

WATERDROPS

Water Cycle

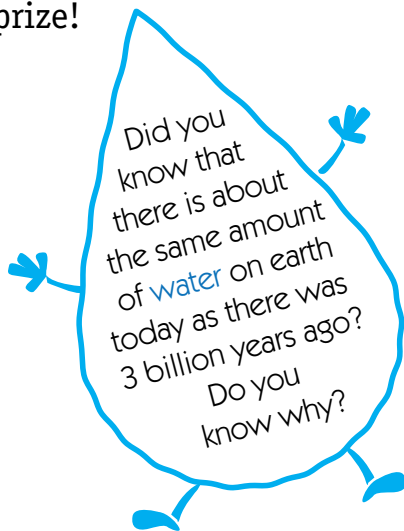
Southwest Florida Water Management District Water Resources Newsletter for Grades 3-5

Hello Readers!

This issue of **WaterDrops** brings you information about **water** as a resource. What is a resource, you ask? It's something for us to use. **Water** is one of our most important resources. **Water** exists in a variety of places. We can find fresh **water** under the ground in places called aquifers and on the earth's surface in lakes, rivers and streams. We can see it falling from the sky as rain. Nearby, we can find salt **water** in the Gulf of Mexico.

All the **water** on the earth is part of a wonderful system in nature called the **water** cycle. After you complete this issue, you will know a lot more about the **water** cycle. Don't forget to send in the activity on the back page for a prize!

Happy Splashing!

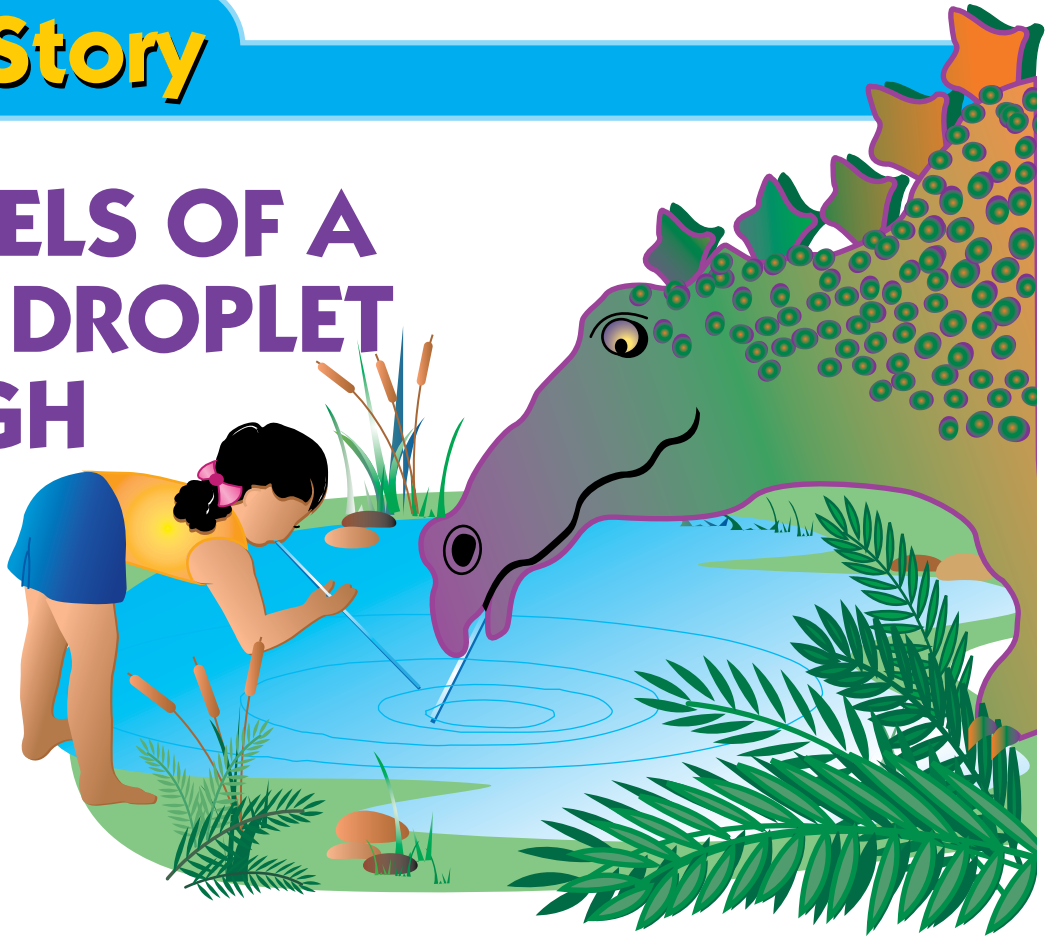


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Feature Story

THE TRAVELS OF A WATER DROPLET THROUGH TIME AND SPACE!



