

# OCEAN IN A BOTTLE

Oil spills, which can harm thousands of animals, are spread by ocean waves. Watch what happens when ocean waves churn up oil and water.



## WHAT YOU'LL NEED

- Large, clear plastic bottle with a tight-fitting lid (The larger the bottle is, the bigger “wave” action you’ll see, but a smaller bottle works fine as well.)
- Funnel (if the bottle has a narrow neck)
- Measuring cup
- Blue food coloring
- Hair conditioner
- Water

## WHAT TO DO

- 1** If you’re using a large bottle, measure 2 cups of water. Add food coloring to the water until it’s deep blue.
- 2** Pour the blue water into the bottle. Add 1 cup of hair conditioner. Close the bottle tightly.

**ACTIVITY CONTINUED ON NEXT PAGE (PAGE 1 OF 2)**

This activity was modified and adapted from the *Liquid Explorations Teacher’s Guide* published by LHS Great Explorations in Math and Science (GEMS).

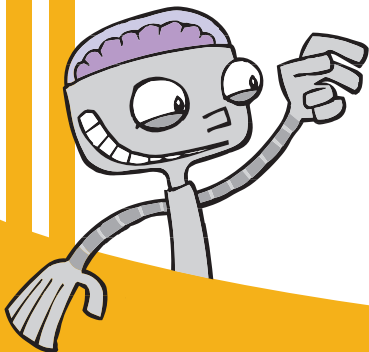
# OCEAN IN A BOTTLE (ACTIVITY CONTINUED)

- 3** Hold the bottle on its side and tilt it back and forth slowly to make an “ocean” wave motion. Start with small waves; then try making them larger to see what happens.

(Note: For a smaller bottle, you can reduce the water and conditioner measurements, as long as you have 2 parts water for 1 part conditioner.)

- 4** What happened when the oil and water were first combined?

- 5** What happened when you rocked the bottle to makes waves?



## DID YOU KNOW?

- Sea otters don't have blubber, so if their fur gets oiled by a spill, they can't keep themselves warm.
- Baby seal pups that get covered in oil don't smell the same, so their mothers can't recognize them on the beach.

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