THE OPEN OCEAN - PREUNIT

Summary: Students conduct a pre-assessment and are introduced to what the open ocean is.

Objectives:
1. Conduct Pre-assessment
2. Define the open ocean.

Materials:
Pre-assessment Test

Making Connections: This session is meant to introduce the students to the open ocean environment and test their knowledge about the open ocean environment prior to the unit.

Background: Our oceans are vast areas of water that span thousands of miles and may be several miles deep in some places. There are several different types of habitat in the ocean including reefs, lagoons, estuaries, trenches and the open ocean. In many areas of the world you may have to go many miles from land to reach the open ocean. However, in Hawaii the open ocean environment may be within a baseball throw from shore. For this unit we will define the open ocean as any area outside the reef where you cannot see the bottom.

The preassessment test is designed around some of the key concepts that students should learn about the open ocean in this unit. Ideally the instructor will conduct this test at the end of the unit to assess concept communication and attainment. However the test also introduces the students to the key concepts and sparks their interest in the unit.

Preparation: Print one copy of pre-assessment test per student. (Optional): Decorate classroom with ocean colors and organisms. May use the materials included in this unit such as fish cards and ocean maps.

Procedure: Define the open ocean for the students using the background information above. You may want to refine the definition using the student’s suggestions and display their definition of the open ocean throughout the unit.

Conduct pre-assessment test. Remind students that although they may not know the answer they should at least attempt one. If you have the time you could continue on to lesson # 1’s brainstorm.
Pre-Assessment

1. How is the open ocean different from a shallow reef and coastal waters or a pool?

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2. Name some living and non-living things in the open ocean.
   Living
   Non

3. How is the water in Hawaii different from the water near the North Pole?

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4. List some non-living/physical properties of open ocean water that you can measure (on land, some examples would be wind speed, air temperature, nutrients in the soil).

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5. How do the non-living/physical properties of open ocean water influence/change the living organisms in the ocean?

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6. Describe what a food web/chain is and give examples of things in the web/chain.

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7. List some examples of problems with the open ocean (people throw trash in the ocean)?

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8. What would you do to solve the problems you listed in number 7?

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