## WEATHER WATCH



STUDENT WORKBOOK





## **BOTTLED UP**

You see weather in the sky. You see weather in pictures. Have you ever seen weather in a bottle? In this activity, you will begin your weather discovery with one type of weather in a bottle.

## **WEATHER IN A BOTTLE**

**Making a Model** 

WHAT YOU NEED:

FROM THE KIT:

- Bottle cap
- Clear 17 oz bottle
- Matches
- Plastic graduated cup

WHAT TO DO:



STEP

Measure 30 mL of cold water using the graduated cup. Pour it into the bottle.

OTHER ITEMS:

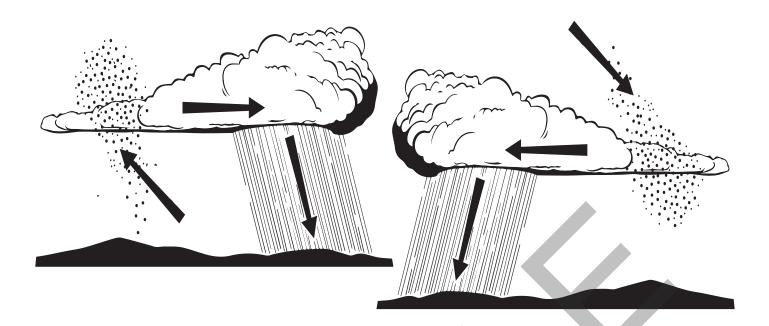
Water

**STEP 2** Put the cap on the bottle.



STEP 3 Squeeze and release the bottle 3–4 times. Draw what the inside of the bottle looks like in the "Before Match" box after Step 9.

**STEP 4** Remove the cap from the bottle.



It is easier to make clouds when the temperature, or how hot or cold something is, is low. This means that it is cold. The colder the water in your bottle is, the easier it is to make the clouds. The same is true for clouds outside. When the weather is colder, clouds form easier.



## THINK ABOUT IT!



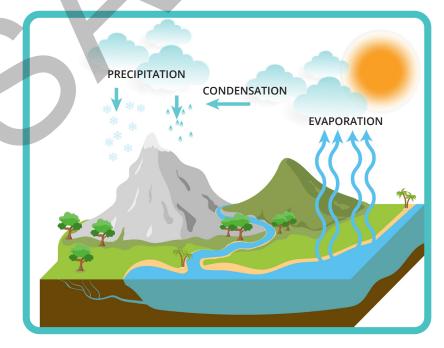
What are two questions you have about the experiment?

The second experiment was like the cloud in a bottle from Activity 1. In Activity 1, the water was not hot, so it didn't need to cool with ice. Instead, the droplets in your bottle formed around the smoke you sucked into the bottle. In nature, clouds form like this around dust particles called cloud seeds.



After water vapor condenses into a cloud, the clouds get heavy with all that water. When clouds become too heavy, **precipitation** happens. Precipitation is water that comes back to Earth, like rain. **Rain** is drops of water that fall from clouds above Earth.

You saw this last stage of clouds in the experiment with the shaving cream. The shaving cream was like a cloud. The food coloring is like rain. Food coloring made the shaving cream too heavy, so the food coloring fell out of the shaving cream cloud, like rain.





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Kit	SU-WEATWT
Instructions	IN-WEATWTS
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