

From the Mountains to the Estuary: From the Schoolyard to the Bay

**Meaningful Watershed Experiences
for Grade 6 Students**

Created by:



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In partnership with:



**Occoquan Bay National Wildlife Refuge
Manassas Battlefield National Park**



Essential Vocabulary

Watershed Systems Board Game

Adapted from a lesson by Anthony Futyma, Belville Middle School

Overview

Students will use vocabulary associated with water concepts and watersheds to create their own board game.

Materials

- dice
- poster board or drawing paper
- markers
- list of watershed and freshwater terms (below)
- index cards
- objects for playing pieces (e.g. coins or buttons)

WATERSHED TERMS

headwaters	waterfall
rapids	river
tributary	creek
meander	flood plain
wetland	delta
beach	lake
pond	divide
estuary	Chesapeake Bay
pollution	

FRESHWATER TERMS

water vapor	irrigation
water cycle	precipitation
evaporation	transpiration
condensation	water table
ground water	aquifer
spring	artesian well
turbidity	salinity
pH value	

Setting the Stage

Explain that each pair (or group) of students will create their own **Water Systems Board Game** using terms that you have been covering in class.

In the game, the players will be a water molecule traveling through their watershed.

Each group must incorporate ten terms from each list above, for a total of 20 terms.

Acquisition of Learning

1. In the game, the players will move from start to finish. The group will devise the rules. Encourage the students to be creative! The students may include traps in the game board (e.g. player gets stuck in the groundwater, miss a turn; or player falls into an aquifer, go back two spaces. You may also include items to advance the players several spaces; (e.g. water molecule evaporates- move ahead three) (player encounters a waterfall- take another turn).
2. Students can use index cards to write rules, or write them on the board.
3. The teacher should check to be sure the terms are being used in the correct context.
4. Students should give their game a title...for example: **River Run**.
5. When complete, the teacher should assess for accuracy, and then the students should play each others games!

Closure

Review flow of water through watershed and water cycle.

Review

For a good review of the water cycle show the **Water Cycle** Movie Clip on the Mountains to the Estuary CD