OIMB GK12 CURRICULUM

3rd Grade **45 minutes**

The Incredible Journey: Project WET Water Cycle Game

Oregon Science Content Standards:
3.1 Structure and Function: Living and non-living things vary in their characteristics and properties.
3.1P.1 Compare and contrast the properties of states of matter.
3.2 Interaction and Change: Living and non-living things interact with energy and forces.
3.2E.1 Identify Earth as a planet and describe its seasonal weather patterns of precipitation and temperature.

Ocean Literacy Principles:
3. The ocean is a major influence on weather and climate.
6. The ocean and humans are inextricably interconnected.

Goals:
- To have students understand the physical processes of the water cycle
- To have students get a feel for different lengths of time water spends in different parts of the water cycle
- To play a game to demonstrate that the water cycle can take many different pathways.

Concepts:
- The water cycle is not just one pathway for a water molecule to travel. The possible paths are amazing!
- Water in the water cycle is sometimes solid, sometimes liquid and sometimes a gas.
- Water spends a longer amount of time in some locations in the water cycle than others.

Materials:
- 9 paper dice (available at OIMB or Project Wet)
- Label and picture for each station: Clouds, Plants, Animals, Rivers, Oceans, Lakes, Ground water, Soil, Glaciers
- Paper and pencils for students to record their journey

Lesson Plan:
- Discuss what the water cycle is and where you find water in nature. Make sure students include water inside plants and animals!
- Describe different example pathways through which water travels and how long water molecules might stay in a location (e.g. glacier vs. cloud)

- Tell the students they will each be a water molecule moving through the water cycle.
- Divide the class into 9 groups, one to start at each station: Clouds, Plants, Animals, Rivers, Oceans, Lakes, Ground water, Soil, Glaciers (show pictures).
- Have a student in each group roll the dice at each station and determine where the group will go next. If the dice says stay, then go back to the end of the line at that station. Each of the students should make a list (in order) of where they travel (blank quarter sheets work well).
- After 10-20 minutes, stop the class, and ask for volunteers to share their journey as the rest of the class follows along on the overhead or board.

Assessment: Discussion of students' pathways as water molecules

Source: Adapted from The Watercourse and the Council for Environmental Education. 1998. *The Incredible Journey*, pp 161-165 in Project WET Curriculum and Activity Guide.