

LET'S MAKE A COMPASS



Knowing the directions is essential to transportation. In fact, the information from the compass can be a lifesaver. These things are important today and have been for thousands of years. Using this learning activity, your students can make their own compass using easy to find materials.

What is a compass? A compass is an instrument with a magnetized needle that points north. By knowing where north is, you can use the compass to find other directions. Finding your way with a map and compass is one of the basic skills required by a pilot or a sailor.

Materials needed: One sewing needle for each student, a magnet for each student one from their refrigerator will do just fine, a bowl of water for each student or if you prefer one bowl for every three or four students, a small piece of paper per student.

What to do:

1. Stroke the dull end of a needle across the magnet sixty times, going in the same direction each time.
2. Now place the small piece of paper on top of the water in the center of the bowl. Set the needle on top of the paper and gently move the paper to cause it to spin slightly. Make sure there is no metal near by (does the table you are working on have metal on it or under it?). Also make sure the magnet you used to magnetize the needle is a least two feet away from the bowl. If the paper gets stuck to the side of the bowl, gently nudge it toward the center again.

3. Now wait. What is happening? When the needle and paper have stopped moving completely, the sharp end of the needle is pointing north. You can prove this compass is really north by placing a manufactured compass nearby. Don't set the two compasses too close together because they will interfere with each other.