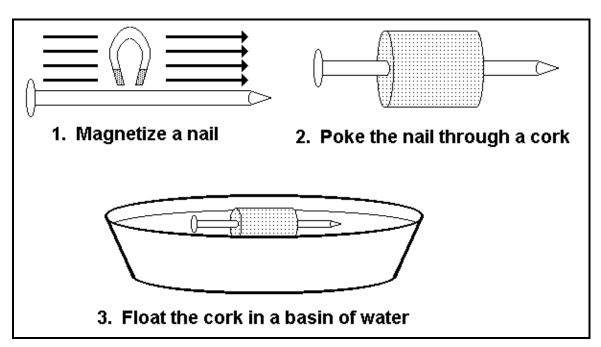


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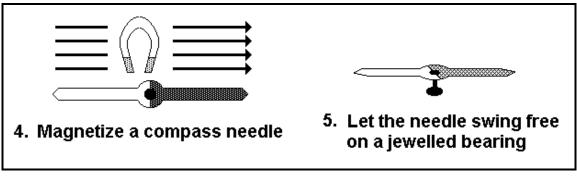
Second Class Requirement 3a1 "Demonstrate how a compass works." (Handbook page 338)

1. How does a compass work?

Name



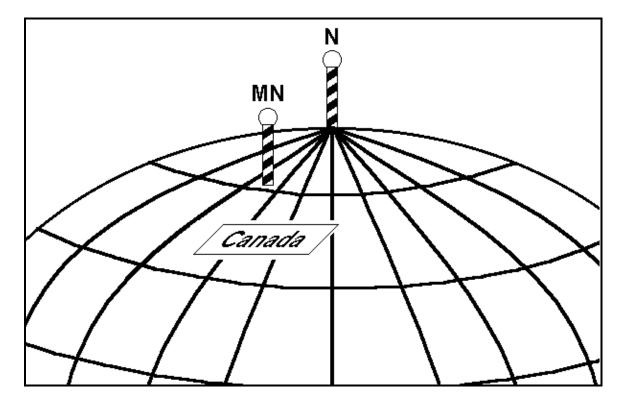
The cork and nail will: ____



The compass needle will: _____

2. In your own words, how does a compass work? (Hint: use the words "compass needle", "magnetized", and "north")

3. The earth has 2 North Poles!

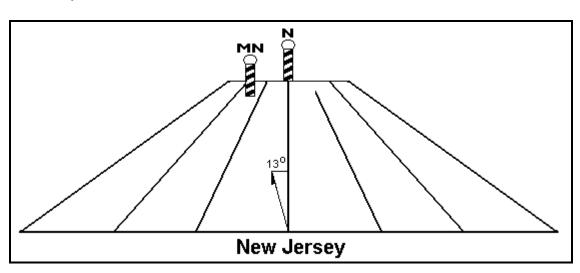


A compass does *not* point to the north pole, which is "true north". So where does a compass really point to?

A compass will really point to "MN", which means_____

The magnetic north pole is a little over 1000 miles from the true north pole.

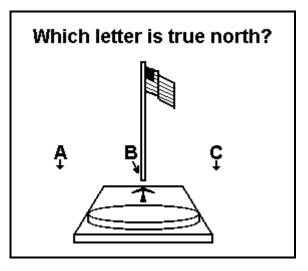
4. If the earth were flat...



If the earth were flat and you could see all the way to the two poles, this is how they would look.

Remember this! In New Jersey, true north is a little to the right of magnetic north.

5. Test yourself on this important point



If the compass needle is pointing at the flagpole, then true north must be at:

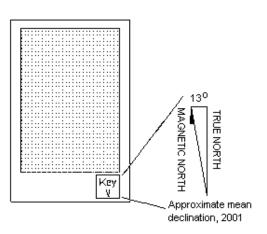
Letter _____ (A or B or C)

6. Showing north on maps

Here's how a map shows the two norths.

What is the official name given to the 13° angle shown in the key?

Angle of d_____



7. How maps are printed

Road maps are always printed with north at the top and south at the bottom. But which north is it?

a. ____ Road maps are lined up with true north

b. _____ Road maps are lined up with magnetic north

(Hint: most drivers don't have a compass in their cars.)

