



## THE RIVER RAN WILD by Lynne Cherry

This book is a true story about the Nashua River which flows into the Merrimac River in Nashua, New Hampshire. The river area was settled first by the Algonquin-speaking Indian people, and later by the English who came to the river valley in the 1600s. The river tolerated changes such as dams, gristmills, and sawmills, but when the industrial revolution came to the banks of the river, too much waste was dumped into the river. The river began to slowly die. One woman, Marion Stoddart, began a campaign to clean up the river. She led a successful citizen campaign that succeeded in the passage of the Massachusetts Clean Water Act of 1966. Today the river water is clear again, and the river has become its name once again - the river with the pebbled bottom.

Rivers play an important part in the STC™ Land and Water unit as well as the water cycle. This activity focuses on a "wearable" model of the water cycle.

- MATERIALS:** pipe cleaners; yellow, clear, blue, green, and white pony beads; water cycle diagrams; string; ruler
- ACTIVITY:** Using the water cycle diagrams, have students draw their own water cycle. Make a water cycle bracelet. Have your students wear the bracelet for a week, and invite the adults in your community to stop the students and ask them to explain the water cycle. The words to "Water Cycle Boogie" will help your students with the correct order of beads on the pipe cleaner. Students just need to be careful of the sharp ends.
- SOURCE:** A teacher, Jane Hagen, in a *Super Science Connections* summer workshop at the University of Wisconsin - Madison.

**TEACHER NOTES:** Here are the definitions for the underlined words in the song. The sun starts the whole cycle going.

- Evaporation - Water vapor changing from a liquid to a gas
- Condensation - Water vapor changing from a gas to a liquid
- Precipitation - Water falling to the earth in the form of rain, snow, sleet, or hail.
- Runoff - The portion of the precipitation on a drainage area that is discharged from the area in streams, including surface runoff, ground water runoff or seepage.
- Transpiration - The process by which plants dissipate water into the atmosphere from leaves or other surfaces.

**STANDARDS:**

**BSL:** 1.7, 1.8, 3.3, 4.1, 4.2, 4.3, 4.5, 4.9, 9.3, 11.2, 12.5

**NCTM:** 4d, 13a

**SCS:** B2, B#, D1, E1, F3, F4, H1, H2

Cherry, Lynne. A River Ran Wild. Harcourt Brace & Company, 1992. ISBN#0-15-200542-0.

### **WATER CYCLE BOOGIE**

(Sing to the tune "Skip to My Lou")

Sun a shining, from its birth,  
Dries the water, dries the earth.  
A **YELLOW** bead shows its worth,  
Water cycle boogie.

Evaporation, water's gone,  
To a vapor, won't take long.  
Choose a **CLEAR** bead, can't go wrong,  
Water cycle boogie.

Clouds are forming, drop by drop.  
Vapor moving, will not stop.  
**WHITE** beads show us, what's on top.  
Water cycle boogie.

Condensation, water's here.  
No more vapor, give a cheer.  
A **LIGHT BLUE** bead, like a tear,

Water cycle boogie.

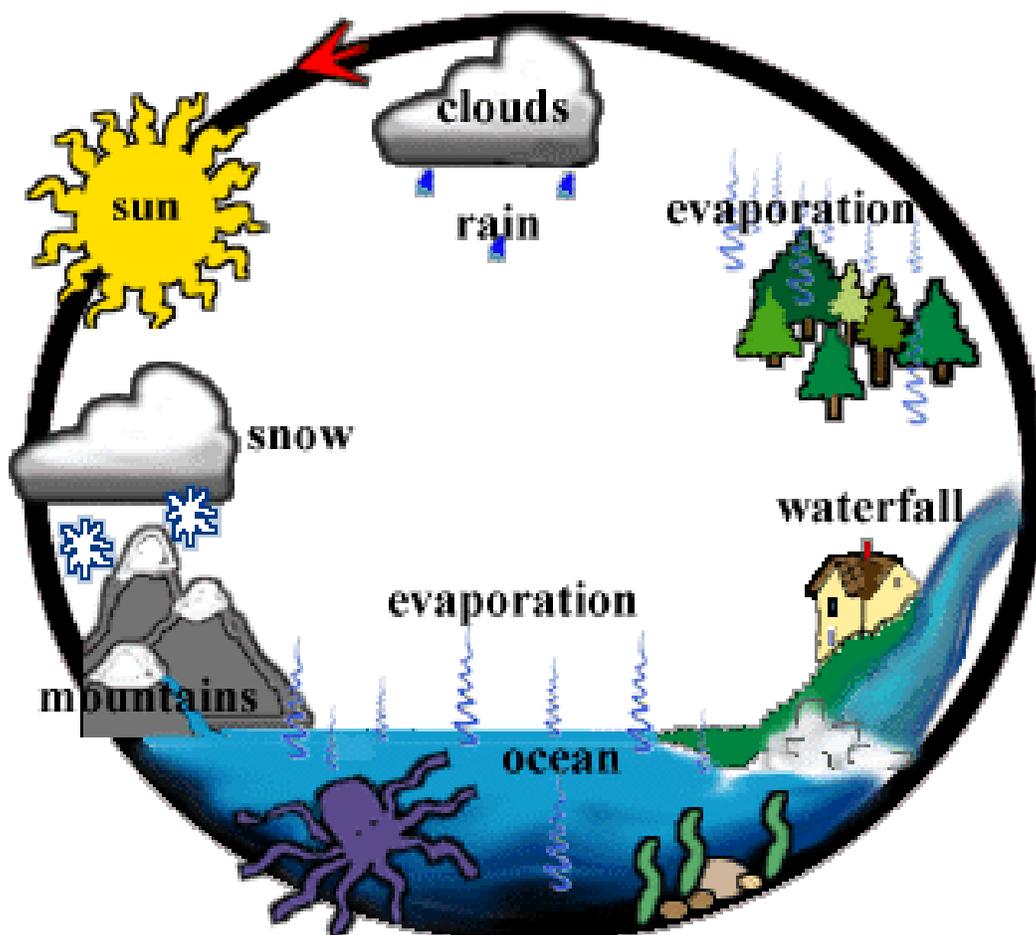
Precipitation, rain and snow,  
Shows us water, on the go.  
A DARK BLUE bead, don't you know,  
Water cycle boogie.

