WATER GOES SOME PLACE ELSE

INSTRUCTIONS

(MODIFIED FOR ADEED)

Science Concept:

Uncovered water goes some place else.

Objectives:

The student will:

- describe where water goes in containers;
- make predictions about how much water will be left in a container; and
- compare the water level of water containers.

GLEs Addressed:

Science

[3] SD1.2 The student demonstrates an understanding of geochemical cycles by describing the water cycle to show that water circulates through the crust, oceans, and atmosphere of Earth.

[3] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring and communicating.

Math

[K] MEA-1 The student demonstrates an understanding of measurable attributes by making comparisons between objects using concepts of big/little, long/short, large/small, more/less, same. (M2.1.1)

Vocabulary:

describe - to give an account in words

less - being a smaller number

more - a greater amount

prediction - tell ahead of time

prepare - to make ready beforehand

same - not different from one another

Materials:

- Water
- Pitchers (3 or 4)
- Clear cups 12 ounce or larger with lids (one per group)
- Clear cups 12 ounce or larger without lids (one per group)
- Permanent markers
- STUDENT WORKSHEET: "Water Containers"
- STUDENT WORKSHEET: "Student Observations Worksheets"
- Chart paper

Activity Preparation:

1. Clear a place in the classroom where the water cups can sit undisturbed and where students will be able to make observations of them for a period of two weeks.
2. Fill the pitchers with water.
3. Draw a line around every cup with a permanent marker.

Activity Procedure:

Gear Up
Process Skills: communicating, predicting, and observing

1. Ask students "If I put a wet handprint on the chalkboard, will the handprint be there at the end of the day?" Allow time for students to answer. Put a wet handprint on the chalkboard. Students will observe as it dries. Ask students what happened and why. Write student responses on chart paper.

Explore
Process Skills: communicating and observing

2. Show students a cup of water without a lid. Ask what will happen to the water if it's left out in the classroom for a few days. Allow each student to answer, write the answers on chart paper, and put each student's initials next to their answer.
3. Show students a cup with a lid on it. Ask students what will happen to the water in the container with a lid on it if it is also left it in the classroom for a few days. Record each student's response next to his or her earlier answer.
4. Divide students into groups of 2 or 3. Demonstrate how to fill the clear cups up to the line on the prepared cups. Distribute cups to each group and aid students in labeling their cups with their names.
5. Ask groups to fill their cups up to the line.
6. Ask students to put the lid on one of their cups.
7. Allow students to place their cup in an area of the classroom where it will not be disturbed. Distribute the STUDENT WORKSHEET: "Observations Worksheet." Aid students in making their first observation. Explain students will make further observations each day for two weeks.
8. Each day for two weeks, distribute student's worksheets and have them to make observations of their cups of water.

Generalize
Process Skills: predicting, communicating, questioning, and describing

9. After a period of two weeks, ask the class the following questions and discuss. Write student responses on the board.
   a. Which cup has more water?
   b. What happened to the water level in the closed cup?
   c. What happened to the water level in the open cup?
   d. What do you think will happen to the water in the closed cup if we observe it in the classroom for another week? Why do you think that?
   e. What do you think will happen to the water in the open container if we observe it in the classroom for another week? Why do you think that?
   f. How are the observations we did with the water cups like the wet handprint on the board? Repeat the wet handprint demonstration if necessary.

Apply
Process Skills: observing, communicating, and describing

10. Ask students if they have seen examples of where water has gone some place else (in a mud puddle, tea kettles, water in the bathtub, etc). Record student ideas. Have students go home and find an example of water going some place else. This could be something that happens at their home, in their yard, or somewhere in the world. The students will draw a picture or bring in a magazine picture, or photo to show this. Students will share their picture or photo with the class.

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RUBRIC

Assessment Task:

The teacher will use the STUDENT WORKSHEET, "Water Containers" for each child. The teacher will have six real examples of containers with water. Two containers will be covered and four will be open. The following questions will be asked individually and recorded by the teacher on the worksheet:

a. If these containers were in our classroom, point to where the water would be in each container after one week.
b. Look at each container and tell me if, after one week, the water level would be the same, more, or less than it is today.
c. Describe for me where the water goes in each container after one week.

Rubric:

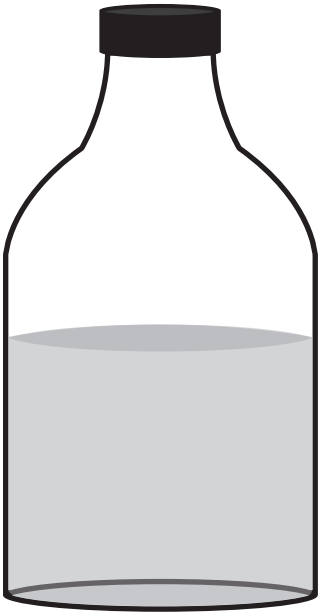
Objective	GLE	Below Proficient	Proficient	Above Proficient
The student describes where water goes in containers.	[3] SD1.2	The student describes where the water goes in one open or closed container.	The student describes where the water goes in two open or closed containers.	The student describes where the water goes in three or more open or closed containers.
The student makes predictions about how much water will be left in a container.	[3] SA1.1	The student predicts the water level in less than three containers.	The student predicts the water level in three or more containers.	The student predicts the water level in four or more containers.
The student compares the water level in containers.	[K] MEA-1	The student compares the water level for less than three containers.	The student compares the water level for three containers.	The student compares the water level for four or more containers.

