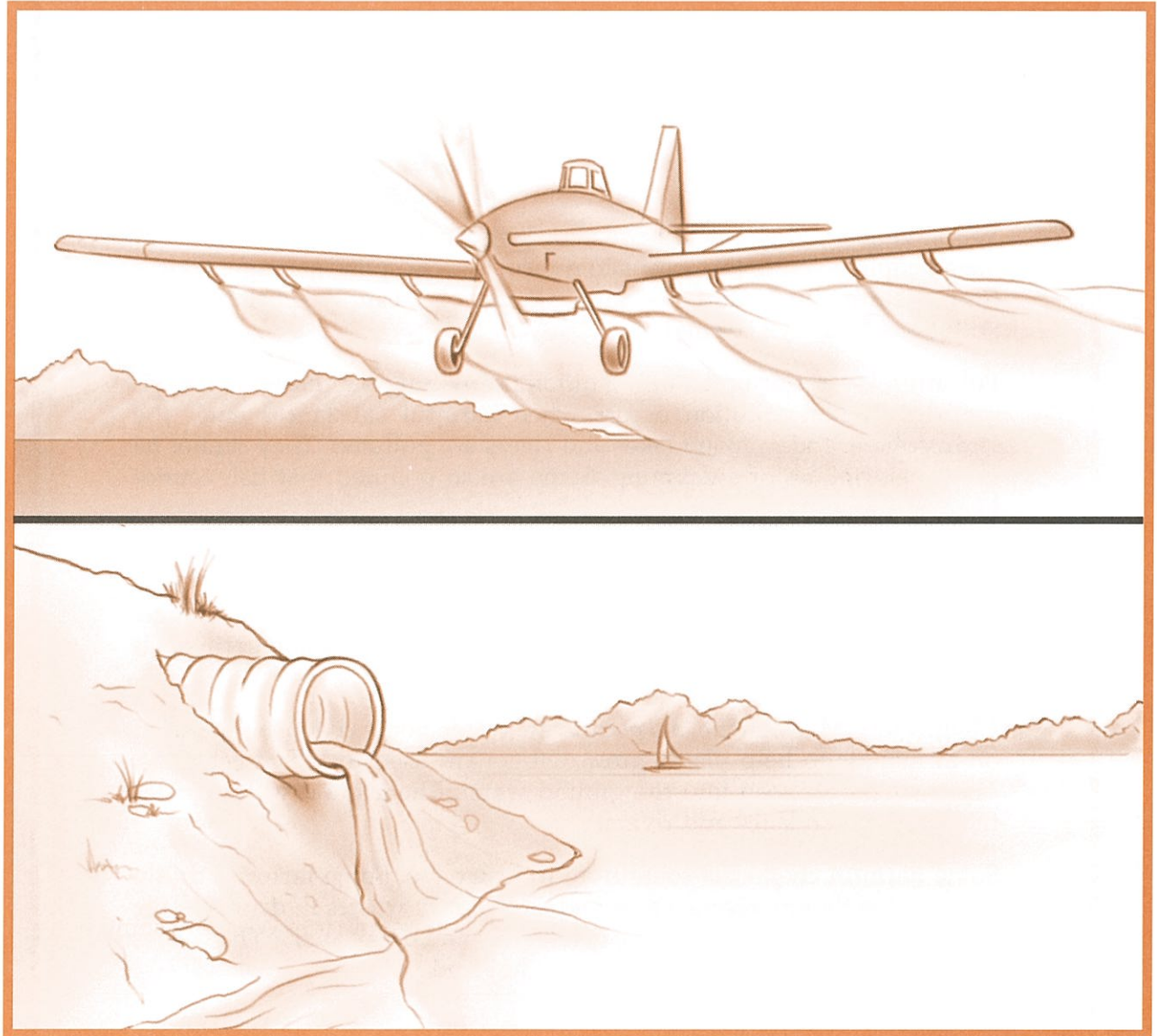


What is water pollution?



LESSON | What is water pollution?

7

You have learned about some of the “gifts” from the ocean. But, what have people given to the oceans in return? . . . Oil spills, garbage, wastes from factories and ships — many kinds of harmful substances, or pollutants [puh-LOOT-ents].

Pollution is a major problem. Pollution is anything that harms the environment. Water pollution occurs when harmful substances enter the hydrosphere. Today, many lakes and rivers are polluted. They cannot be used for drinking or swimming. Some are so polluted that fish cannot live in them.

Now let us find out where water pollution comes from.

Sewage is a major source of water pollution. Germs live in sewage. Many fish and shellfish cannot be eaten because they contain germs that live in sewage.

Chemicals Many chemicals pollute the water. Some chemicals are used on farmlands to help plants grow. Others are used to kill insect pests. These chemicals seep into the ground water. The ground water carries the chemicals to lakes and rivers.

