### Water Cycle in a Bag



## Objective

Identify the components of the water cycle and observe the water cycle by constructing a simple, miniature model.

#### Materials Needed

- Clear plastic bag
- Measuring spoon
- Rubber band or twist-tie
- Masking tape

#### Procedure

- 1. Pour 2 teaspoons of water into a clear plastic bag.
- 2. Blow air inside the bag with your mouth ad quickly seal the bag closed with a rubber band or twist-tie (zippered bags work well too).
- 3. Place the bag on a sunny window ledge or tape directly to the window pane. Look at the bag throughout the day. What changes do you see?

#### Variation

For faster results, make two bags. Put cold water in the first bag and hot water in the second bag. Compare the two bags.

#### Conclusion

Water molecules are constantly on the move in what is called the water cycle (or hydrologic cycle). Heat from the sun causes the water to evaporate and become a vapor. As the water vapor cools, it condenses, forming tiny droplets which gather to form clouds. As the droplets get larger, they become heavier causing them to fall to the ground as precipitation (like rain, sleet, or snow). Some of this precipitation joins lakes and streams (called surface water), and some of it soaks into the ground where it becomes groundwater. The process of water soaking into the ground is called infiltration, or recharge.

# **Activity Source**

<u>The Groundwater Gazette</u>, published by The Groundwater Foundation