NAME: _____

STUDENT WORKSHEET

WATER CONTAINERS

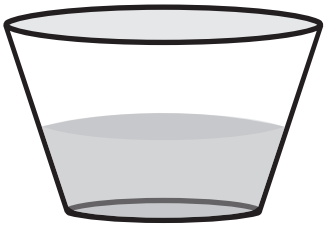
MORE LESS SAME



MORE LESS SAME

MORE LESS SAME

MORE LESS SAME

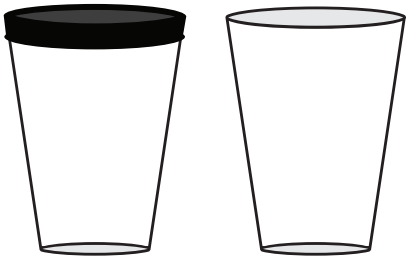
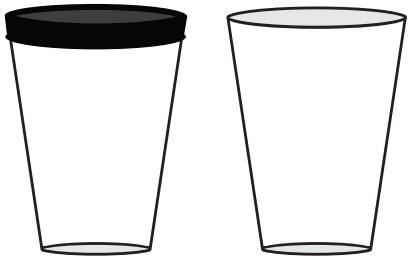
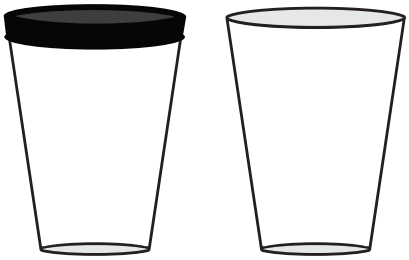
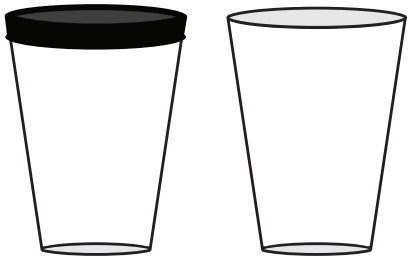
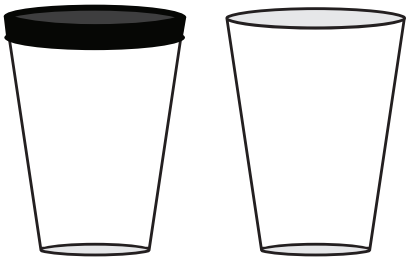
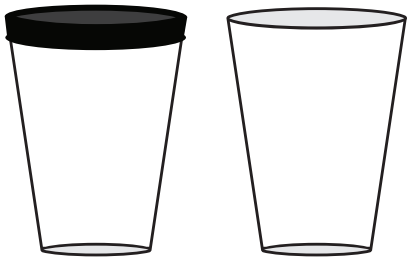
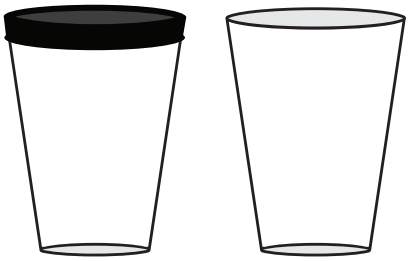
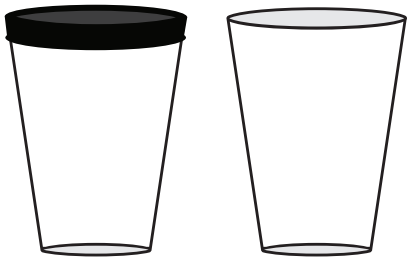
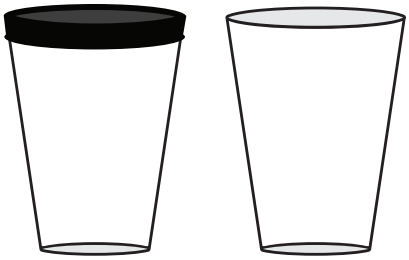
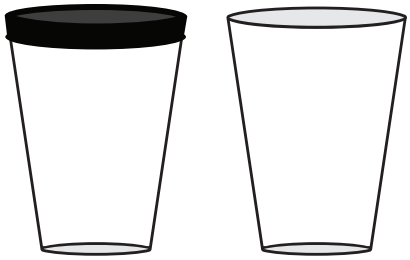


MORE LESS SAME

MORE LESS SAME

NAME: _____ STUDENT WORKSHEET

STUDENT OBSERVATIONS

Day 1 	**Day 2** 
Day 3 	**Day 4** 
Day 5 	**Day 6** 
Day 7 	**Day 8** 
Day 9 	**Day 10** 

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