

A photograph of two children standing in the rain. The child on the left is wearing a yellow raincoat and blue shorts, holding a red umbrella. The child on the right is wearing a red and blue raincoat, blue shorts, and a purple bucket hat. They are both smiling. The background is a dense rain falling over green foliage.

# The Water Cycle

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# Weather

**Weather** is what the air outside is like. The weather changes a lot. You can see and feel changes in the weather.

It may be warm or cool. It may be snowy or rainy. It may be windy or calm. It may be sunny or cloudy.

Most people like sunny days.





▶ You might need different clothes for different weather.

▶ Weather can change quickly. It may be windy one day. The next day it may be calm.



**COMPARE AND CONTRAST** What is the difference between a rainy day and a sunny day?

## Water Goes Around

What goes up must come down.  
Some people say that. It is true  
about water.

In the **water cycle**, water moves  
from Earth to the air and back again.

▶ In the water cycle, some  
water falls as rain.





▶ The amount of water on Earth has always been about the same. The same water has been moving around Earth for millions of years.



**MAIN IDEA AND DETAILS** What is the water cycle?

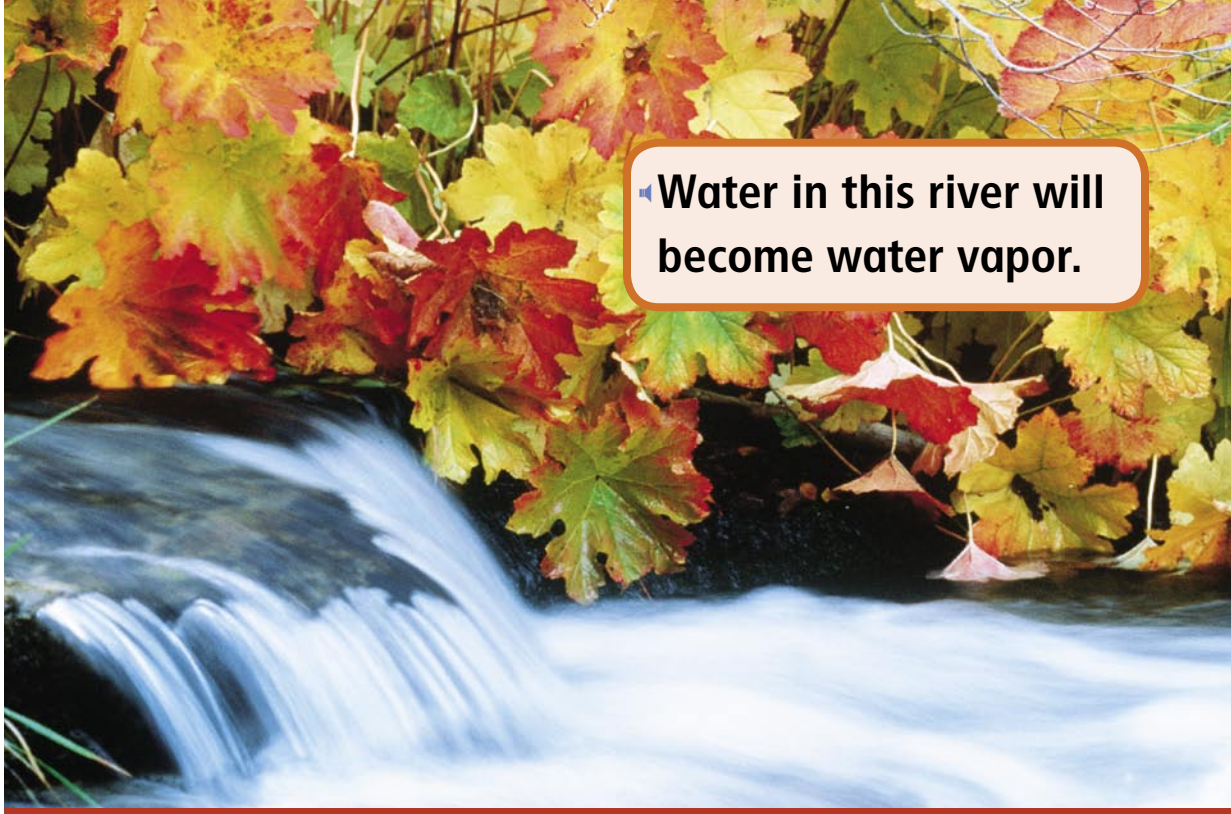
## How Water Goes Up

Heat from the sun makes water warm. The sun causes water to evaporate. **Evaporate** means to change from liquid into water vapor. **Water vapor** is water in the air that you can not see.



It is a warm day. Some water will evaporate.





Water in this river will become water vapor.

