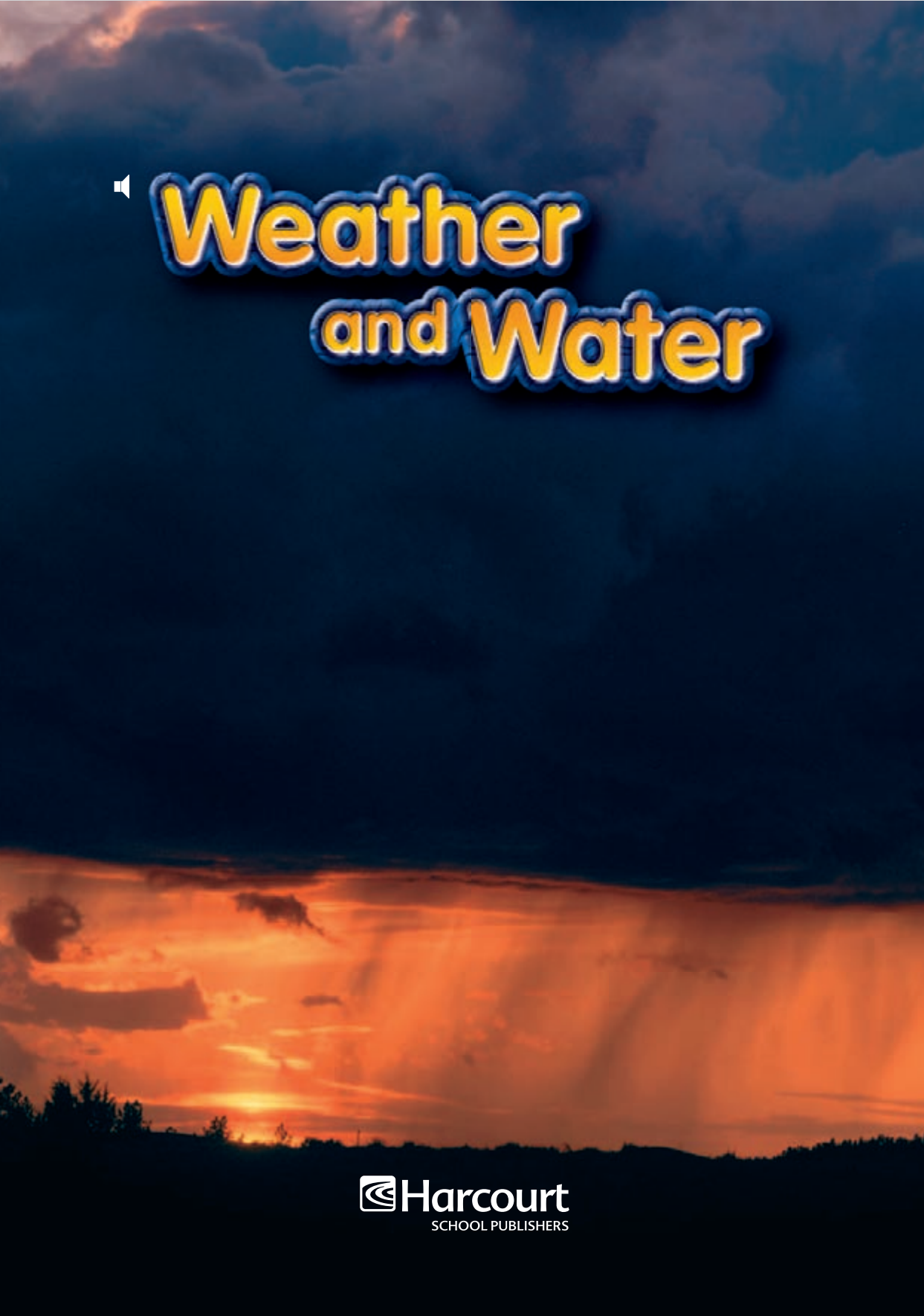




Weather and Water

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Weather Overhead

Weather is what the air outside is like. Look up in the sky. You may see clouds. You can also feel the weather. Is it windy?

 Weather changes all the time. Some changes take a short time. Some take months.



 Clouds can tell you about weather that is coming your way.



Some places have seasons with a lot of storms.

Weather patterns help you predict the weather. To **predict** is to use what you know to guess what will happen. In many places, the weather changes with the seasons. You can predict what the weather will be like in each season.

