

ACTIVITY 1: BE A-MAZE-ING!

Directions:

Think about all the instruments described in the video. Discuss as a group why having multiple instruments that provide similar information might be useful in providing clear directions for navigators on the ship.

Now it's time to test your directions. Set up two points in the classroom: one that is a starting point, while the other is the finish line. OPTIONAL: You might consider arranging desks, tables, and chairs in such a way to create an obstacle course.

1. Split students into pairs. Student A will close their eyes or wear an eye covering. Student B will provide instructions to Student A and guide them from the starting point to the finish line.
2. Student A begins providing verbal directions to Student B.
3. Student B must follow Student A's instructions exactly as they are worded. Continue with this process until Student B successfully arrives at the finish line. Other students are observing the process and making reflections.
4. Repeat the same steps with other student pairs.

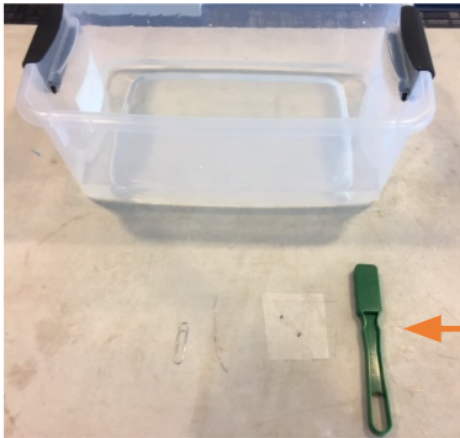
Reflection questions (complete as a whole group after all pairs participate OR complete in between student pairs):

- What did you notice about Student A's directions?
- What was challenging in providing the directions?
- How could the directions be improved?
- What is the importance of providing specific, clear directions?
- How does this relate to navigation?

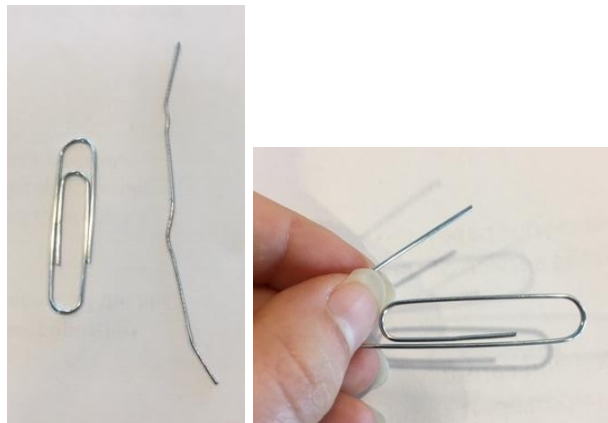
ACTIVITY 2: COMPASS CREATION

Directions: Follow these steps to make your own compass using household materials.

Materials: For this activity, you will need a container of water, a paper clip, a piece of wax paper, and a magnet.



This is a magnet, but yours may look different.



Start with a paper clip*. Straighten the paper clip if it is not straight already. If you do not have a paper clip, you may use a needle with adult supervision.



Run the magnet over one half of the paper clip.

When you reach the end, take the magnet off and place it back on the paper clip where you started. Repeat the process.



Make sure to pick the magnet up off the paper clip, and not slide the magnet back and forth!

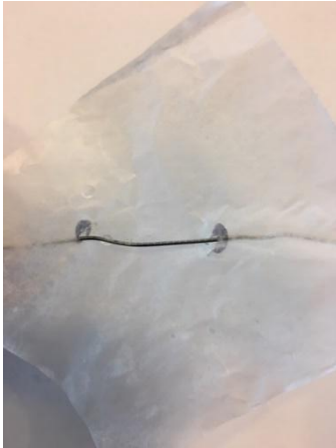


Run the magnet over the paper clip for one minute to magnetize it! You can use a kitchen timer, a watch, or a phone timer to help you count down.



Cut out a piece of wax paper*. Use a marker to put two dots on the paper, about an inch apart.

*If you do not have wax paper, you can use a leaf or another piece of paper.



Slide your paper clip through the two dots on the square of wax paper.

Your paper clip needs the wax paper to float!



Gently place your paper clip device on the surface of the bin of water.

Count to ten, carefully watching the paper clip. It should move to point in a particular direction.

Be patient and watch carefully! If your paper clip compass doesn't seem to move, try running the magnet over your device again.

Now your paper clip can line up with Earth's magnetic field, pointing north and helping you find your way.