Water Cycle Lesson 1: *The Solve*
Student Handout

I. Watch the Mosa Mack Mystery

Either on your own, in a small group, or as a class (your teacher will let you know), watch/read Mosa Mack's Comic Mystery on the Water Cycle. Then, fill out the questions below. Include a page number/time code in your answer as evidence of where you found your answer.

Name: _____   Date: _____

Episode Questions

1. Why was Splashy Land closed?

2. What does the hydrologist blame for the "missing" water?

3. What does Billy find once he climbs down into the well?

4. Where does the water in the aquifer come from?

5. What did Mosa and her crew discover in the air on their plane ride?

(c)2015 Mosa Mack Science, Inc.
www.mosamack.com
info@mosamack.com

6. Describe the problems with using ocean water to solve the water crisis.

7. Explain what happens to wastewater after it falls down the sewer drain.

8. What water is Mosa going to use to re-open Splashy Land?

9. Create a picture in the box below to show your understanding of how the following words connect together in the water cycle: **Evaporation, Condensation, Precipitation, Freezing, Melting**
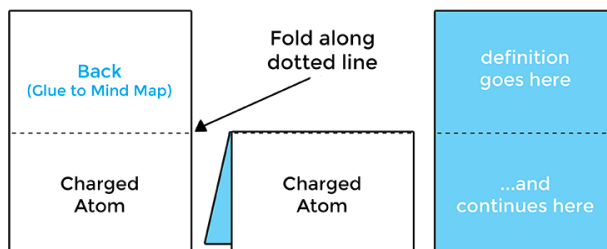
(c)2015 Mosa Mack Science, Inc.
www.mosamack.com
info@mosamack.com

II. Vocabulary Activity

Note: Your teacher will tell you whether you will complete this activity online here, or offline by following the instructions below.

1. Using the materials at your table, cut out your vocabulary cards along the **solid lines**. Note: Do not cut at the dotted lines.

2. Fold the cards at the dotted lines.

3. Write the definition of the term on the inside of the card using the definitions below.

4. Use the clues from the Mind Map images, definitions, and vocabulary terms to place the cards in the correct location in the Mind Map, explaining your thinking to group members as you go.