Some harmful chemicals come from industry too. Some factories dump wastes directly into rivers. Other industries bury wastes in drums in the ground. But what happens if the drums rust and break apart? The wastes leak into the ground water. Where do they end up?

WHAT DO THE PICTURES SHOW?

The pictures below show different causes of water pollution. Match each cause with its picture. Choose from the following causes:

Sewage

Industrial wastes

Oil spill

Farm chemicals

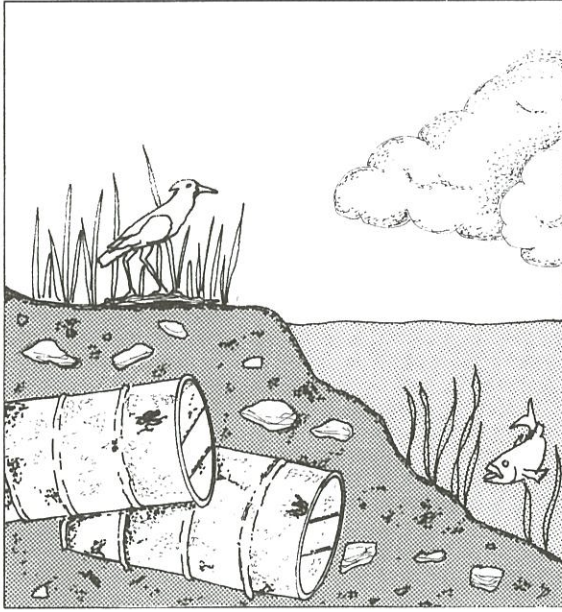


Figure A

Figure B

1. Cause? _____

2. Cause? _____

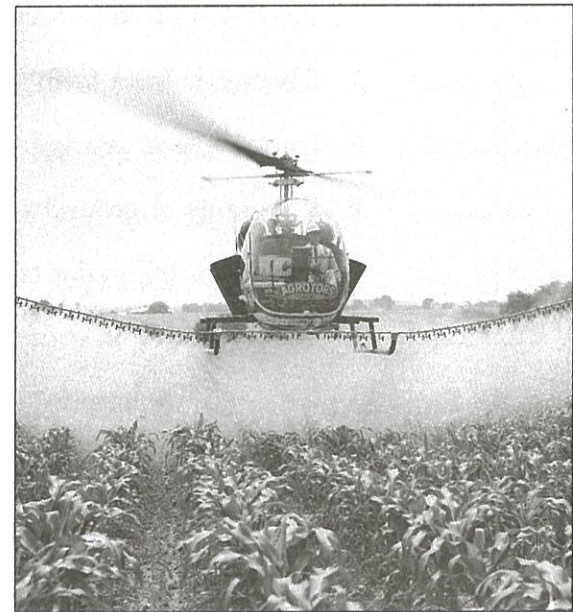
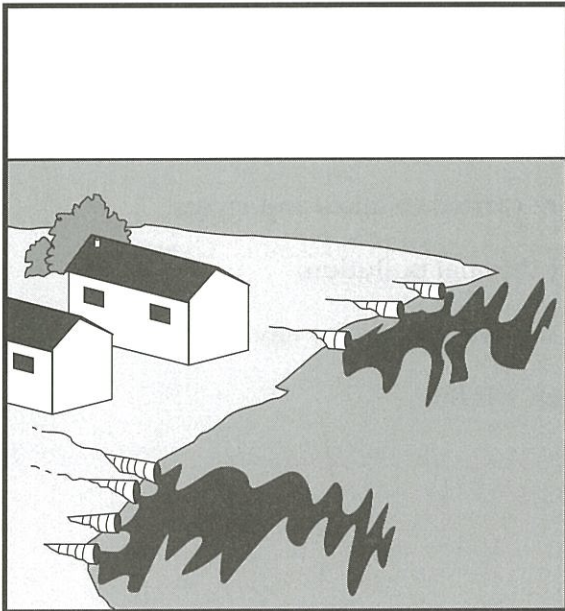


Figure C

Figure D

3. Cause? _____

4. Cause? _____

MORE ABOUT WATER POLLUTION

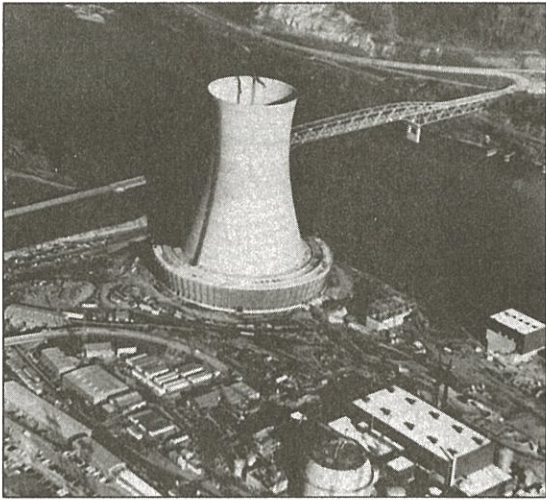


Figure E

Some industries take cold water from a lake or stream. They use the water for cooling. Then they release the water back into its river or lake. Is the water the same? No! When the water is used for cooling, the water itself becomes heated. So when the water is put back into its source, it kills plants and animals that normally live in cooler water.

