

## ACTIVITY!

# MAKE YOUR OWN COMPASS

Before to the compass, sailors used landmarks and the position of the sun and stars to tell them which direction to sail. They often kept within sight of land, in case it became foggy or cloudy. The invention of the compass allowed sailors to navigate safely away from land. A compass's magnetized needle aligns itself with the lines of the earth's magnetic field. When the compass is level, the needle turns until one end points to the North magnetic pole, giving sailors direction no matter what the weather.

## SUPPLIES

- ✧ small paper clip, straightened
- ✧ magnet
- ✧ small piece of Styrofoam (packing peanuts work great)
- ✧ bowl of water
- ✧ permanent marker

**1** Rub the straightened paper clip with the magnet for several minutes. Push the paper clip all the way through the Styrofoam.

**2** Gently place the paper clip and Styrofoam on the surface of water. Allow the needle enough time to align along the magnetic fields of the earth. It will then point north. If you gently blow on the needle, the same end of the needle should always return to the same direction.

**3** Mark the north end of the needle with permanent marker.

**CLASSROOM CONNECTION:** Take your compass to different points in your school. Which direction is north?

