

OCEAN POLLUTION / LESSON OVERVIEW

Objectives

The students will:

- learn about different types of pollution;
- identify different causes of pollution;
- be able to explain impacts of pollution on marine wildlife;
- and describe ways to prevent pollution.

Lesson Summary

Part 1. Sources of Pollution (10 – 15 minutes)

Part 2. Types of Water Pollution (15 – 20 minutes)

Define surface water pollution, nutrients pollution, oxygen depleting pollution, groundwater pollution, microbiological pollution, suspended matter pollution, and chemical pollution.

Part 3. Impacts of Water Pollution on Marine Life (45 – 60 minutes)

Learn how the environment and wildlife are affected by pollution varies and depends on the type of pollution, its concentration, and its location.

Part 4. Preventing Pollution (15 – 20 minutes)

Activity 1. Preventing Pollution Challenge (3 weeks; mostly take-home)

This activity provides an excellent opportunity for students to develop a plan to reduce pollution in their own home! Students should record their observations before and after the project and present it to the class.

Materials: Computer with internet access, poster board or Microsoft PowerPoint, graphing paper, markers, pens, journal or paper to record observations

Activity 2. Testing Water Quality (1 – 3 hours; take-home)

In this activity, students will test the water quality of local bodies of water and compare to clean, treated water. In doing so, students will be able to determine how human activity has affected their local environment.

Materials: Clean, empty test tubes or bottles with lids, freshwater test kit (can be purchased at pet store or aquarium store), protective safety equipment (goggles, gloves, aprons), pencils, graphing paper, worksheet (provided), and data table (provided).