#### SCIENCE, TECHNOLOGY, ENGINEERING & MATH



# **MAGNETISM: MAKING a WATER COMPASS (3-5)**

### The SCIENCE of MAGNETISM:

A magnet is a piece of iron that attracts or repels other metal objects.

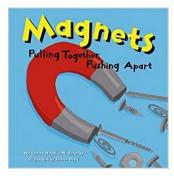
The **poles** are the two strongest points of a magnet and are located at opposite ends. NORTH and SOUTH

Push If 2 north poles or 2 south poles of magnets come together-pushing apart A compass is a tool that uses a magnet to point north, and helps

Repel

Attract-When the North Pole of the Magnet is brought to the South Pole of another magnet- pulling together

Attract



people find their way.

#### LITERACY CONNECTION:

Magnets: Pulling Together, Pushing Apart by Natalie Rosinsky includes a variety of fun at-home projects using magnets.

Don't have this book at home? There are many online resources for books on magnets!

## **ACTIVITY: WATER COMPASS**

Materials: small bar magnet / refrigerator magnet, foam/Styrofoam, water, bowl, paperclip

- 1. Draw a picture of an arrow, a fish, or whatever shape you want and cut it out
- 2. Rub a paperclip in the same direction across the magnet 50 times
- 3. Slide the paper clip on to one end of the foam shape
- 4. Float the "fish" in a bowl of water and watch it line up north to south all by itself!



**EXPLORE:** What happens if you put a magnet near your compass? What about different metal objects? If you were on a ship, would you want metal objects near your compass?

For step-by-step instructions, watch the video at: Water Compass STEM Activity

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org