

INCREBIBLE JOURNEY

Objective: Students will describe the movement of water within the water cycle and identify the states of water as it moves through the water cycle.

Illinois State Goals: 12. E.

Top Book Hits:

Water Dance by Thomas Locker; **ISBN-13:** 978-0152163969

Water Cycle by Delta Science Readers; **ISBN-13:** 978-1592423477



Materials Needed:

- Colored pencils
- Dice
- Water Cycle Data Table sheet (one per group)
- Water Cycle Diagram sheet (one per group) – the tables that are used to complete this activity are included on the following 2 pages.

Procedure:

1. Have individual students or small groups roll two dice. This will determine where the water molecule will begin its journey through the cycle. Find the sum of the roll on the chart below and then record the starting place of the molecule on the Water Cycle Data Table that is found on the next page.

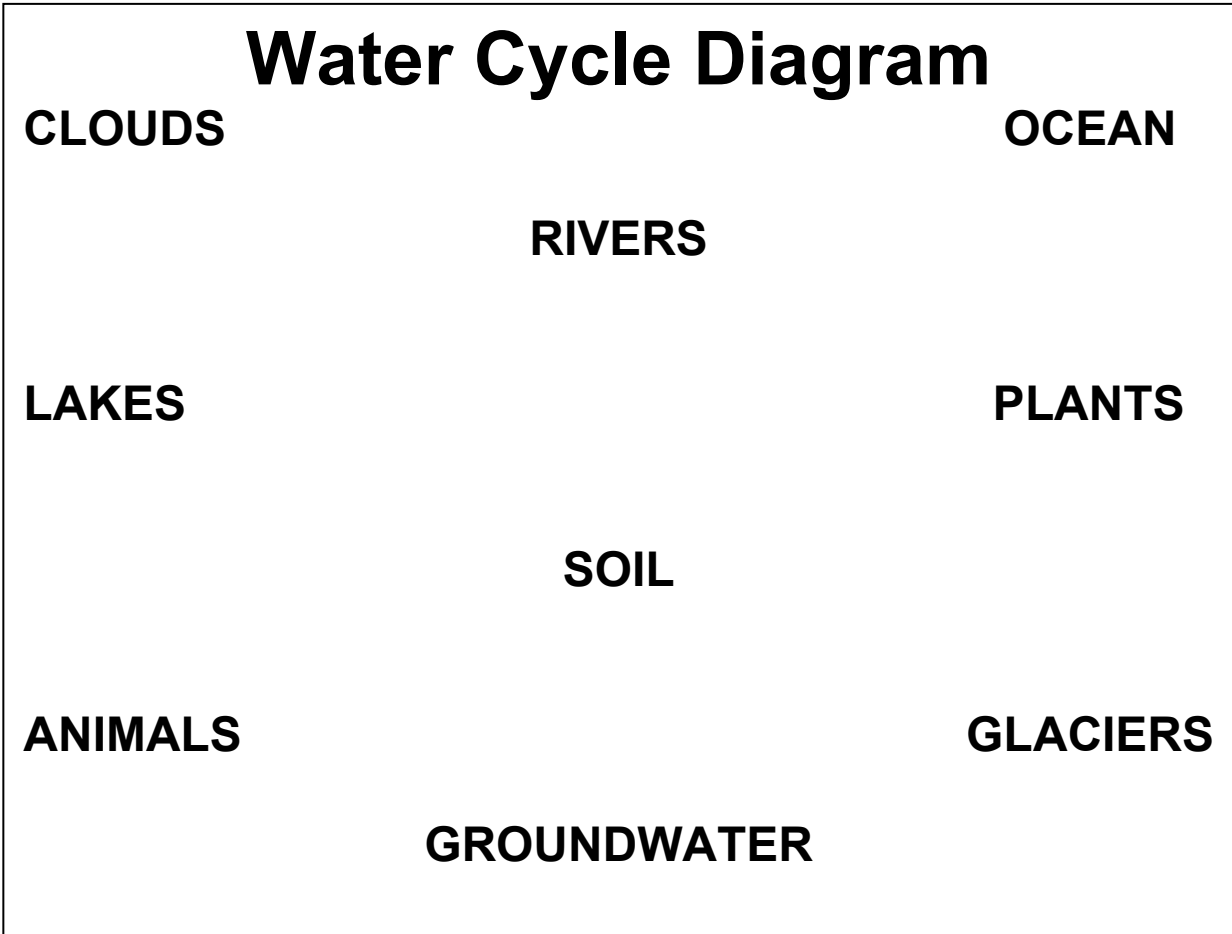
2 – animal	5,6 – clouds	10 – glacier
3 – ground water	7,8 – ocean	11 – soil
4 - lake	9 – river	12 - plant

2. To begin the journey of the water molecule, roll one of the dice. Looking at the Water Cycle Table, determine where the water molecule will move next. Record where the water molecule moves in the Water Cycle Data Table under roll # 1.
3. On the Water Cycle Diagram, use the colored pencil to draw a line that shows where the molecule moves.
Example: On your first roll of the 2 dice, you got a 10, so you begin your journey as a glacier. On your second roll, you roll a 2. Look at the Water Cycle Table by the glacier. A roll of 2 has you move to the clouds. Before rolling again, document the movement of your molecule on the Water Cycle Diagram and the Data Table.
4. Repeat steps 2 and 3 nineteen (19) more times.
5. After all groups have finished their water molecule journeys, discuss and compare their results.

Explore More: Have students make a water bracelet after completing the activity by using a different colored bead for each of the places their water droplet went during the activity. If the activity is done in small groups, each student could roll and document their individual water molecule journey on the same water cycle diagram. This will show the possible variances in molecule journeys. As an evaluation, instruct students to use water cycle terminology to explain their water molecule journey. (Terms may include condensation, evaporation, precipitation, run-off, transpiration, and infiltration.)

Give credit where credit is due...adapted from Project WET.

Water Cycle Diagram



Water Cycle Data Table

Starting area: _____

Roll #	Move to:	Roll #	Move to:
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Give credit where credit is due...adapted from Project WET.

Water Cycle Table

Molecule is in:	Die #	Move to....	Molecule is in:	Die #	Move to...
SOIL	1	Plants	CLOUDS	1	Soil
	2	River		2	Glacier
	3	Ground water		3	Lake
	4,5	Clouds		4,5	Ocean
	6	Stay in soil		6	Stay in Cloud
PLANT	1,2,3	Clouds	LAKE	1	Ground Water
	4	Animal		2	Animal
	5,6	Stay in plant		3	River
				4	Clouds
		Lake		5,6	Stay in lake
RIVER	2	Ground water			
	3	Ocean	GLACIER	1	Ground Water
	4	Animal		2	Clouds
	5	Clouds		3	River
	6	Stay in River		4,5,6	Stay in Glacier
OCEAN	1,2	Clouds			
	3,4,5,6	Stay in Ocean			
ANIMAL	1,2	Soil	GROUND WATER	1	River
	3,4,5	Clouds		2,3	Lake
	6	Stay in animal		4,5,6	Stay in ground water

Give credit where credit is due ... adapted from Project WET.