This week at school, Kim's class is learning about the **water** cycle. The students had just finished watching a video on the story of **water**. They learned that **water** moves itself in a never-ending cycle.

"What did you like best about the video?" asked the teacher.

"I liked the part that showed a timeline with dinosaurs drinking **water**, and then pioneers drinking the same **water**, and finally children of today drinking the EXACT same **water**," said Kim.

"I never knew that!" exclaimed Tomika.

"I guess that means that in 100 years, people will be drinking the same **water**," said Clayton.

"We have the same amount of **water** on earth that we've always had. I think that's cool!" said Rick.

The class continued the discussion about **water**. "Did you know that the **water** cycle is also called the hydrologic cycle?" asked the teacher.

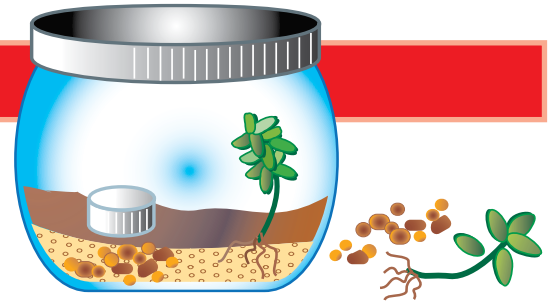
"I think **water** cycle is easier to remember than hydrologic cycle," said Kim.

"What's important is that we all understand the different parts that make up the cycle," said the teacher. "Let's imagine that each one of us is a **water** droplet. How would you describe your trip through the **water** cycle? You may begin your journey anywhere in the cycle."



Take It Home

CREATE A WATER CYCLE AT HOME!



Here is an easy experiment you can do at home.

Materials:

- glass jar with lid
- small stones
- soil
- bottle cap
- sand
- a few small plants

Directions:

1. Find a clean jar that has a wide top. An applesauce or a pickle jar works well for this project.
2. Place a layer of small stones in the bottom of the jar and then cover the stones with sand.
3. Fill the jar with soil until it's about half full. Place a few small plants in the soil.
4. Fill a soda bottle cap or other small container with **water**. Place the container next to the plants on top of the soil.
5. Place the jar lid on top and twist it as tightly as you can. Place your jar in a sunny place for a few days.

You have created a miniature **water cycle!** Take notes on what you observe about the moisture in the jar. Share your findings with the class.



