

# The Atmosphere

## Learning Activity 3

### **Objective:**

Demonstrate the concept of precipitation.

### **Overview:**

Students will see the hydrologic cycle in action as the water evaporates and condenses to form rain.

### **Total Time:**

20- 30 minutes

### **Supplies:**

Hot plate, mayonnaise size jar, re-sealable sandwich bag, Ice cubes

### **Background:**

What goes up, must come down. Precipitation is the most commonly seen aspect of the hydrologic cycle.

### **Procedure:**

1. Add about two inches (5 cm) of hot water to the mayonnaise jar.
2. Add the ice cubes to the sandwich bag and seal it.
3. Place the sandwich bag over the mouth of the jar, allowing one end of the bag to form a tip inside of the jar. This will allow the condensed water to collect at one location.
4. After a few minutes, the water (rain) will begin to drip from the sandwich bag, returning to the water.

### **Discussion:**

Despite the sometimes excessive rainfall that occurs, only about 0.3% of all water on the earth is found in the atmosphere. And only a small fraction of that is seen as rain. Most of the water in the atmosphere is in the gas state called water vapor. So while the hydrologic cycle is essential for life due to the water it brings, the vast amount of water in the cycle is found in the oceans, lakes, and ground water.