Unit 5

Indiana's Water Riches Conservation

What is Conservation and How Can We Help?

Water conservation is using water wisely and only when really needed. We want to be sure that there is clean water for future generations. Did you know that the average family of four uses over 150,000 gallons of water year! This number does not include the water used by factories and farms that produce the clothing we wear and the food we eat .

There are many activities that we do everyday where we might be not using water very wisely. For example, we all brush our teeth every day, but how many of us turn off the faucet while we brush? You can conserve about 10 gallons of water by shutting off the water while you brush. Here are a few other conservation tips:

- Choose WaterSense labeled products for your home whenever possible.
- Plug the sink or use a basin when washing dishes by hand.
- Fix leaks and turn faucets off carefully.
- Wash a full load when washing clothes or running the dishwasher.
- Keep a pitcher or bottles of water in the refrigerator instead of running the faucet to get it cold.
- Take a short shower instead of a long shower or a bath. This will save up to 150 gallons of water per month!
- Conserve water in the kitchen: Let water you have boiled pasta or potatoes in for watering plants. Rinse fruit and vegetables in a pan of water instead of running the faucet. Use this water for plants.
- Parents can purchase low-flow water fixtures (faucets, showerheads, and toilets) that save a lot of water.

What other ways can you think of to conserve water?

Vocabulary Words

Conservation

The wise use of natural resources, so we can meet current and future demand s.

Drought

A period of time when there is no rainfall and the soil gets very dry.

Hypothesis

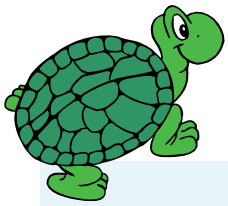
A statement that is tested using measurements and other concrete evidence. The hypothesis can be accepted as true or false (rejected). Or more testing is needed.

Transpiration

The process by which plants release water through their pores into the atmosphere.

Water Quality

A measure of the chemical and physical condition of water. Drinking water must have a high water quality.



Ask Sheldon

Dear Sheldon,

My science teacher told the class that scientists use instruments to measure the quality of water much like a doctor uses thermometers and stethoscopes to measure our health. What type of instruments do scientist use to measure water quality?

Mike Curious

Dear Mike,

Your teacher is right! Scientists use instruments including Secchi disks, probes, nets, gauges and meters to help measure and determine water quality. They take water samples and measure the chemical and physical condition of the water. They also check the health of plants, animals, and organisms that live in the water.

The Environmental Protection Agency (EPA) has a research vessel, the *Lake Guardian*, that travels the Great Lakes to sample the water, aquatic life, sediments and air to study the health of the Great Lakes ecosystem. This ship has science labs onboard!

Sheldon

Dear Sheldon,

My 5th grade class is looking for ideas on what we can do to help conserve water. Do you have any ideas or conservation suggestions for my whole class?

Lisa Water

Dear Lisa,

Your class can get involved in a lot of great group projects that can help conserve water. You can agree to do your best to conserve water, brainstorm ways to conserve, and keep records to evaluate how you are doing. You can also teach others about water conservation.

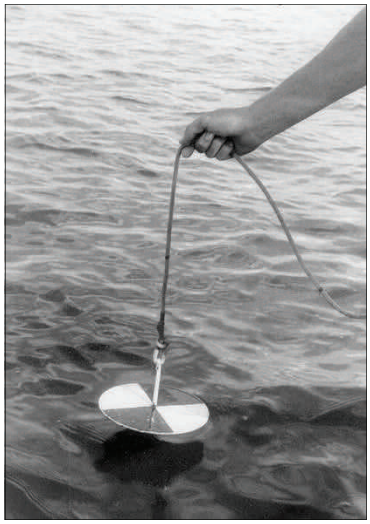
Another idea would be to adopt a stream or a watershed in your community. Class members can take turns monitoring the water, record signs of pollution, and pick up trash.

Sheldon.

EPA Websites!

See the EPA websites: www.epa.gov/water and http://water.epa.gov/learn/kids/, to learn more about our water resources. You can use the search box to learn more about the Lake Guardian or see the topics listed on the left hand side of the site:

- Drinking Water
- Our Waters
- Pollution Prevention
- What You Can Do



Picture of a Secchi (sek'ee) disk. It is used to measure the transparency of water—how far down it is when you can no longer see the black and white triangles.

IDNR Websites!

See the Indiana Department of Natural Resources, www.in.gov/dnr, to learn more about Indiana water. Links are listed on the left of the home page.

- IDNR Healthy Rivers Initiative
- Resource Management, Water
- Resource Management, Indiana's Water Shortage Plan

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Indiana's Water Riches
Conservation

Home Survey

See how environmentally friendly your home is! Take this survey home and record the following answer the questions. Circle the answer that applies to your family and your home.

Your family runs the dishwasher and washing machine when it is:
1. Full
2. Half full
3. Only a few items are in it

How many faucets do you have in your house?_____

Do any of them leak? Yes or No

If so, how many leak? _____

Does your family recycle any of the following?
1. Glass
2. Paper
3. Plastic
4. All of the above
5. None

In your garage (or wherever your parents park their car) do you notice any of the following?
1. No oil or chemical stains
2. A few drops or oil
3. Lots of oil on the ground

What does your yard consists of (mostly)?
1. Sand and dirt with no grass
2. Some grass and shrubs
3. Grass, shrubs, and trees.

You are doing good if you answered the following:
- Dishwasher and washing machine are full when run
- No leaky faucets
- Your family recycles everything listed
- No oil or chemical stains from your family cars
- Your lawn consists of grass, trees, shrubs, etc.

What Do YOU Think?

Circle the either T for true or F for false

T or F Doctors measure water quality.

T or F Taking shorter showers saves water.

T or F Water quality is very important.

T or F Water conservation is about using water wisely.

T or F Oil leaking from a family's car does not pollute water.

T or F Fixing leaky faucets conserves water.

Name seven ways that you can conserve water:

1._____

2._____

3._____

4._____

5._____

6._____

7._____