▶ The sun's heat can make water vapor in different places. Water vapor can come from oceans, rivers, or lakes. Water on the ground can evaporate, too.

***Fast Fact***

▶ Water can be found under the ground, on Earth's surface, and in the air.



**COMPARE AND CONTRAST** Does water evaporate faster on a cloudy or a sunny day?

## ▶ **How Water Comes Down**

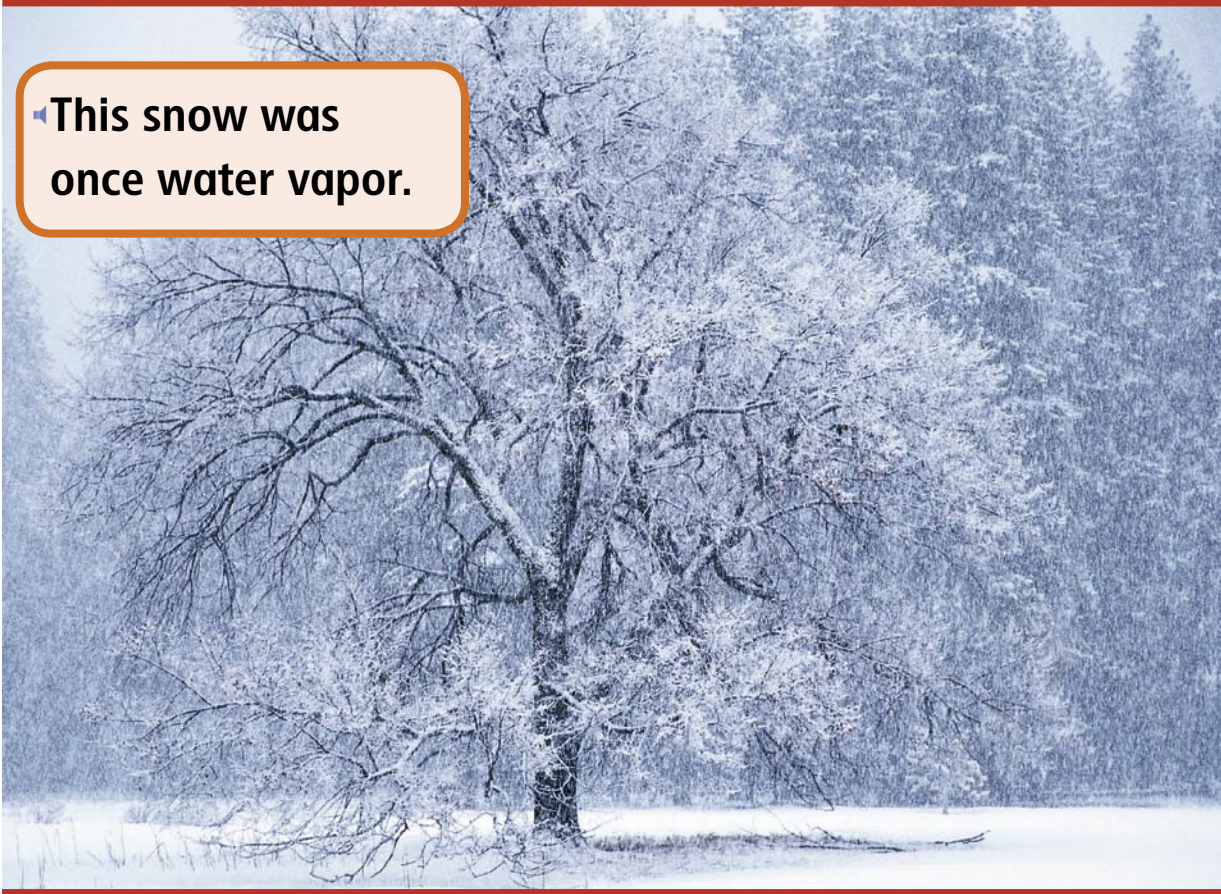
When water vapor meets cold air, it changes. Cool air causes water vapor to **condense**. This means that the water vapor turns into tiny water drops.

▶ These tiny water drops come together. They join to make clouds.



▶ **When it rains,  
you need an  
umbrella.**





▹ This snow was once water vapor.

▹ The water drops in the clouds get heavy. Then water falls to Earth as rain or snow. The cycle continues.

***Fast Fact***

▹ Oceans store most of Earth's water.



▹ **COMPARE AND CONTRAST** How are rain and snow alike?



