

KIDS for the BAY

A Project of Earth Island Institute

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Experiments and More

Deep Ocean Currents Experiment

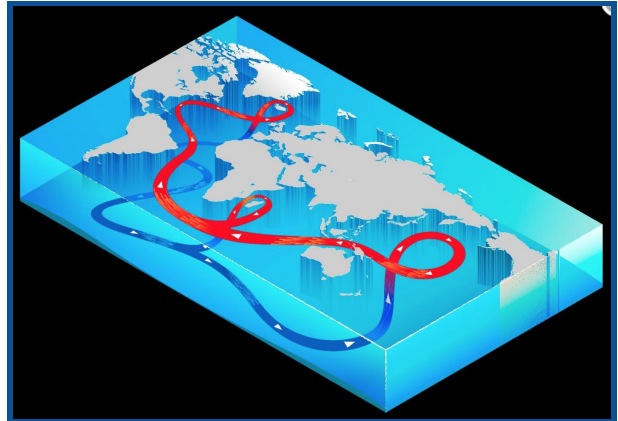
See how ocean water moves at different depths!

Activity Summary

This is a hands-on experiment that illustrates how temperature and depth creates currents in our oceans.

Directions

1. Fill a 9 x 13 inch pan with an inch of water. Make sure the water is room-temperature (or slightly warmer).
2. Set an ice pack (or baggie of ice) against the edge of one side of the pan (inside the water).
3. Place 1 drop of food coloring right in front of the ice pack and 1 drop on the opposite side of the pan.
4. Use your scientific powers of observation to watch what happens to the food coloring drops. Record your observations.
5. Consider these questions during and after the experiment:
 - a. Did the food coloring nearest the ice pack stay still? What happened to it and why?
 - b. Did the food coloring opposite the ice pack stay still? What happened to it and why?
 - c. How are water depth and temperature related?
 - d. Would we have tides if all of the ocean was the same temperature?
 - e. What other forces of nature help make tides?
 - f. Why are tides important?



Location

Your own house! If you have some space outdoors, consider doing the experiment there.

Supplies

- 9 x 13 inch pan
- Water
- Ice pack or baggie of ice

Share your experience with us!

Email kidsforthebay@gmail.com to share photos, videos, comments or questions.

Tag us on Instagram and Facebook @kidsforthebay. Use **#EveryoneisanEnvironmentalist** in your posts.

- Food coloring
- Paper/journal and pencil

Additional resources and related activities

1. [National Ocean and Atmospheric Administration guide to ocean currents](#)
2. [How Do Ocean Currents Work? video](#)

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