

# *Where does the water go?*

**Title:** Where does the water go?

**Subject:** Science

**Grade Level:** Two

**Overview:**

The purpose of the following activity is:

1. To learn about the water cycle and think about the cycle within the natural floodplain at Brookland Elementary.
2. To introduce weather and the water cycle. These topics will be emphasized further at the grade five level.
3. To identify moisture/water within their surroundings and understand how it is cycled through the environment and back into a visible form (i.e. from Washbrook /glass of water).

**Outcome:**

Through observation and experimentation the students will:

1. Learn where to identify moisture in the environment
2. Discuss the processes that water goes through and the forms that water may take.

**Description (Teacher to student):**

Today you will learn about moisture/water in the environment.

First, I'm going to tell you about the changes that water goes through and the different forms it can take. Then we will read a story about a little drop of water called 'Moisture.' She will tell her story about moisture and water in Washbrook, and how the water we see in the brook can form large fluffy clouds in the sky and then later can return back to the water that we drink.

Then we will go outside and perform a water experiment. We will spill some water on the pavement in the playground and measure the size of the spot of water before and then again after our activity.

After that, we will sit outside in the learning center and read Moisture's story again, and while you listen, you will have to write down examples of different

water forms. After the story we will explore the site, looking for clues that “Moisture” is present.

Once we have found evidence of moisture throughout the site, we will come back in and you will answer questions about the water cycle and Washbrook and you will also draw pictures of each water form.

**Materials:**

Small mirrors

Bottle or glass of water

Activity sheets

Pencil

**Procedure:**

**Inside**

1. Explain the steps to the activity.
2. Explain the 4 water forms: Evaporation/Transpiration, Condensation, Precipitation, Collection
3. Read “Moisture’s Water Cycle Adventure”.

**Outside:**

4. With a bottle of water, pour four “puddles”. Select four children to draw a circle around the wet spots, tracing the outside of the wet spot.
5. The Washbrook is a wonderful visual aid for the students to interpret the water cycle diagram. In the amphitheatre, re-read the attached story about the water cycle telling the story about ‘Moisture’. During the story, get students to give examples of each water form (possible questions are within story). Students can write down examples from the story on their activity sheets.
6. After the story, start a discussion about the four forms of moisture/water. Say that you’ll look for evidence of each stage.
7. Pass the mirrors around, get students to breathe on the mirrors and look for condensation (and then evaporation as it disappears). Students should write this on their ‘condensation’ and ‘evaporation’ activity sheets.
8. Check the small puddles, to see if they are any smaller. This is evidence of evaporation. Students should write this on their ‘evaporation’ activity sheet.

9. Look around the site for leaves that feel moist. Every student should find a leaf (they don't need to pick it) that feels moist. This is evidence of transpiration. Students should write this on their 'transpiration' activity sheet.
10. Look for evidence of collection (the stream). Students should write this on their 'collection' activity sheet.
11. Check the puddles once more as the class heads back to the classroom.
12. In the classroom, students should draw a picture for each of the stages of the water cycle. They should be drawn in their scribblers.

**Some possible follow-up activities would be:**

- a) Draw a picture of you as a water droplet, explaining where you would go if you could travel the world as part of the water cycle.
- b) Write a story about where you would go if you were part of the water cycle.
- c) Set up an evaporation experiment. Pour water onto a large piece of material, have the students measure the diameter of the spot, and measure the diameter every 30 minutes throughout the day. Keep track of the differences; create a table to display the changes.

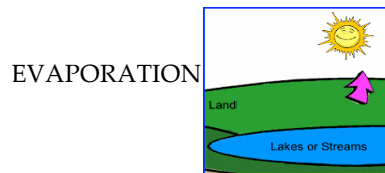
**Key Words:** Evaporation/Transpiration, Condensation, Precipitation, Collection

# Moisture's Water Cycle Adventure

— Margie Amos

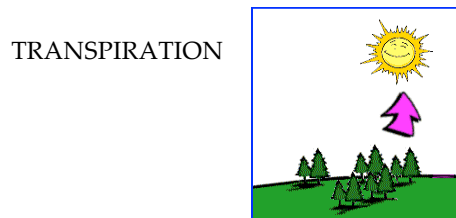
Once upon a time in the Washbrook at Brookland Elementary there was a small droplet of water named Moisture. Moisture was floating down the Washbrook with her friends enjoying watching the children at Brookland Elementary play under the glow of the hot hot sun. Suddenly, Moisture and her friends were felt a little dizzy; perhaps they were getting too much sun because without any notice they were losing weight and slowly rising out of the Washbrook. They started floating into the air and becoming so thin that they became invisible.

