

LHS GEMS Ocean Currents

Provided by:

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Information	Program Description
5th—8th Grade	Students gain an understanding of the impact of ocean currents on Earth. Learning is placed in real-world context as students study what causes ocean currents, the currents' impact on the environment, and how they have influenced human history.
Curriculum Format	Each lesson can be presented in 45-60 minutes.
	Teaching Guide with complete instructions is provided.
	Teaching Kit with materials needed to present lessons is provided. User may need to provide standard classroom supplies (pencils, scissors, glue). If a lesson requires perishable items (e.g. milk), user is responsible for these purchases.

Lesson	Overview
One: Planet Ocean	Students brainstorm what they already know about the ocean and learn about the vastness of Earth's one, interconnected ocean and the importance of the ocean to all life on the planet.
Two: Waste Disposal	Students learn what cause ocean currents: wind and water masses of different temperatures. They also perform an experiment that shows how ocean currents spread pollution, and make predictions about where the best and worst places are to dispose of waste.
Three: Current Trends	Students experiment by combining water of different temperature and salinity to discover how the force of the wind and differences in density affect motion of the water current.
Four: Layering Liquids	Students examine four layers of liquids (hot, cold, salt, and fresh water) to discover more about the concept of density.
Five: Ice Cubes Demonstration	The students experiment and make predictions about whether ice cubes will melt faster in fresh water or salt water.
Six: Ocean Routes	Students predict ship routes for real-life situations based on what they have learned about ocean currents.
Seven: Message in a Bottle	Students make up their own stories involving ocean currents incorporating what they have learned about the affects of ocean currents on Earth.

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