



Leak Detectives

Contact Information

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Grades

3-5

Objectives

Students will be able to: 1) learn what water conservation is and why it is important, 2) help save water by checking their home for leaks.

Method

Students act as detectives in trying to find leaks inside and outside the home.

Materials

Food coloring

Vocabulary

Water Conservation

Procedure

1. There may be water wasters in your home, both visible and hidden. Help save water by checking your house for leaks. Although some leaks are easily seen such as at the kitchen faucet, others are hidden and may not be as easy to locate. Some leaks may waste hundreds of gallons a water a day!

2. Introduce the term *Water Conservation*. Water Conservation is any practice or technology that helps people use less water. Water conservation *practices* could be something as simple as repairing a leaky faucet or turning the water off while brushing your teeth. Water Conservation *technologies* consist of toilets, showerheads, dishwashers, and washing machines that use less water.

Although we have limited and finite water resources in Athens-Clarke County, water use continues to increase with increases in population as well as construction and expansion of new homes, schools, and businesses. Water Conservation is one way to make sure there is enough water to meet all of Athens-Clarke County's needs in the future. Plus we want to make sure aquatic wildlife such as fish, turtles, frogs, and other animals have enough water too.

Procedure (continued)

3. Check indoors for any leaks

a. Check the kitchen and bathroom faucets for leaks.

First, *look* and see if any of the faucets are leaking. Make sure the faucet handles are turned off all the way.

Second, *listen* for any dripping sounds that might indicate a leak under the sink or somewhere else that you cannot see.

If you see or hear any leaks, tell an adult in the house so the leak can be repaired.

b. Check the toilet for leaks

- Remove the lid from the tank of the toilet. Ask an adult to help lift the lid because it's a bit heavy.

- Pour some food coloring into the tank of the toilet

- **Do Not Flush**

- Wait 15 to 30 minutes and then check the toilet bowl.

- If the water is clear, you do not have a leak. If the water in the bowl shows some of the food coloring, then the toilet has a leak. Tell an adult so repairs can be made.

4. Check outdoors for leaks

a. Check the outside faucets. Are any leaking? Make sure the handles are turned all the way off. If they are still leaking, tell an adult so they can be repaired.

b. Does the garden hose have a nozzle attached? If not, attach one to help save water.

c. If you have a sprinkler system, check to make sure water is not running out of the sprinklers when they are turned off. Does water run all over the street or sidewalk when they are on? If so, tell an adult the sprinklers need fixed.

5. Students can use their senses to try and find other leaks that may occur inside or outside a home. See if they can start finding leaks in and around the school as an extension of this activity. Have them share what they find with the class.

Did you know.....

- A leaking toilet may waste from 30 to 500 gallons of water a day.

- A leaking faucet dripping 1 drop per second wastes 192 gallons of water a month.