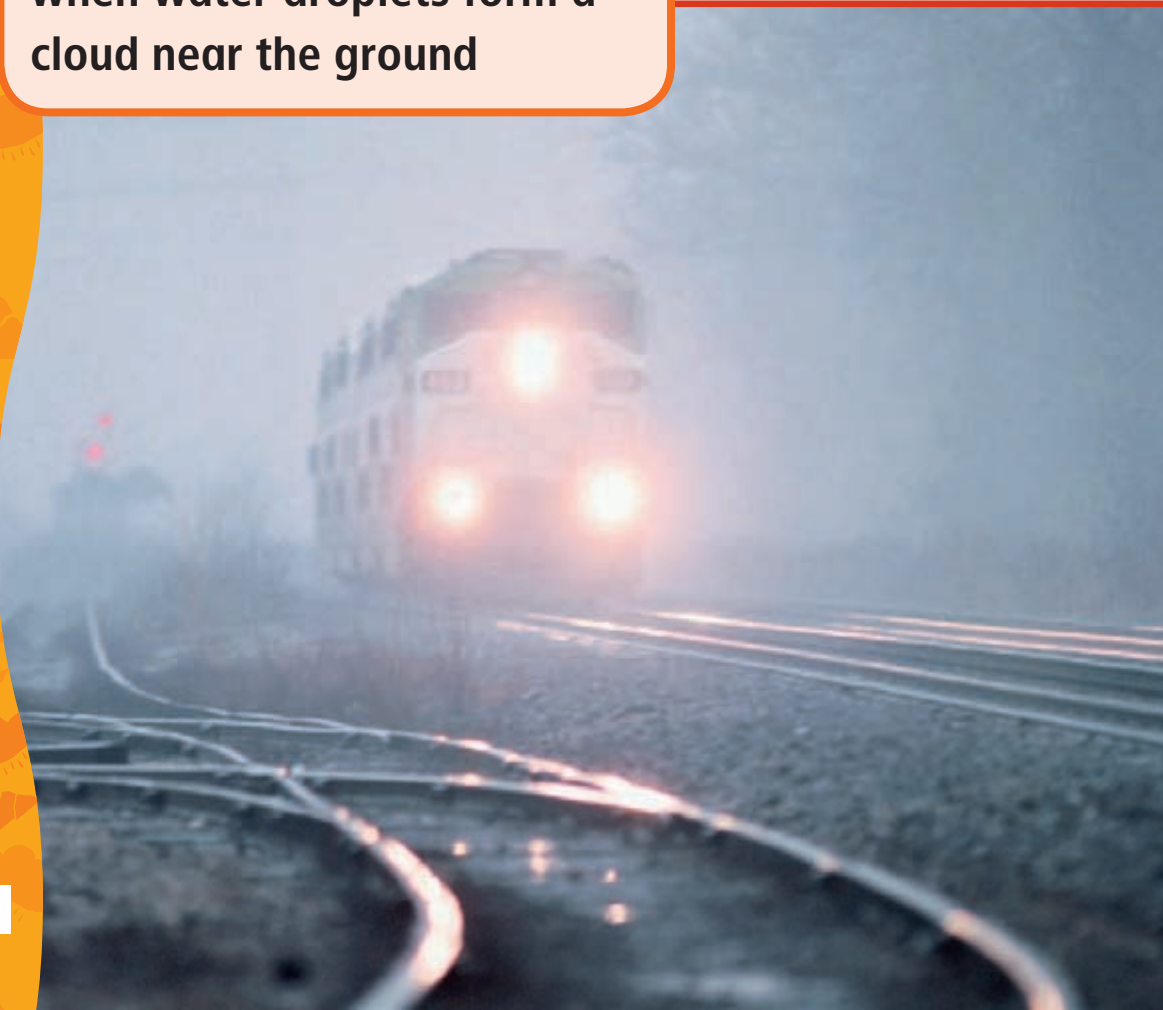


MAIN IDEA AND DETAILS What is the weather like today?

▶ **Watery Weather**

When it rains, water falls from the sky. It is a liquid. Sometimes a small amount of rain falls. Other times a lot of rain comes down.

▶ Fog is an example of weather when water droplets form a cloud near the ground





Hail is water in the form of ice. This ice often falls during summer storms!

Water can change from one form to another. Frozen water falls as snow. Sometimes ice falls. Ice and snow are both solids.



CAUSE AND EFFECT What effect does weather have on the form of water?

