



Teacher Guide
Ocean in a Box
90 minute Discovery Outreach
Grade: 3-6

Museum of the Gulf Coast

Description

Explorers will dive into an ocean of discovery and learn about some of the unique animals just off the gulf shore. Through hands on discovery, student involvement, and interactive games groups will discover what makes the Gulf Coast so special.

Before Your Program/How to Set Up Your Room

- Teacher needs to be present at all times.
- Review the vocabulary with the students
- Student's desks should be cleared. For the game portion of the program they will need to be divided into 5 groups of 5 (for class of 25)
- Please provide at least one clear table at the head of the classroom

Texas TEKS

3rd Grade: 112.14 Science (9) (A) (B); (10) (A) (B) (C)

4th Grade: 112.15 Science (3) (C); (9); (10) (A) (C)

5th Grade: 112.16 Science (4); (9) (A) (C); (10) (A)

6th Grade: 112.18 Science (4) (E); (12) (F)

Concepts/Goals

- Students will understand the importance of the ocean ecosystem
- There are many different types of animals living in coastal waters.
- Students will explore some animals that are native to a coastal region.
- Students will discuss similarities and differences between the animals
- Students will identify ocean zones and how different animals are adapted to those zones.

Vocabulary

Marine life-of or relating to life in the ocean

Ocean zones- The ocean is divided into 5 main zones from the surface to the depths where light can no longer penetrate. These zones are characterized by different physical and chemical

properties, such as quantity and quality of light, pressure and temperature. These properties affect what life forms can exist within those limitations. There is the sunlight zone (reaches 656 feet), the twilight zone (reaches 3, 821 feet), the midnight zone (reaches 13, 124 feet), the abyss (19, 686 feet), the trenches (reaches 35, 797 feet).

Benthos-community in which organisms live in or near the sea bed

Nekton-actively swimming organisms in a water

Plankton-organisms that float adrift in water these include animals, algae, and bacteria

Phytoplankton-photosynthetic, microscopic organisms that serve as a basis in the aquatic food chain

Ocean-large body of salt water the comprise 72% of the earth

Sea- A body of salt water smaller than an ocean. Seas can be landlocked either partially or completely surrounded by land

PreVisit Activity

Oceans of the World Worksheet

1. Research the ocean floor, what it looks like and what species live on it
2. Use math skills to find out how long it would take to cross each of the five oceans by boat or plane
3. Find pictures, stories and poems about oceans
4. Research how the oceans were named

Extension Activity

Ocean Collections

Have students bring in seashells or other ocean-related items to class. Provide students with dictionaries, encyclopedias, or other reference sources. Have students place each item on an index card or a piece of paper. Then have students label the item with both the common and scientific name, where it was found, and other relevant data. You might want to have students categorize items and then organize a classroom display.