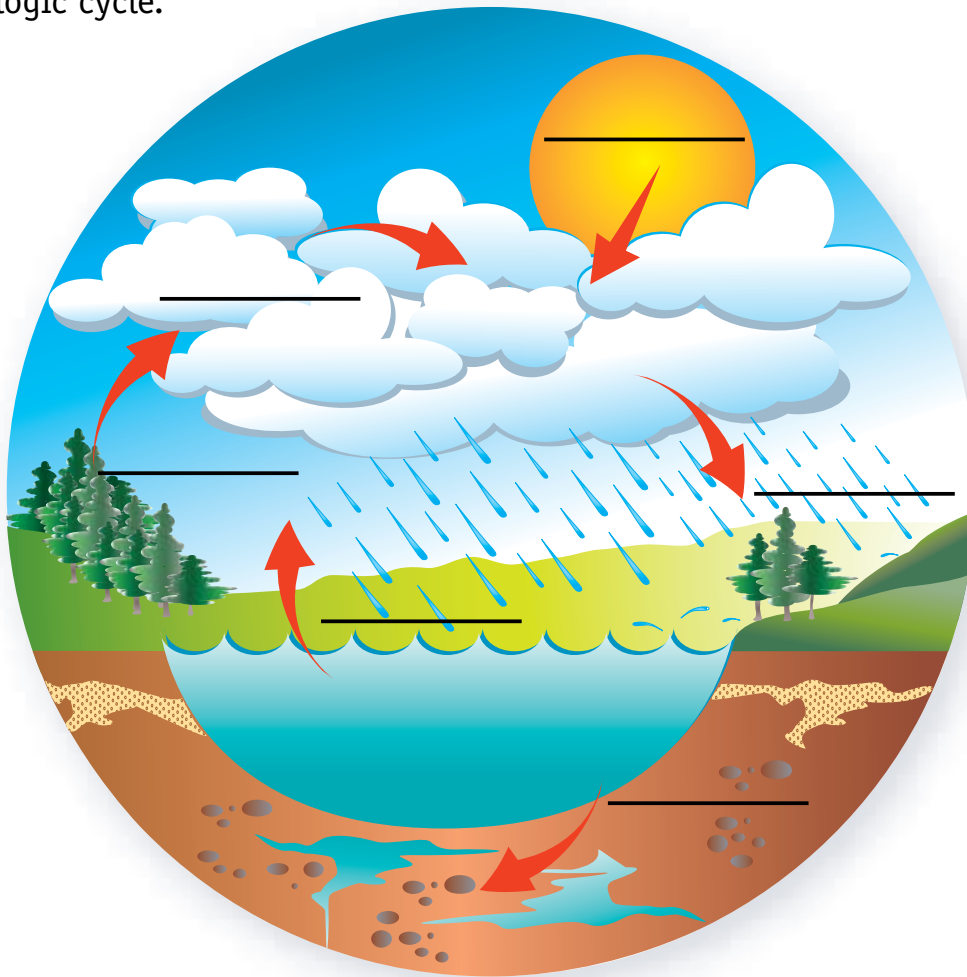
Ask Water Cycle Wanda

Sherita asks: My teacher says that trees give off water! Is this true?

Water Cycle Wanda: Yes! Trees are an important part of the **water cycle**. They draw **water** up through their roots and use it to manufacture food. As they do this, they release oxygen and hydrogen through tiny holes in their leaves. This produces **water** in the form of gas. This process is called *transpiration*. Have you ever noticed that you feel cooler when you walk through the woods? The shade cools us from the sun's heat. The moisture given off by the trees acts like a giant air conditioner that cools the surrounding air.

PARTS OF THE HYDROLOGIC CYCLE

As you learned earlier in this issue, the hydrologic cycle is also called the **water cycle**. Read the list of terms and definitions below. Use the terms to label each part of the hydrologic cycle.



sun

- provides energy for the never-ending cycle

evaporation

- vapor created when the sun heats **water** in lakes, streams, rivers or oceans

transpiration

- vapor created when plants and trees give off moisture

condensation

- tiny droplets of **water** formed when **water** vapor rises into the air and cools

precipitation

- moisture released from clouds in the form of rain, snow, hail, etc.

percolation

- movement of the **water** through the ground

Water in Our World

WATER CYCLE EVERYWHERE!



Have you ever noticed a steamy bathroom mirror or window in your home? This is an example of an important part of the **water** cycle called *condensation*. **Water** vapor is a gas when it's in the air. The **water** vapor cools when it comes in contact with a cool surface such as the glass in a window. As the **water** vapor cools, it changes from a gas to a liquid. Tiny **water** droplets begin to form on the glass. As the droplets become heavier and heavier, they run down the glass. Something similar happens to **water** vapor in clouds. These droplets collect together in the clouds and grow heavier and heavier. When the droplets become too heavy to stay up in the clouds any longer, they fall as rain!

Fill-in-the-blank

Complete each sentence by writing in the correct word.

- When **water** droplets become too heavy to stay in the clouds, it _____.
- **Water** changes from a gas to liquid when it _____.
- Condensation is an important part of the _____ cycle.