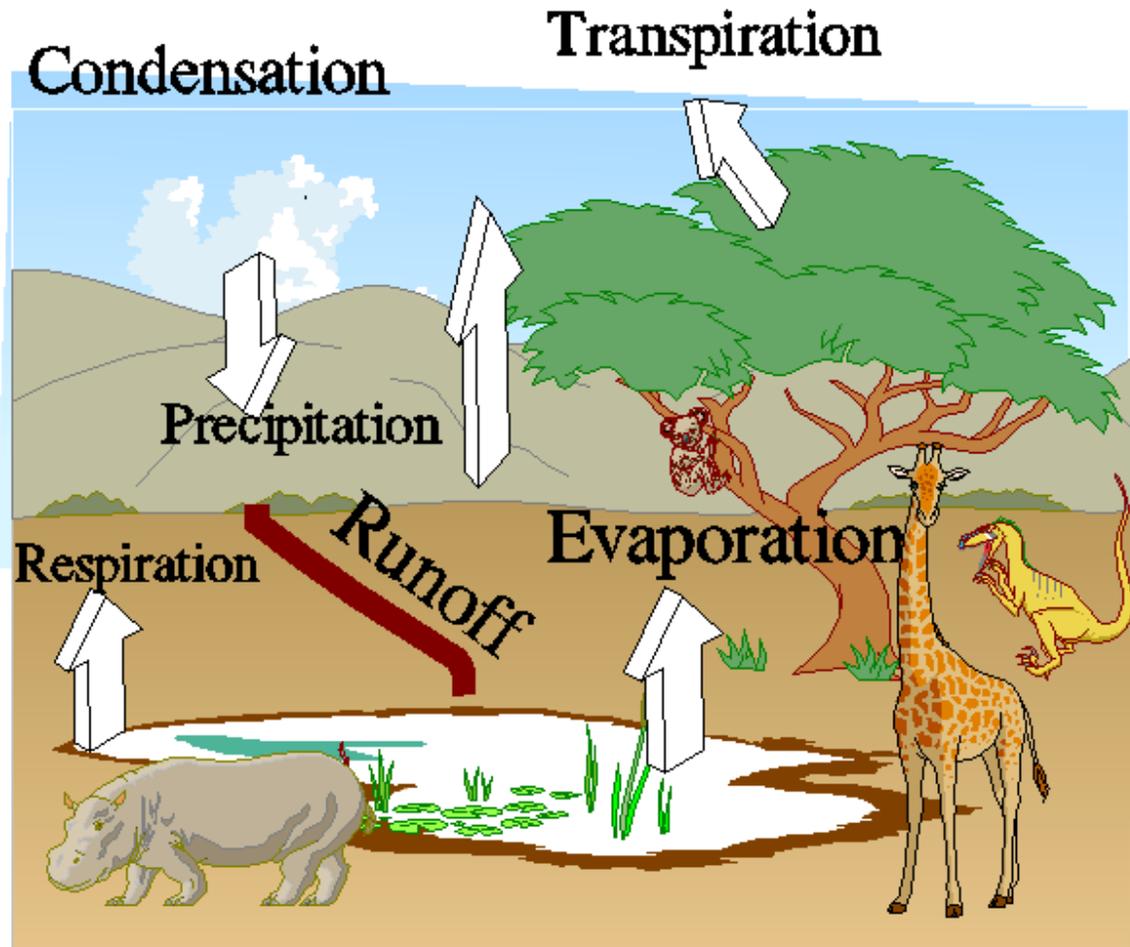
See the water, moving fast,  
Runoff on the ground at last.  
BROWN beads also join the cast,  
Water cycle boogie.

Transpiration from a tree.  
Water vapor, you can't see.  
GREEN beads show it, all to me.  
Water cycle boogie.

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# The Water Cycle

This image was found on this website: <http://www.marietta.edu/~biol/102/ecosystem.html>