5. When you're ready to glue or tape, raise your hand so you can check your Mind Map with your teacher.

6. Use glue or double-sided tape to connect the back of the vocabulary card to the correct place on the Mind Map.

7. Use your completed Mind Map to discuss these questions with your group:
   a. What do the processes of evaporation and transpiration have in common?
   b. Name the forms of precipitation shown in this Mind Map illustration.
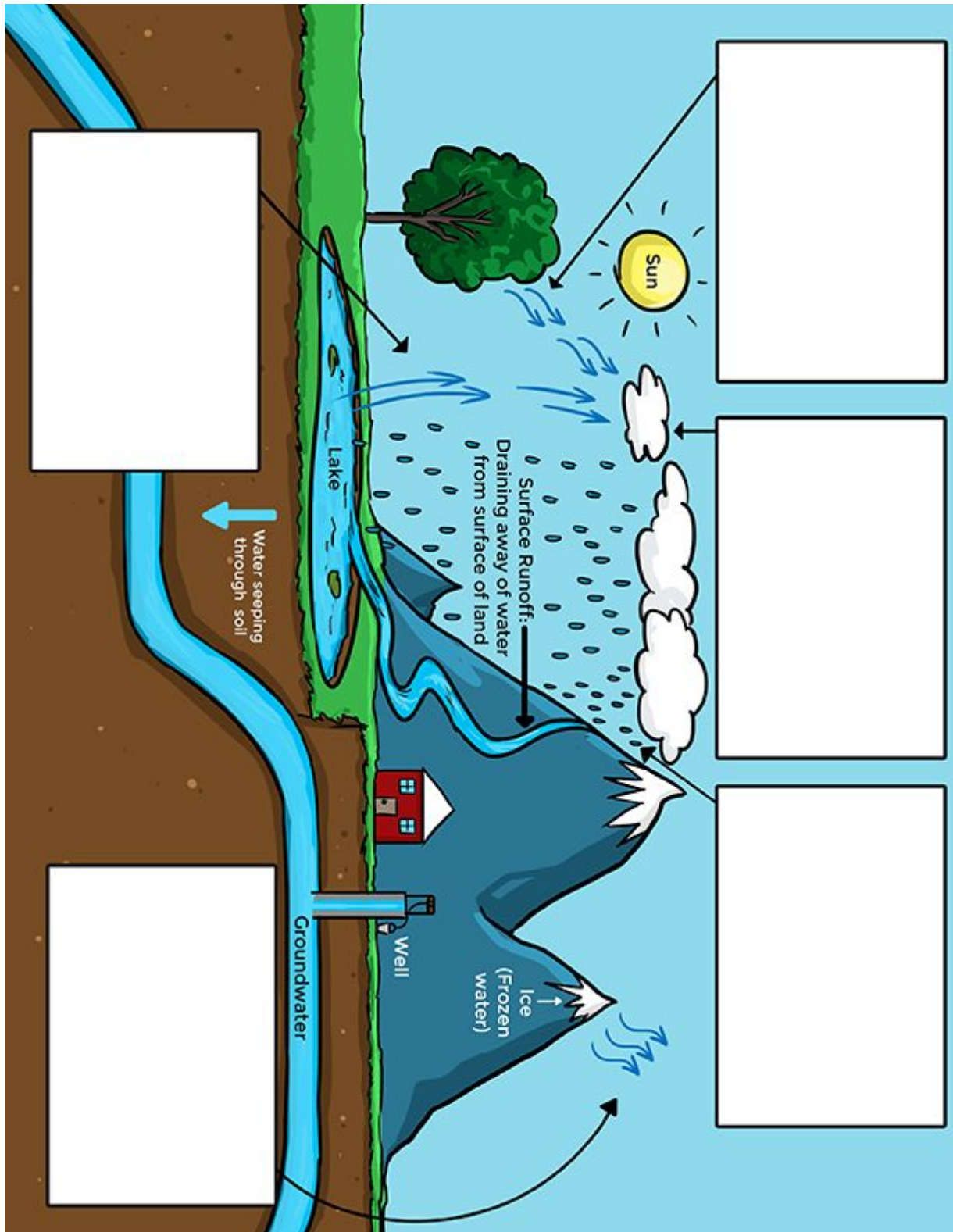   c. How is runoff important to the Water Cycle process?

(c)2015 Mosa Mack Science, Inc.
www.mosamack.com
info@mosamack.com

Mind Map

(c)2015 Mosa Mack Science, Inc.
www.mosamack.com
info@mosamack.com

Transpiration	Condensation	Precipitation

Evaporation	Sublimation	

Vocabulary

- Evaporation: The process that occurs when the surface of liquid water heats and changes into water vapor (a gas).
- Transpiration: The process that occurs when plant leaves release water vapor (a gas) into the air.
- Condensation: The process that occurs when water vapor (a gas) cools and changes back into liquid droplets.
- Precipitation: The process that occurs when water—in the form of rain, snow, sleet, or hail—is released from the clouds and falls to the ground due to the force of gravity.
- Sublimation: The process that occurs when frozen water (ice or snow) turns directly into water vapor (a gas).

III. Quiz: Check for Understanding
Complete the exit ticket below *or* you can take the quiz online!

Name: _____   **Date:** _____

1. An aquifer is best described as:
    a. An underground river
    b. A pool of ocean water
    c. Rain, sleet, and snow
    d. A drinking fountain found at Splashy Land

2. Most of the water in an aquifer comes from:
    a. Splashy Land Water Park
    b. Water seeping down through the ground from rain and rivers on the surface above
    c. The clouds in the sky
    d. Snowpack found on the top of the mountains

3. Snowpack is formed from layers of snow, which is a form of:
    a. Transpiration
    b. Condensation
    c. Precipitation
    d. Evaporation

4. Condensation occurs when:
    a. Liquid water is heated and escapes into the air
    b. Water vapor cools into liquid droplets
    c. Water seeps through the ground
    d. Rainwater freezes into ice

5. Heat causes liquid to become vapor and enter the air. This is how water from the ocean enters the air. This process is known as:
    a. Runoff
    b. Condensation
    c. Precipitation
    d. Evaporation

6. 97% of all the water on Earth is located in:
   a. Snowpack
   b. Lakes
   c. Aquifers
   d. Oceans

7. True or false: Water from sewer drains can be cleaned and recycled back into rivers and streams.
   a. True
   b. False