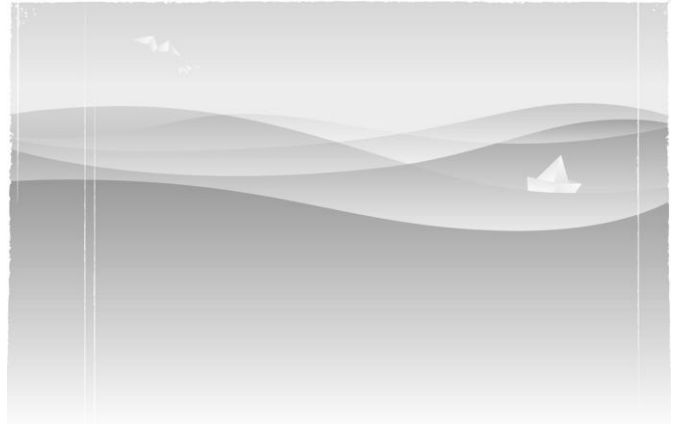


Round and Round it Flows

Make currents visible and discover how they flow in this fun, pretty project!

Materials

- Plastic bottles
- Water
- Food Coloring
- Clear Tape
- Liquid handsoap w/ Glycol stearate -- not glycol distearate



Process

1. Fill bottle $\frac{1}{4}$ full of hand soap, add 2 drops of food coloring
2. Slowly add water (don't let it foam, if it does, fill to overflowing so the foam runs out)
3. Cap the bottle, dry it off and tape it shut to prevent leaking
4. Try swirling the bottle. Does speed change anything?
5. What happens when you shake it up?

So What's Happening?

Normally, you can't see *currents*, how the water is moving, inside a full jar of water. Water that's moving in one direction looks the same as water that's moving in another direction. But glycol stearate, the chemical that gives some liquid hand soaps a pearly look, lets you see patterns flow in water. When people design boats and ships that move through the water, they study the patterns flowing water makes as the object moves through it. Differences in the flow of water can affect how fast a boat can go.

Vocabulary

- **Current** – a large portion of air, large body of water, etc., moving in a certain direction.

For More Information

Water Encyclopedia. "Ocean Currents." Last modified 2011.

<http://www.waterencyclopedia.com/Mi-Oc/Ocean-Currents.html>