

## Case Details

### Case Title:

Ocean Explorers

### Author(s):

Jennifer Pokorny, Emory University  
Yasmine McKenzie, Bethune Middle School

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6/28/2011

### Grade Level(s):

Middle School

### Subject(s):

Earth Science

### Summary:

Ever wonder what it would be like to travel along the ocean floor? The Office of Ocean Exploration is seeking new teams of scientists and explorers to help find new possible mining locations in the Atlantic and Pacific Oceans. Join us for Ocean Training and learn about how you can be part of this important mission to the ocean floor.

### Suggested Citation:

Pokorny, J. J., & McKenzie, Y. M. (2011). *Ocean explorers*. Retrieved June 03, 2012 from Emory University, CASES Online Web site:  
[http://www.cse.emory.edu/cases/casedisplay.cfm?case\\_id=3171](http://www.cse.emory.edu/cases/casedisplay.cfm?case_id=3171)

### Learning Objectives:

1. List and describe the various features of the ocean floor (continental shelf, continental slope, seamounts, abyssal plain, mid-ocean ridge, trench, hydrothermal vents)
2. List and explain the different methods of ocean exploration, including the pros and cons of each (sonar, scuba diving, submarine, remote underwater manipulator/robots)
3. Identify different species of animals that live in the ocean and under what conditions they live (depth, light, pressure, etc.)
4. Describe minerals that are found in the ocean and where they are located
5. Examine and discuss the pollution risks that mining in the ocean poses

### National/State Standards:

*Georgia Performance Standards*

E6E3. Students will recognize the significant role of water in earth processes

S6E5. Students will investigate the scientific view of how the earth's surface is formed

S6CS1. Importance of curiosity, honesty, openness, skepticism, etc.

S6CS6. Communication

S6CS7. Question scientific claims/ arguments effectively  
S6CS9. Scientific inquiry