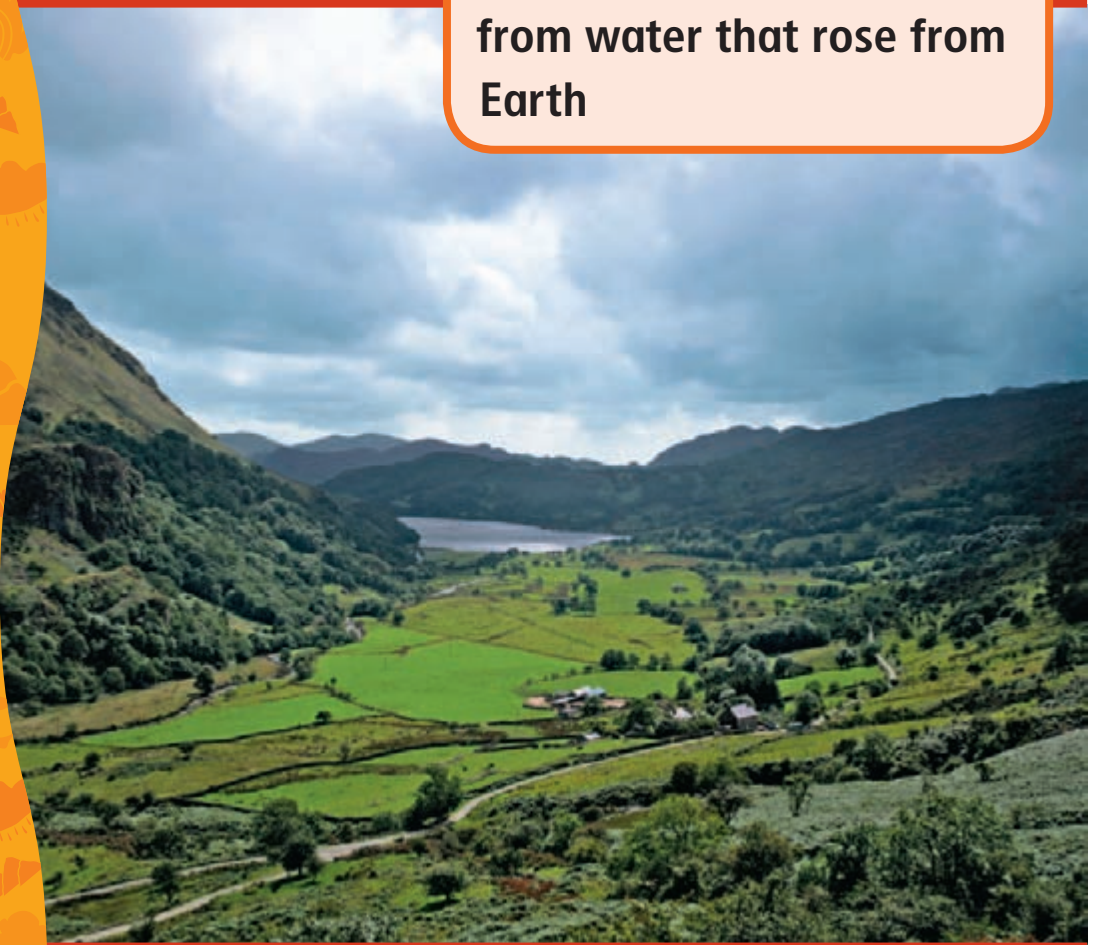
Fast Fact

Hailstones are chunks of ice that fall from the sky. Hailstones can be as large as a baseball!

The Water Cycle

Water moves from Earth to the air. Then the water moves back to Earth. This is called the **water cycle**. Water rises into the air as a gas when it is heated. The water in the air forms clouds.

 These clouds were formed from water that rose from Earth



▮ The drops of water in the clouds get heavy. The water in the air falls to Earth. The water may fall as rain, sleet, hail, or snow.

