

Causes of Pollution

Lesson Objective

In this lesson, students will identify and discuss different kinds of pollution, sources of pollution, and why it is important to keep the environment free of pollution.

Activating Prior Knowledge & Concept Building

Begin the lesson by asking your students to think of a scenario where they have been to a place (such as a park, beach, etc.) and they witnessed trash on the floor. Ask your students how they felt about it? What did they think? Did they even have a reaction? Next, briefly discuss pollution and its dangerous effects.

Background knowledge: Pollution is the presence in or introduction into the environment of a substance or thing that has harmful or poisonous effects. It is the contamination of air, water, or soil that are dangerous to living organisms. It can happen naturally, such as through volcanic eruptions, or as a result of human activities, such as through oil spills in the ocean.

The Science Behind It

For this lesson, 3 main vocabulary words are going to be defined to describe pollution:

1. **Litter**- trash; such as paper, cans, and bottles, that is left lying in an open or public place.
2. **Environmental toxins**- chemicals used to make plastic and other products, which harm the environment
3. **Hazardous wastes**- liquids, sludge, solids, or gases that potentially can harm the environment and affect our health

Materials:

- photographs of water, air, and land pollution
- posterboard** (Optional, other options could include technology, e.g. power point presentation, student created video, etc)
- crayons, markers
- poster or tempera paint
- water (if you are using paint)

Instructions for Instructor:

1. Begin the activities by displaying and reviewing the lesson vocabulary (pollution, surroundings, litter, and environment).
2. Discuss the displayed pictures of water, air, and land pollution. Have students identify what is wrong in each of the pictures displayed.
3. Write the students responses underneath each of the pictures. Remind the students that pollution is anything that harms our surroundings and that people cannot survive without clean air, water, and land. Stress that pollution is a responsibility and concern of all people in every community.
4. Ask students to “Brainstorm” to complete a list of ways that they can help to stop pollution (Examples: not put garbage into the lakes and streams, walk or ride bikes whenever possible, pick up litter). List the students’ responses on a poster titled “Let’s Stop Pollution”.
5. Provide students with a half sheet of posterboard** and crayons. Have them make a poster to inform others about pollution. Display the posters in the classroom or around the school.

Closing

Review the activities of the day with the students and assess what concepts they took away or what they missed. List the key learning points on the board. Have students reflect on the activity by sharing out and writing about it in their science journals (or activity document).

Debrief Questions: What do you know now that you didn't know before about pollution? What are some other ways that you can prevent pollution? What will you do on a day-to-day basis to minimize how much you pollute?

Source:

<http://lessonplanspage.com/sciencepollution-htm/>