

## TEACHER'S GUIDE

# WATER WIZARDS

## WATER RECYCLE

### Review

Remind students of what they learned in the last activity.

### Purpose

The purpose of this activity is to allow students to become familiar with the water cycle.

### Preparation

Review "Why is This Important?" with students. Sketch on the blackboard a diagram of the water cycle. Discuss the diagram with the students.

### Materials

water  
hot plate  
pan of water with lid  
salt  
small cup

### Experiment for "DO THIS..."

1. Boil water in covered pot on the hot plate. Steam from the boiling water condenses when it hits the lid. The condensed water then falls back to be changed to steam again, completing the cycle. Relate what is happening to the water cycle of earth.
2. Add enough salt to make the water briny. Relate to the oceans where most of earth's weather is formed. Let "rain" drip into cup. Let cool and then let a student taste to see if it is salty. Explain this phenomenon.

### Reinforcement in "Can You Tell Me..."

1. Have students answer questions individually or as a group. Encourage creativity. Let students complete Water Wizard Workout as time allows.
2. Have students construct a "water recycle" (terrarium) to take home.

### Materials

clear, clean 2 liter plastic bottle with lid ( label removed)  
scissors  
clear, wide packing tape  
gravel  
soils  
peat moss  
plants (ferns, mosses, etc.)  
water

1. Cut bottles in half.
2. Cut two vertical slits (about 2" long) in top half so top can slide down inside or over bottom.
3. In the bottom of the container, put a 1-inch layer of gravel for drainage.
4. Add a layer of soil (about 3 inches).
5. Add a layer of peat moss.
6. Plant the plants, water lightly and replace top half inside bottom. Tape around the outside to hold together and make air tight.
7. Place in a sunny spot. (You should not have to add any more water). Tell students to watch for condensation over time as their water recycle grows.

### **Extension**

1. Review "Water Wizards Home Brew" for students. Encourage students to share with their parents and incorporate activities into their daily life. Let students share the results in class.
2. Invite a meteorologist to talk to the class about weather.
3. Watch "You Can't Grow Home Again" a 3-2-1 Contact video available in your Board of Education office.