

High School Science Virtual Learning

Biology Human Impact Land Pollution May 18, 2020



High School Applied Biological Science Lesson: May 18th, 2020

Objective/Learning Target:

Students will understand and be able to explain how humans have impacted and polluted the land of Earth.



Let's Get Started:

1. How is plastic made?

2. What are the 3 locations that the bottles end up?





Let's Get Started: Answer Key

1. Question 1- By chemically bonding gas and oil molecules into monomers then to polymers. Making them into tablets and melting them into a shape.

2. Question 2 - In a landfill, in the ocean, and recycled into other usable products.



Lesson Activity:

Directions:

1. Go to the Land Pollution Webquest link and take notes on land pollution. Then use the information to answer the practice questions.

Links: Land Pollution Webquest



Practice

Complete the following questions using the information you learned during the lesson activity.



Questions:

- 1. What is land pollution?
- 2. What are the types of land pollution?
- 3. List 3 sources of land pollution.
- 4. What is the effect of land pollution on ecosystems?
- 5. What is the difference between soil pollution and soil contamination?
- 6. What is the best way to prevent land pollution?



Once you have completed the practice questions check with the answer key.

- 1. Land pollution is the deterioration (destruction) of the earth's land surfaces, often directly or indirectly as a result of man's activities and their misuse of land resources.
- 2. Solid Waste, Pesticides and Fertilizers, Chemicals, Deforestation
- 3. Garbage, Deforestation, Mining, Construction wastes
- 4. Hazardous chemicals in the soil can potentially wipe out living organisms in the soil. These organisms help to break down organic matter in the soil and help aerate the soil. A polluted land or soil will therefore not be able to support the plants and animals that depend on it in keeping food chains intact.
- 5. Soil contamination is when the chemical levels in soil become higher than they naturally are and if they increase high enough to harm plants or animals, then it is considered pollution.
- 6. The best way to prevent land pollution is to recycle products that can be and reduce use of products that cannot be recycled.



Misconceptions

MYTH: Our national forests are protected from logging, mining, and drilling for oil.

FACT: Fifty-two percent of national forests are logged, mined, and crisscrossed by more than 373,000 miles of roads, enough to circle Earth 14 times. Just 18 percent of national forest land is permanently protected wilderness, and much of that is thin soil over rock where trees rarely grow.

MYTH: Plastic six-pack rings do not break down in the environment and can trap marine animals.

FACT: The rings are designed to disintegrate in sunlight, but the process can take ten years. Therefore, the rings should be snipped, recycled, or avoided altogether. Surveys have shown that the rings can strangle birds and fish, but the worst culprit is abandoned plastic fishing line, responsible for 37 percent of marine entanglements.



More Practice:

Follow the links below to do more practice.

- 1. Land Pollution Quizizz
- 2. Land Pollution Quiz



Additional Resources: Click on the link below for additional resources.

Land Pollution Explained

Pollution on Land CK12

Land Pollution Video