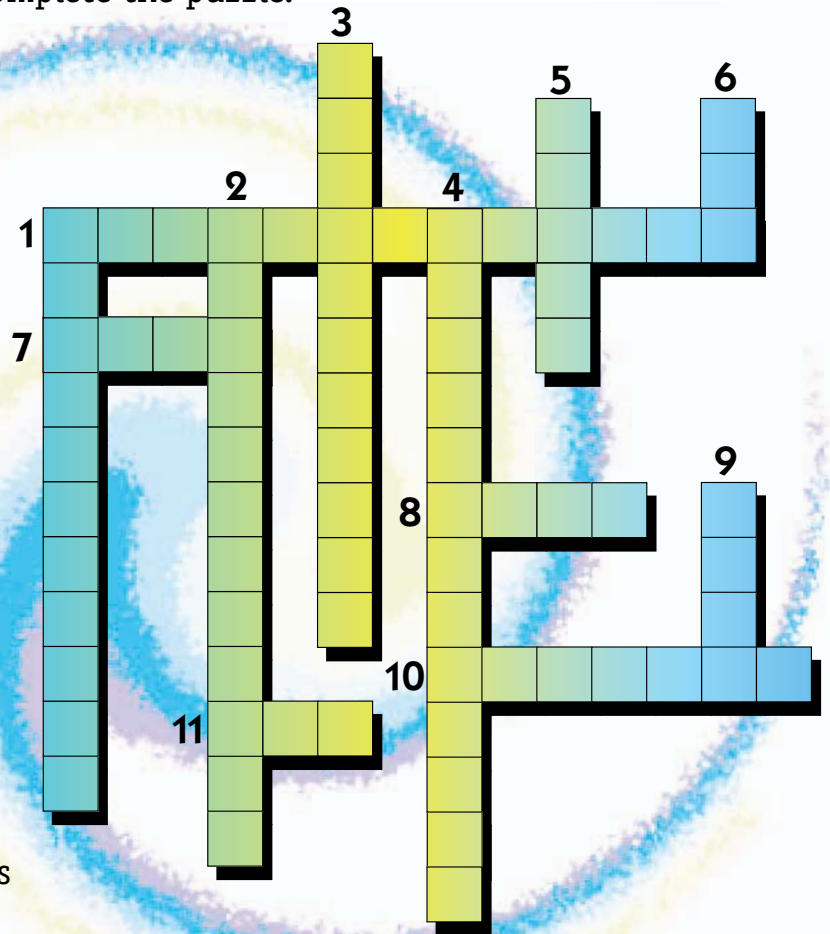


WATER CYCLE CROSSWORD PUZZLE

Use the clues and the word bank to complete the puzzle.

Word Bank

aquifer
sun
transpiration
percolation
evaporation
rain
precipitation
water
lake
pond
ice
condensation



ACROSS

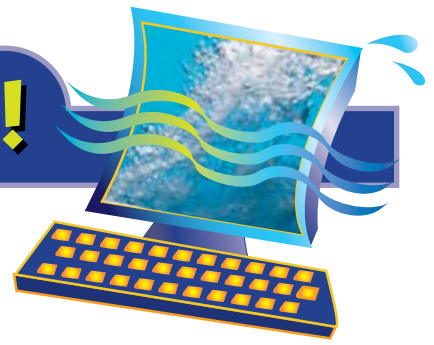
1. Moisture falling from the clouds is called ____.
7. Snow, hail and ____ are forms of precipitation.
8. A ____ is a small body of **water**.
10. An underground layer of limestone full of holes that **water** flows through is called an ____.
11. A solid form of **water** is called ____.

DOWN

1. Downward movement of **water** through the ground is called ____.
2. Tiny droplets of **water** formed when **water** vapor cools is called ____.
3. ____ is the vapor created when the sun heats **water** in lakes, streams, rivers or oceans.
4. Vapor created when plants and trees give off moisture is called ____.
5. People, plants and animals need ____ to live.
6. The ____ provides energy for the never-ending **water** cycle.
9. A ____ is a body of **water** that is surrounded by land.



What's Wet on the Web!



Naturally, **Bill Nye the Science Guy**® is simply full of cool information about almost everything! You can check out this great web site by going to: nyelabs.com.

Click on the Episode Guides to find the topic that interests you. *Episode No. 47* is about the **water** cycle!



Find the Hidden Water Message!

1 = a	14 = n
2 = b	15 = o
3 = c	16 = p
4 = d	17 = q
5 = e	18 = r
6 = f	19 = s
7 = g	20 = t
8 = h	21 = u
9 = i	22 = v
10 = j	23 = w
11 = k	24 = x
12 = l	25 = y
13 = m	26 = z

23 5 • 14 5 5 4 • 3 12 5 1 14, • 6 18 5 19 8

23 1 20 5 18 • 20 15 • 11 5 5 16 • 21 19

1 12 9 22 5 • 1 14 4 • 8 5 1 12 20 8 25 .

Mail your message to us and we will send you a prize!

Name _____

Address _____

City _____ State _____ ZIP _____

County _____ School _____

Teacher _____ Grade _____

Send to: **WaterDrops — Water Cycle Youth Education Communications Department**
 Southwest Florida Water Management District
 2379 Broad Street
 Brooksville, FL 34604-6899



Southwest Florida Water Management District

WATERMATTERS.ORG · 1-800-423-1476

VISPT 12-08



This information will be made available in accessible formats upon request. Please contact the Communications Department at (352) 796-7211 or 1-800-423-1476 (FL only), ext. 4757; TDD only at 1-800-231-6103 (FL only).