
Windy Wonders

Background Information: Ocean currents are basically the movement of water. The ocean currents are important because they change affect the climate on Earth. As ocean currents move around the world, they can cause the climate to change. Many different factors cause ocean currents. Discuss ocean currents that are caused by wind. Wind, the movement of air, blows on the ocean surface and causes ocean currents.

Objectives:

At the end of the lesson, students will be able to:

- Define wind, air, ocean currents and climate.
- Understand how wind moves water.
- Describe an ocean current.

Standards:

Science: unifying concepts and processes; science as inquiry;
science in personal and social perspectives; life science

Vocabulary:

Air
Wind
Ocean currents
Climate

Materials:

9 x 13 Cake pan or plastic container
Water
Oregano or Herb that floats
Straw

Directions for the Teacher:

1. Review the background information about ocean currents and the new vocabulary words.
2. Allow each student to choose a partner, divide into groups, or give a demonstration of the experiment depending on class age and ability level. Distribute materials. Explain that each group will be observing ocean currents caused by wind.
3. Fill the cake pan with water about 2/3 of the way full. Sprinkle oregano, cinnamon, or herb that floats across the surface of the water.
4. Using the straw blow on the surface from the middle. Observe what happens.
5. Redo experiment. Now make the wind blow from a different direction, such as side, etc. Observe what happens.

Extensions:

1. The students should draw the path of the wind currents.
2. Where does garbage floating in nearby oceans come from? Many times we see garbage up against the piers or washed up on shore. Now we know that ocean currents took them there.
3. Discuss the dangers of powerful ocean currents. Many times certain beaches are closed for swimming because of strong currents, riptides or undertows.

References / Resources:

<http://grads.iges.org/pix/head.html>

<http://www.oceanweather.com/data/>

<http://www.pmel.noaa.gov/ogcv/review98.html>
