

OCEAN TIDES / LESSON OVERVIEW

Objectives

The students will:

- Learn what an ocean tide is;
- Learn describe the physical characteristics of the Earth, the Moon, and the Sun;
- Learn how the Earth, the Moon, and the Sun are connected;
- Learn the factors that cause the oceans tides;

Lesson Summary

Part 1. What are Ocean Tides?

Students learn what an ocean tide is and begin to understand the differences between high tides and low tides.

Part 2. What Causes Ocean Tides?

Students will brainstorm why or how ocean tides occur. Students will learn about gravity and how the Sun and Moon influence tides.

Part 3. Types of Ocean Tides

Students will learn about high and low tides, diurnal and semidiurnal tides, and spring and neap tides.

Activity 1. Tidal Expedition

In this activity, students will learn how scientists graph tidal data and will predict tidal patterns. Students will pretend that they are planning an expedition to research sharks, just like the OCEARCH crew!