4-H Rosa Raindrop Water Cycle Board Game

Preparation for leaders

The water—or **hydrologic**—cycle is an endless process in which water is circulated around the surface of the Earth through the soil, plants, animals, and atmosphere. The amount of water moving through the cycle has been approximately the same throughout 3.5 million years. It has been estimated that a single water molecule evaporates once every 5,000 years and has moved through the cycle about 700,000 times since the cycle began.

The water cycle is not a circle. There are many ways water is moved or stored on Earth. Playing the game, learners may move through several loops on their journey through the water cycle.

Objectives

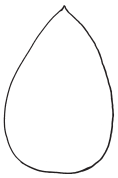
Learners will be able to explain the water cycle, list some of the places on Earth that water is stored, and understand that the Earth's water supply is finite.

After-game discussion

With learners sitting where they all can see the Rosa Raindrop game board, ask them the following questions.

Where in the water cycle is water:

- a gas?
- a liquid?
- a solid?
- moving?
- fresh?
- salty?



How many different ways did learners travel through the water cycle?

Why is it important to protect the quality of Earth's water? *(Because there is a finite amount, as shown on the World Water Tally.)*

Playing the game

Materials needed

- The Rosa Raindrop Water Cycle Game board (inside)
- Four game board markers (use large corks or other similar items)
- One die
- Rosa Raindrop's World Water Tally (back page)—make one copy for each team

Rules of the game

Each player needs a game marker and a copy of Rosa Raindrop's World Water Tally. (Or, you can divide the group of learners into four teams with one game marker and one copy of the World Water Tally per team.)

Play begins with all the playing pieces in the Ocean. The object of the game is for the players to travel the various paths through the water cycle until they return to the Ocean. Everyone "wins" when they return to the Ocean.

The youngest player (or team with the youngest player) moves first. Roll the die and follow the instructions on the first five spaces to move through "Evaporation Powered by Solar Energy." After reaching the Clouds, continue to roll the die and move around the board following the instructions on the space where the playing piece lands after each turn. Players may choose their own direction of travel, unless at the end of their turn they land on a circle that contains an arrow. When a player ends a turn on a circle with an arrow, the player must travel in the direction the arrow points on his or her next regular turn.

On the journey through the water cycle, each player (or team) should use the World Water Tally sheet to record the percent of water found in each section of the water cycle they pass through.

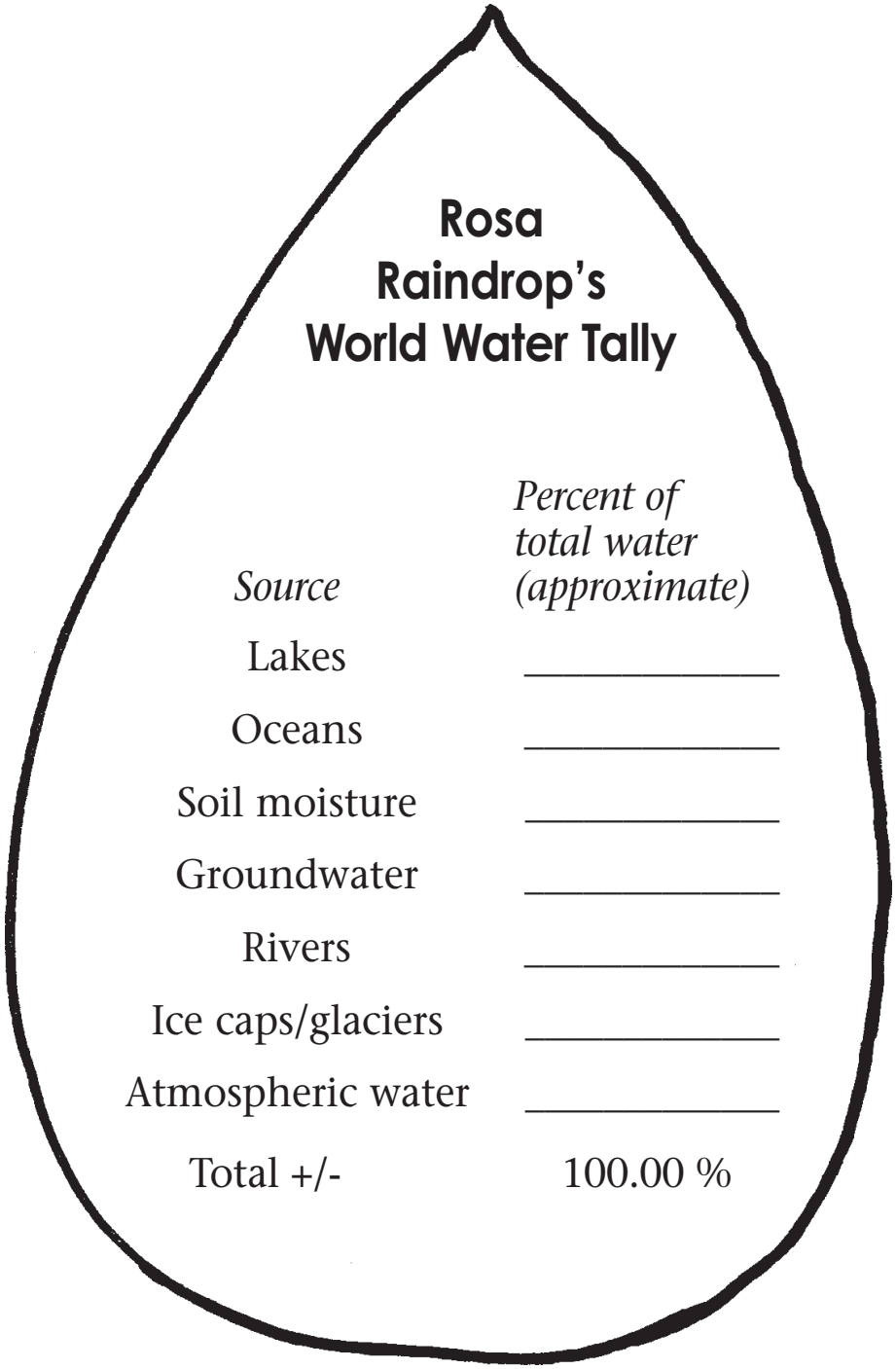
Some players may travel from the Clouds to the Ocean very quickly. Others may take their time traveling several loops. When they return to the Ocean, they may stop or go around again. The leader may wish to set a time limit for game play to end.

Additional exploration

In *4-H Wetland Wonders Water Quality Program* (4-H 3801L), try "The Water Cycle," "Watersheds: Rain Coming and Going," and "The Water Detective."

OREGON STATE UNIVERSITY
EXTENSION SERVICE

4-H 3804
July 2002
$4.00



The *4-H Rosa Raindrop Water Cycle Board Game* was adapted to this game board format by Virginia Bourdeau, Extension 4-H specialist, Oregon State University, from *4-H Wetland Wonders* (4-H 3801L).

Printing costs for this publication were funded by the Oregon 4-H Foundation.

Published July 2002.