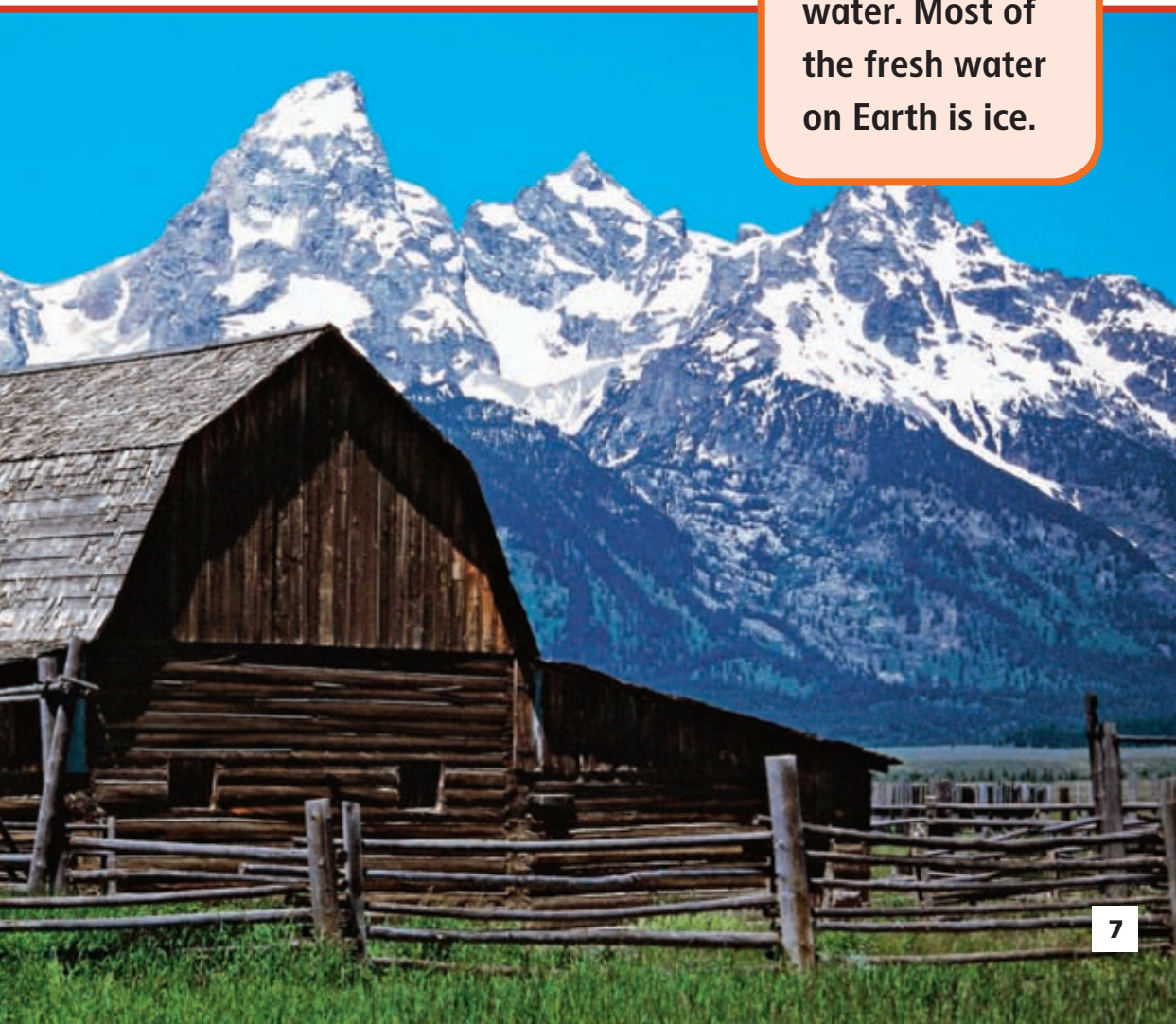


CAUSE AND EFFECT What causes water to rise into the air?

Fast Fact



Most of the liquid water on Earth is salt water. Most of the fresh water on Earth is ice.

