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## D30 Inquiry Activity: Bottled Weather—Teacher Demonstration

As you work through this activity, refer to Activity D30 on page 327 of the Student Book.

### Question

How can you model cloud formation?

### Materials & Equipment

We need the following materials and equipment for this activity.

- 2-L colourless plastic bottle with cap
- warm water
- booklet of matches
- black paper

### Hypothesis

Predict what will happen when you squeeze a 2-L bottle that is filled with smoke and water vapour.

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**CAUTION:** Be careful when using matches.

### Analyzing and Interpreting

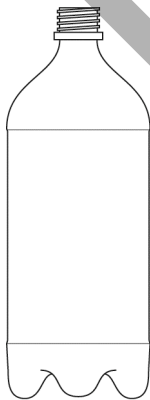
7. Where do you think the water vapour inside the bottle came from?

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8. Use the bottle diagrams below to draw a before-squeezing and after-squeezing picture of what you saw in the bottle.



Before Squeezing



After Squeezing

9. Why do you think it was necessary to squeeze the bottle several times? What do you think would have happened if you had not done this?

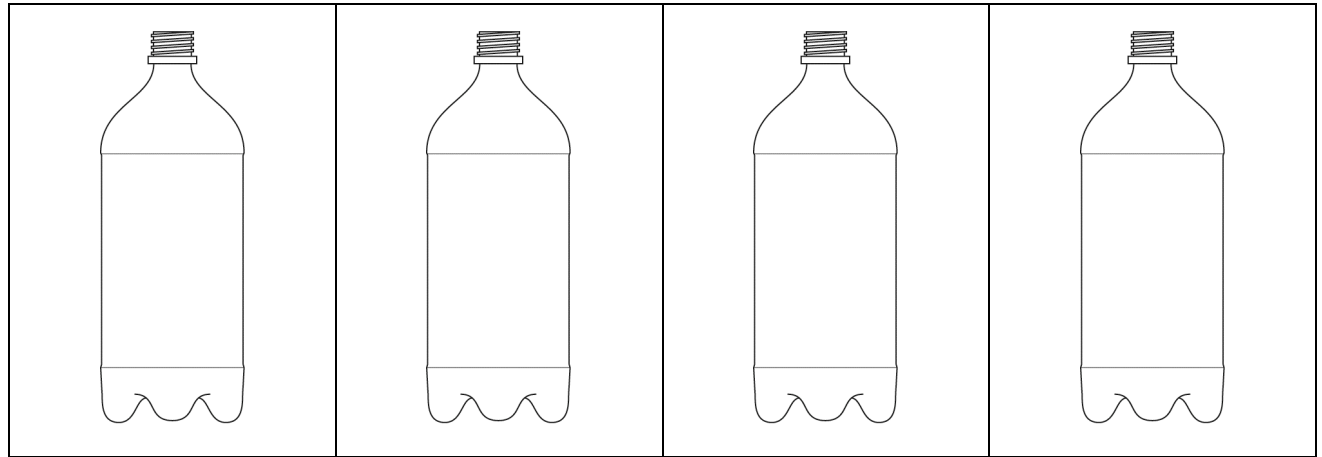
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**Skill Builder**

**10.** Draw the steps your teacher went through in this demonstration before the bottle was squeezed. Be sure to draw what you saw inside and outside the bottle.



Step 1

Step 3

Step 4

Step 6

**Forming Conclusions**

**11.** Work with a partner and make three suggestions about how this activity shows what happens in the atmosphere to form clouds.

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**12.** With your partner, list two conditions in the atmosphere that could cause more clouds to form.

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