

Mini Lab Make Your Own Compass

Procedure

1. Read the procedure and safety information, and complete the lab form.
2. Cut off the bottom of a **plastic foam cup** to make a foam disk.
3. Magnetize a **sewing needle** by continuously stroking the needle in the same direction with a **magnet** for 1 min. **WARNING: Use care when handling a sharp needle.**
4. **Tape** the needle to the center of the foam disk.
5. Fill a **plate** with **water** and float the disk, needle-side up, in the water.
6. Bring the magnet close to the foam disk.

Analysis

1. **Discuss** Where did the needle point when you placed your compass in the water? Explain.

2. **Explain** How did the needle and disk move when the magnet was brought near them? Explain why this occurred.