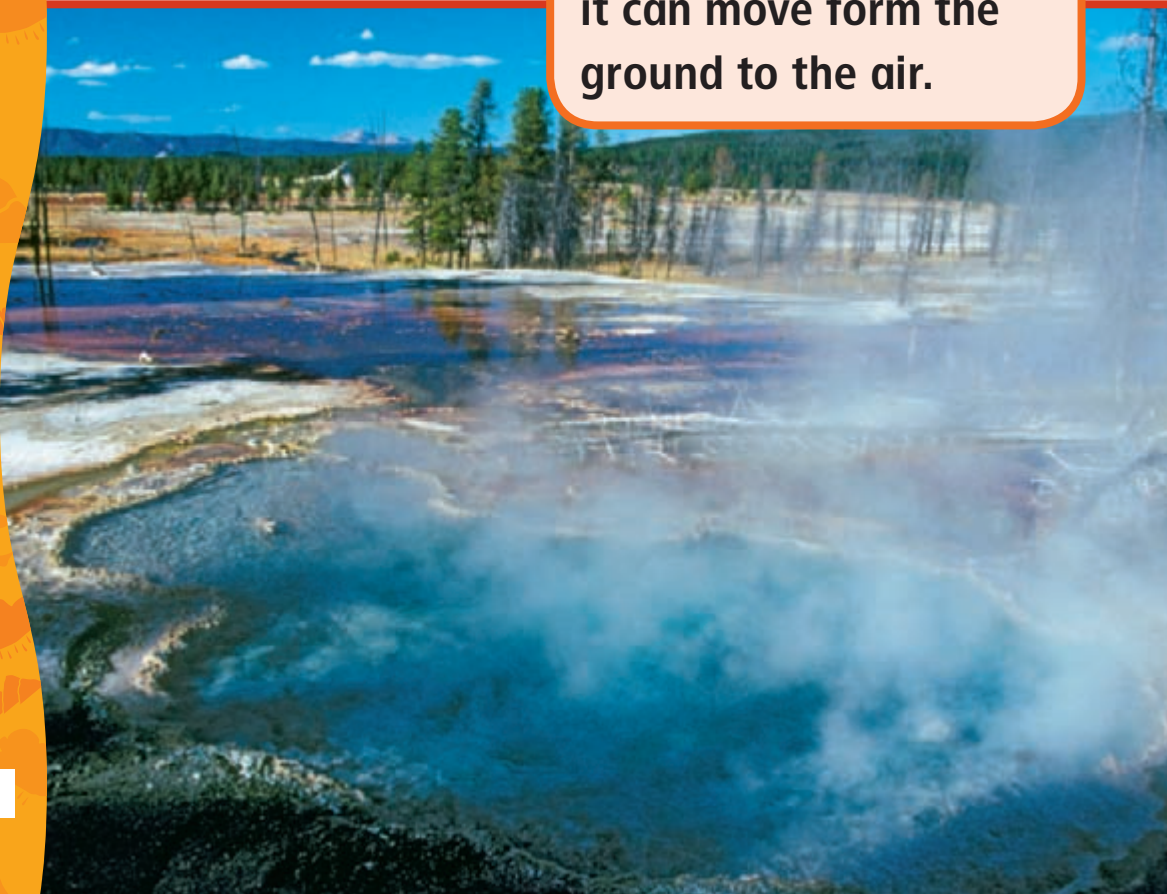


More About the Water Cycle

Water rises when it is heated. The heat from the sun turns the water to a gas.

The gas cools and turns into tiny drops of water. The tiny drops of water form around dust. This is how clouds are made.

When water is heated, it can move from the ground to the air.



■ You may have seen wet grass on a sunny morning. These water drops that form are from condensation. The grass cools during the night. Water vapor in the air turns into drops of water on the grass.



CAUSE AND EFFECT What happens when water vapor in the air cools?

■ The water in the air forms drops on the side of a cold glass.



Round and Round

Water from the sky falls to Earth.
Water moves through the water cycle.
As it moves, you can see different kinds
of weather. Sometimes it is hot and
dry. Sometimes you see rain or snow.

  **MAIN IDEA AND DETAILS** Give examples
of the forms of water that you see in the
water cycle.

 Winter snow is one
example of water
moving through the
water cycle.



Storms with rain and thunder are part of the water cycle.

Summary

Weather changes. You can predict the weather for each season. Water moves from Earth to the air and back. This is called the water cycle.

Glossary

-  **predict** To use what you know to make a guess about what will happen.
(3, 11)
-  **water cycle** The movement of water from Earth to the air and back to Earth. (6, 8, 10, 11)
-  **weather** What the air outside is like.
(2, 3, 4, 5, 10, 11)

Think and Write

-  **1.** What is weather?
-  **2. CAUSE AND EFFECT** What causes water to evaporate from Earth?
-  **3. CAUSE AND EFFECT** What causes water to condense on Earth?
-   **4.** Write about how water would move through the water cycle.

Hands-On Activity

Fill a glass with ice and water. Set the glass in a warm place. What forms on the glass?

School-Home Connection

Keep a journal for one week. Does it rain? Do puddles dry up? What else do you see?