(what is this process called, when water goes from a liquid to a gas, when it “disappears”?)



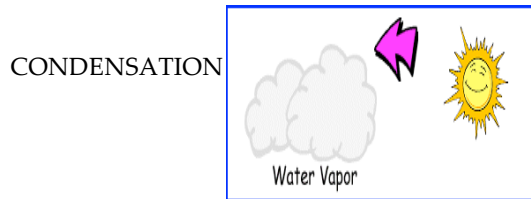
It was so hot this day that even the trees were sweating from their leaves

(do you remember what it's called when plants sweat?)



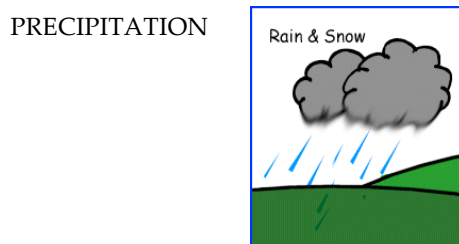
These beads of sweat were friends of Moisture and soon were all invisible and started to float high above the treetops and up, up, up into the sky. The higher they floated, the cooler the air began to feel. Moisture and her friends, also called particles, huddled together to try and keep warm, so they all held hands and formed a giant puffy blanket, a cloud!

(Are there any clouds out today? What do you think they're made of? What is it called when invisible water comes together to form a liquid or a cloud?)



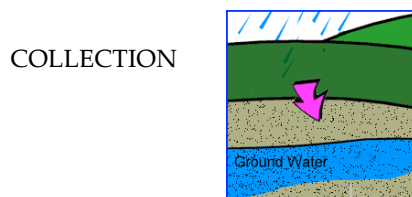
Suddenly, Moisture noticed that by staying warm in this big puffy cloud with the cool air surrounding them, the particles were become bigger and stronger again. With all of their might they held hands tightly, while more of their friends joined them. The cloud started looking dark and gray because Moisture and her friends' faces were turning colors of dark blue and gray in an effort to hang onto each other. They all became so big and heavy that it became hard for them to hold hands together and one by one they started slipping away.

(What is happening? What do we call it when water droplets fall from clouds? It's raining! This is called precipitation. What do we call it when those water droplets are frozen? Are there other kinds of precipitation? (sleet, hail...)



One by one and drop by drop they all began falling back to the ground, and collected in puddles, rivers, streams, lakes, oceans, and many soaked into the ground (like your garden!), and traveled deep into the earth's ground water.

(this is called collection, because water collects in these areas, and stays a liquid... for now, anyway!)



Moisture and her friends were waving to each other and wishing each other a fun and safe journey back down to earth. As Moisture and her friends fell to the earth they looked around to see where they would like to land. The wind carried them off in every direction. Some landed on the trees and plants, some landed on rooftops, some landed on the orange spotted cat running down the street, some in the ocean and others decided that it would be nice to return to the Washbrook; Moisture was one of them.

Moisture took many trips like this throughout the year, however she didn't always travel with the same friends each time. Moisture met different types of particles within the Washbrook like Snow, Sleet, Rain, Mist, Fog, Morning dew and even Frost came for an occasional visit. They came from all over the world and were of all ages. Each one had plenty of stories to tell about their adventures. One of the particles who was five years old spoke about floating on clouds over Thailand; other particles braved long dark adventures gliding through the smallest cracks and pores of rocks far below the ground in Greece, they were over 100 years old. Moisture's favorite story was the one about the particle that traveled the entire world and saw just about all that could be seen, she was over one million years old and did not look a day over six; as a matter of fact she is in the fountain inside the school.

Moisture gleamed with excitement to learn about the endless possibilities for new adventures. She dreams about the day when she'll make it all the way to Alaska to fall from the sky and return to the earth as a part of a snowflake so that she can see Polar Bears - what a thrill!

If you could travel with Moisture where would you go, how would you get there and what form of moisture would you like to be? The next time you are swimming in the ocean or lake, making snow angels or taking a drink of water think about where the water has been and how old the water Moisture and her friends could be.

**The end.**

\*Illustrations from: <http://www.dnr.state.wi.us/org/caer/ce/eek/earth/groundwater>

## Activity Sheet

In the boxes below, give examples of each water form. Provide as many examples as you can.

Evaporation	
Transpiration	
Condensation	
Precipitation	
Collection	

What happened to the puddle on the pavement?

Why did it happen?

In your scribblers, draw a picture of each stage of the water cycle in the Washbrook area.