

WEB OF CONSERVATION

A program by Oklahoma 4-H Youth Development & Oklahoma Water Resources Center

SKILL: SCIENCE **TIME: 20 MIN**

OBJECTIVES:

- Students will discover ways to reduce water use inside the home.

LESSON:

We use water all the time both in the home and outside. Let's do an activity to see how many ways we use water in and around the house.

Instructions: Form a circle and join hands so we have our circle evenly spaced. I will give a ball of yarn to one person, and they will hold on to the end of the string. We are going to build a web of indoor water uses by tossing the ball of yarn until everyone in the circle has had a turn. Before you toss the ball of yarn, tell us one way you used water in the home this week. Be sure to hold on to the string when you toss the ball to someone across the circle.

You have all identified a lot of ways that you use water every day! Are there any other ways you would like to add to the list?



VOCABULARY

- Conservation

MATERIALS

- Ball of yarn
- Water Use in the Home Poster and Velcro matching pieces

NOTE

- This lesson requires an open space. Use a gymnasium, empty classroom or a room where furniture can be moved out of the way so participants can form a circle for the activity.

4H₂O: WEB OF CONSERVATION

Why do you think we made this web today?

The web shows that all of us use water all the time. We are all connected! Let's sit down on the ground in our circle and lay the web on the floor.

How much water do you think you use in a day?

Each person uses 80-100 gallons each day.

If you have two people in your home, you use 160-200 gallons a day.

For a family of four, they use 320-460 gallons a day. That's a lot of water!

Let's talk about how much water is used for some of the things you mentioned as you built the web. We are going to do a matching activity on the poster, Water Use in the Home. I will pick a few people to come up and help me with this activity.

Let's see if we can match the activity with the number of gallons needed to do that activity.

- Wash dishes in the sink with water running — 30 gallons
- Shave at the sink with water running — 15 gallons
- Get a cool drink of water from the faucet — 1 gallon
- Wash clothes — 60 gallons
- Flush toilet — 7 gallons
- Brush teeth with water running — 5 gallons
- Take a bath in a full tub — 30 gallons

Half of the water we use in the home is for washing clothes and dishes. The rest goes to bathing and flushing toilets which is about 45%. Drinking and cooking makes up 5%.

There are several ways that we can conserve water in the home. What do we mean when we say conserve water?

To **conserve** water means we try to use less water so we do not waste it.

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What are some ways we can save water when we wash clothes?

- Wash only full loads
- Adjust the water level to the size of the load
- Hand wash single pieces instead of washing in machine
- Wash only dirty clothes
- Keep equipment in good repair
- If your parents need to buy a new washer, tell them to look for a high efficiency washer. These use less water per load.

What are some ways that we can reduce the amount of water we use when in the bathroom?

- Take shorter showers
- Turn water off when washing your hair and body in the shower
- Take a short shower instead of a bath
- Don't fill the bathtub full if you need to take a bath
- Install water-efficient shower heads
- Reduce the volume of water held in the tank of the toilet. One way to do this is to put a 1/2 gallon jug of water down in the tank.
- Flush less often. Some families use the saying "If it's yellow, let it mellow. If it's brown, flush it down."
- Avoid flushing Kleenex or other trash down the toilet
- Turn off water when brushing teeth

What are some ways we can use less water when cooking and drinking?

- Fill one sink with soapy water and one with clean water to rinse dishes instead of letting the water run
- Keep a pitcher of water in the refrigerator to pour for drinking
- Turn off water when peeling vegetables or fruit

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Let's Clean Up and Review

- How many gallons of water do you use each day? 80-100 gallons
- What are some ways that you use water in the home? Bathing, brushing teeth, washing clothes, cooking, drinking
- What is the one thing you can go home and start doing today to save water?

Oklahoma Aqua Times Related Lessons:

- Wasted Water or Righteous Resource
- A Drop in the Bucket
- Water Down the Drain
- Dirty Dishes
- The 40 Gallon Challenge

Lessons can be found at: <https://4h.okstate.edu/projects/science-and-technology/oklahoma-aqua-times/index.html>

Lesson adapted from 4-H₂O For You: Indoor and Outdoor Water Conservation, Texas A&M AgriLife Extension Service, Guadalupe County



**OKLAHOMA WATER
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PASS Standards

Grade Level	Standard	Science and Engineering Practices	Cross Cutting Concepts
4th	4.ESS2.2: Analyze and interpret data from maps to describe patterns of Earth's features.	Analyzing and Interpreting Data	Patterns
5th	5.ESS2.2: Describe and graph amounts of saltwater and freshwater in various reservoirs to provide evidence about the distribution of water on Earth.	Using Mathematics and Computational Thinking	Scale, Proportion, and Quantity
5th	5.ESS3.1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environments.	Obtaining, Evaluating, and Communicating Information	System and System Models
6th	6.ESS2.4: Develop a model to describe the cycling of water through earth's systems driven by energy from the sun and force of gravity.	Developing and Using Models	Energy and Matter
7th	7.ESS3.3: Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.	Constructing Explanations	Cause and Effect
7th	7.ESS3.4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.	Engage in Argument from Evidence	Cause and Effect