This kind of pollution is called thermal [THUR-mul] pollution. Nuclear power plants are the main cause of thermal pollution.

TRUE OR FALSE

In the space provided, write "true" if the sentence is true. Write "false" if the sentence is false.

- _____ 1. Pollution is not a major problem.
- _____ 2. Some factories dump wastes directly into rivers.
- _____ 3. Water pollution occurs when harmful substances enter the atmosphere.
- _____ 4. Thermal pollution occurs when water is cooled.
- _____ 5. Chemicals from farmland seep into ground water.
- _____ 6. Germs live in sewage.
- _____ 7. Pollutants of groundwater are carried to lakes and rivers.
- _____ 8. Farms are the major cause of thermal pollution.
- _____ 9. Wastes buried in drums are not harmful to the environment.
- _____ 10. Oil spills are harmful to ocean wildlife.

PROTECTING THE WATER



Figure F

Sewage-treatment plants have been built in many cities and towns. These plants change sewage into less harmful substances.

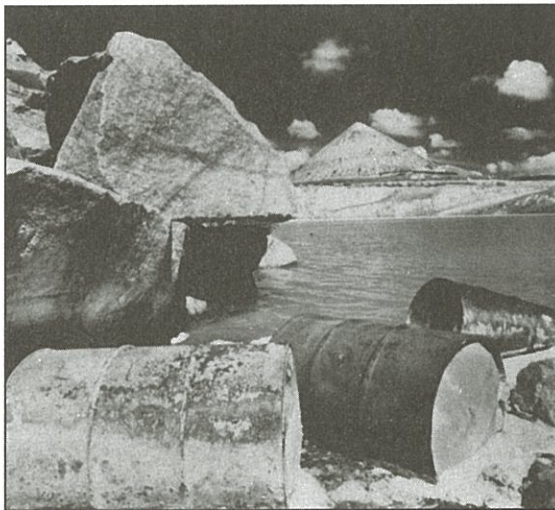


Figure G

Laws also help protect our water supply. Many farmland chemicals have been banned. They can no longer be used.

Laws require industries to clean their wastes before dumping them into lakes and rivers. Laws also call for the cleanup of wastes buried in drums in the ground.

1. Why is water pollution a major problem? _____

2. a) How do laws help fight water pollution? _____

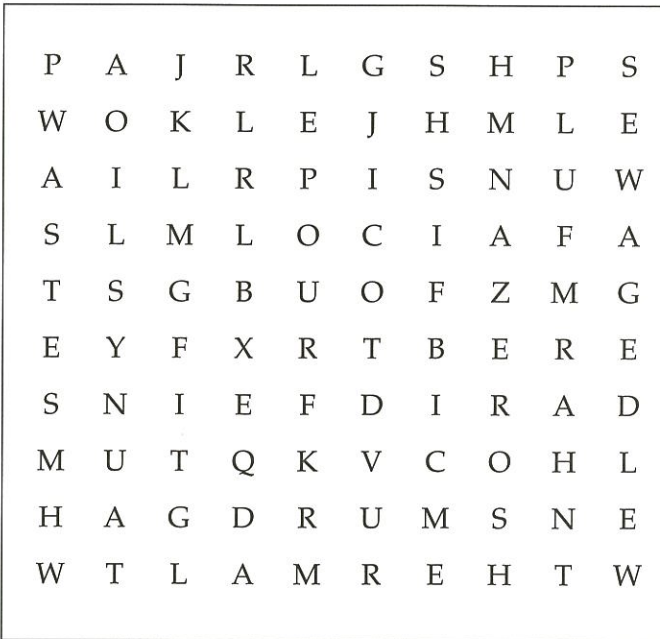
b) What do you think should happen to people who break the law and illegally dump wastes into the water? _____

3. How can you help stop water pollution? _____

WORD SEARCH

The list on the left contains words that you have used in this Lesson. Find and circle each word where it appears in the box. The spellings may go in any direction: up, down, left, right, or diagonally.

pollution
water
sewage
germs
thermal
oil
fish
drums
harmful
wastes



REACHING OUT

In the space below, draw a diagram that shows how a chemical used on a farm to kill insects, could end up in a person's body.