## Clouds

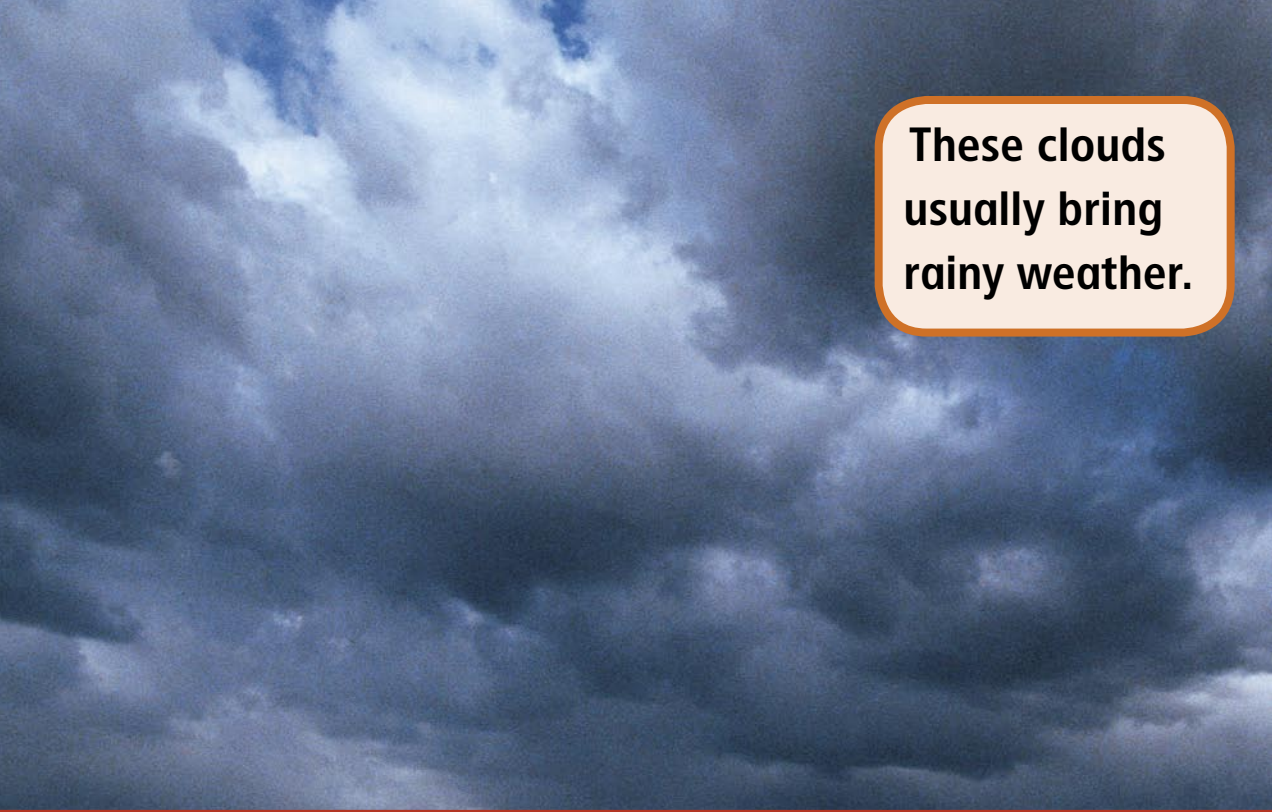
Clouds can tell you how the weather may change. Not all clouds hold water. Not all clouds bring rain or snow.

▶ You see fluffy white clouds on nice days. Giant, white, feathery clouds usually mean sunny weather.

### ***Fast Fact***

▶ Clouds can block sunlight from reaching Earth.

▶ These clouds usually mean good weather.



These clouds  
usually bring  
rainy weather.

Low, gray clouds usually mean rain or snow.

◀  **MAIN IDEA AND DETAILS** Do all clouds bring rain?

## ◀ **Summary**


The water cycle never stops. The sun causes water to evaporate. Water vapor condenses when it meets cool air. Then it rains or snows.

## ▀ **Glossary**

- ▀ **condense** To change from water vapor into tiny liquid water drops (8, 11)
- ▀ **evaporate** To change from liquid into water vapor (6, 7, 11)
- ▀ **water cycle** The movement of water from Earth to the air and back again (4, 5, 11)
- ▀ **water vapor** Water in the air that you can not see (6, 7, 8, 11)
- ▀ **weather** What the air outside is like (2, 3, 10, 11)



## Think and Write

- ▶ **1.** Tell about the water cycle.
- ▶ **2. COMPARE AND CONTRAST** How are water vapor and water alike and different?
- ▶ **3. MAIN IDEA AND DETAILS** What happens when water vapor meets cool air?
- ▶  **4.** Write a story about what you like to do on rainy days.

## Hands-On Activity

Work with a partner. List all the ways you use water.

## School-Home Connection

Talk with a family member about the water cycle.