



WATER WATER EVERYWHERE

Name: _____ Date: _____

LEACHATE

THINK FIRST!

How does buried garbage affect the ocean?

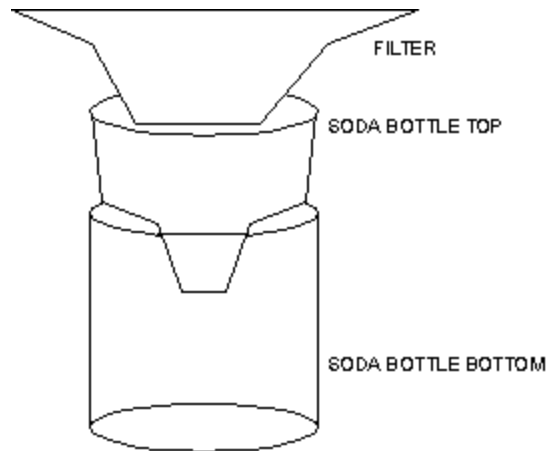
We are going to explore this question in two ways: the old way of simply burying garbage and using a new, modern landfill.

MATERIALS

- 1 2-liter soda bottle, cut in two
- 1 bendable straw
- 2 cups of sand
- water
- 2 filter papers
- 1 small jar
- scissors
- poster paint
- 1 plastic bag
- 1 paper towel
- 2" cellophane tape
- measuring cups

PROCEDURE: BURIED GARBAGE

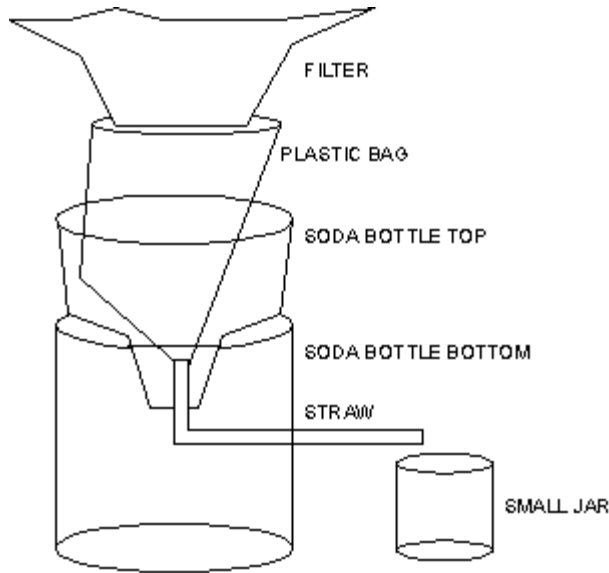
1. Put 1 cup of water in the soda bottle to represent the ocean.
2. Assemble the soda bottle and filter as shown.



3. Put 1/2 cup of sand in the filter.
4. Put a squirt of paint on a small piece of paper towel to serve as garbage.
5. Lay the towel on the sand and pour another 1/2 cup of sand on top to bury the garbage.
6. Now pour 1 cup of water on top of the sand and observe what happens to the ocean water.

PROCEDURE: IMPROVED LANDFILL

1. Clean up your garbage dump. Put 1 cup of clean water in the bottle for the ocean.
2. Cut a small hole in one corner of the plastic bag.
3. Stick the straw into the hole and tape it in place so that no water will leak out.
4. Assemble the soda bottle, funnel, plastic bag, filter and straw as shown.



5. Put 1/2 cup of sand in the filter.
6. Put a squirt of paint on a small piece of paper towel to serve as garbage.
7. Lay the towel on the sand and pour another 1/2 cup of sand on top to bury the garbage.
8. Hold the small jar under the straw and pour 1 cup of water on top of the sand. Observe what happens to the ocean water.

CONCLUSION

QUESTION

Now that you have protected the ground water and oceans with an improved landfill, what will you do with the contaminated water you have collected?
