City of San Diego Water Department

Water Conservation

Activity Book
The Water Cycle

There is as much water in the world today as there were thousands of years ago. In fact, it’s the same water. The water that we drink contains the same molecules that the dinosaurs drank. Perhaps Columbus sailed across it.

The earth naturally recycles water. The Water Cycle is controlled by the sun. Heat and energy from the sun causes the world’s oceans, lakes and pools in your backyard to warm and evaporate.

When water is heated, it changes from a liquid to a gas called water vapor. This process is called water evaporation.

When water evaporates, it rises into the cooler air, collects, and forms clouds. The water vapor cools down and changes back into liquid water called condensation.

As more and more water vapor cools in the clouds, water droplets begin to form. The water droplets become larger and get so big that the swirling winds in the atmosphere can no longer hold them up. The drops fall from the sky.

These droplets are called precipitation. Precipitation comes down to the earth in the form of rain, snow, sleet, or hail depending on the conditions in the atmosphere.

The water then runs off into lakes, rivers, streams, and any other body of water.

More water is heated by the sun, the water evaporates and the whole cycle begins again.
Water Word Scramble

1. ALEK __ __ __ __
2. PVORA __ __ __ __
3. NDKIR __ __ __ __ __
4. EURSE __ __ __ __
5. VERIR __ __ __ __
6. VOESNCRE __ __ __ __ __ __
7. TRASEMS __ __ __ __ __ __
8. DISLO __ __ __ __
9. USN __ __ __
10. EWRAT __ __ __ __
11. ECRELCY __ __ __ __ __ __
12. ILDIUQ __ __ __ __
13. LUDCOS __ __ __ __ __
14. SGA __ __ __
15. AEVS __ __ __

Two bonds of Hydrogen
Use the Secret Code

Use the Secret Code

SECRET CODE
A= ⊗  C= ◆  E= ☁  L= ☁  M= ⊗  O= ⚫  R= ☒  T= ✓  U= ☁  W= ⊓

One bond of Oxygen

On Track With H₂O Facts

Did you know that:

- 80% of the world is covered by water or ice. 20% is dry land.
- 97% of the world’s water is salty and undrinkable. 2% of the available drinking water is frozen in ice caps and glaciers. 1% of the world’s water is available to drinking.

Less than 1% of water treated by the City of San Diego is actually used for drinking. The remaining 99% of our drinking water is used to water our lawns, to wash our clothes and to flush our toilets.

- 55% is used to water our lawns -
- 20% gets flushed down toilets. -
- 15% is used in showers and baths.
- 7% is used to clean our laundry and dishes.
- 2% is lost through undetected leaks.
- 1% is available to drink.

The average person uses 88 gallons of water a day.

Water your lawn early in the morning or late in the evening.

Fill your tub half way to save water.
Water Quiz

1. - The water coming out of your faucet contains molecules that the dinosaurs drank.  
   T  F

2. - The volume of earth’s water is constantly changing.  
   T  F

3. - Potable water is drinkable water.  
   T  F

4. - Water exist naturally in the form of a gas, a liquid and a solid.  
   T  F

5. - Our human bodies are mostly water.  
   T  F

6. - We can survive two months without drinking water.  
   T  F

7. - A reservoir is a man-made lake used for water storage.  
   T  F

8. - The average yearly rainfall in San Diego County is about 9½ inches.  
   T  F

9. - The earth naturally recycles water faster than we can use it.  
   T  F

10. - Most plants do not die from over watering.  
    T  F

Name each form of water

Solid, Liquid, Gas

Forms of water: Solid, Liquid, Gas
Water Has Many Different Names

And is used in many different ways!

Think about what you did yesterday. Were you at home all day? Did you go to school? Did you go to a friend’s house? Did you go to the mall? Write a list of all of the different ways that you used water.

Are you done? Count the many different ways you used water yesterday and put the total here.
1. Conserving water in the kitchen is simple. Choose the best ways to save water.
   A. Wash full loads of dishes in the dishwasher.
   B. Keep drinking water in the refrigerator.
   C. Wash vegetables in a bowl.
   D. All of the above.

2. If you leave the water running while brushing your teeth, how much water is wasted?
   A. 7 to 9 gallons
   B. 2 to 4 gallons
   C. 4 to 6 gallons
   D. 3 to 5 gallons

3. What activity in your home uses the most water?
   A. Toilet flushing.
   B. Taking a bath or shower.
   C. Washing laundry.
   D. Cooking and dishwashing.

4. How often should you water your lawn?
   A. Every day.
   B. Only when necessary.
   C. Three days per week.
   D. Four days per week.

5. What Activity outside your home uses the most water?
   A. Washing the Car.
   B. Watering the lawn and garden.
   C. Washing the driveway.
   D. Answers A and C.

6. How many gallons per day does the City of San Diego use?
   A. 90 million gallons.
   B. 150 million gallons.
   C. 210 million gallons.
   D. 350 million gallons.

7. What are the steps of the water cycle?
   A. Evaporation and condensation.
   B. Precipitation.
   C. Percolation and runoff.
   D. All of the above.

8. What percent of all water used in San Diego is imported?
   A. 90%
   B. 70%
   C. 50%
   D. 30%