

Student worksheet

Water Watchers

Materials Needed:

• Food coloring

Water is precious. Here in Colorado Springs, we live in a semi-arid climate that only gets an average of 16 inches of precipitation per year. We don't have enough water in town for all the people that live here, so Colorado Springs Utilities brings in water from the Rocky Mountains 100 miles away. To make sure we have enough water, everyone needs to use it wisely.

What you'll do:

- Take a Water Sense quiz.
- Use food coloring to test your toilets for leaks.
- Watch a video on how to replace a leaky toilet flapper.
- Learn about a water footprint and calculate yours.
- Complete a match game and add up the gallons of water needed to make a cheeseburger.

Water Watchers Quiz

It's Time to Test Your Water Sense! Think you know everything there is to know about water? You can't be sure until you test your Water Sense. *Circle your answers below. Use your teacher's answer key to see how many questions you answer correctly!*

1. When is the best time of day to water your lawn?

- A. Early morning or late evening
- B. In the afternoon
- C. All day long

2. How much water could you save by washing your bike with a bucket and sponge rather than letting the hose run?

- A. 1 gallon a minute
- B. 3 gallons a minute
- C. 4 gallons a minute
- D. 6 gallons a minute

3. True or False: It isn't important to save water because there is so much of it on Earth.

- A. True
- B. False

4. Which of these ways to wash the car saves the most water?

- A. Wash it in the driveway with the garden hose
- B. Drive it into the lake
- C. Take it through a car wash that recycles water

5. How much water does a family of four (mom, dad, brother, and sister) use every day?

- A. 50
- B. 116
- C. 250
- D. 312

6. Stuck helping mom or dad wash the dishes? Which may use less water?

- A. Washing dishes by hand
- B. Washing dishes in a dishwasher



7. True or False: Keeping the water running when you brush your teeth wastes a lot of water.

- A. True
- B. False
- 8. Which of the following uses less water?
 - A. Taking a 5-minute shower
 - B. Taking a bath

9. Which of these everyday objects is a water-saving tool?

- A. A bucket
- B. A clock
- C. A broom
- D. All of the above



10. Which of these activities wastes the MOST water per day in the average home?

- A. Running the tap while washing dishes
- B. Using a garbage disposal
- C. A leaky toilet
- D. Long showers

11. True or False: It's okay to flush some trash down the toilet like cotton balls and tissue.

- A. True
- B. False

12. What should you do if you see or hear a leaky faucet in your house?

- A. Ignore it-drips are no big deal
- B. Do nothing—there is no way to fix a drippy faucet
- C. Tell your parents

Check your answers with the teacher's answer key and see how you scored!

WaterSense SCORING:

9 or more questions correct: Congratulations, you're a WaterSense Hero! You understand that water is a precious resource that must be used more efficiently.

6-8 questions correct: You're a WaterSense Whiz Kid!

Less than 6 questions correct: You're a WaterSense Wonder! But that means there's room for improvement!

To learn more about why water efficiency is important and how you can become water-efficient, visit <u>www.epa.gov/watersense</u>.



Is Your Toilet a "Silent" Leaker?

Did you know that toilets are the source of most water leaks? According to the Environmental Protection Agency, one out of every four toilets can be a "silent" leaker, losing about 20 gallons of water a day without you noticing. If you can hear your toilet running, you may be losing up to 200 gallons a day!

Ask your parents' permission to test your toilets at home for silent leaks.

Toilet Leak Testing Instructions:

- a. Add 10 drops of food coloring into the water in the tank.
- b. Do not flush.
- c. After 15 minutes, look in the bowl and see if colored water appears.
- d. You have a leak if colored water from the tank seeps into the bowl. Silent leaking toilets can waste 20 gallons of water or more a day!
- 1. Tally your toilet testing data:

_____ Number of toilets tested

- _____ Number of toilets leaking
- 2. Determine the amount of water lost to "silent" leaks by multiplying the number of leaking toilets by 20 gallons per day:

_____ Amount of water lost per day (gallons).

3. Figure out how much water is lost in a year by multiplying by 365:

_____ Amount of water lost per year (gallons).

- 4. Watch the 2.5-minute YouTube video on how a 4th grader can replace a toilet flapper: <u>"Stella Fixes a leaky Flapper"</u>
- 5. Fix toilet flappers or replace leaking toilets. Congratulate yourself for saving water!
- 6. Share your results with your teacher to determine how much water your class is saving by fixing or replacing leaking toilets.

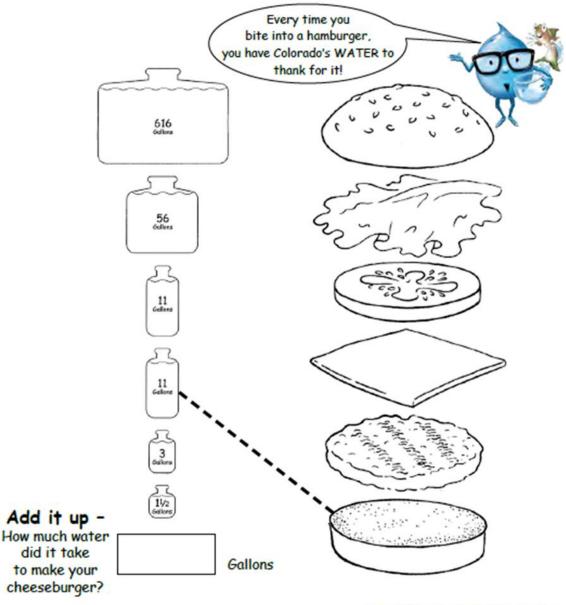




What is a Water Footprint? Your water footprint is the amount of water you consume in your daily life, including the water used to grow the food you eat, to produce the energy you use and for all of the products in your daily life – your books, music, house, car, furniture and the clothes you wear. Find out your water footprint using this calculator: https://www.watercalculator.org/

How Much Water is in Your Food?

Match up the ingredients on the right to the correct number of gallons it takes to grow or produce each. Then color your own burger!



Source: California Department of Water Resources