

Materials Needed: 2 clear plastic or glass containers, coffee mug, ice

Questions for the Scientist:

1. How do clouds form?
2. What is the relationship between air and cloud formation?

State Your Hypothesis: _____

Procedures:

1. Locate 2 clear plastic or glass containers. Place one container in the refrigerator for approximately 10–15 minutes to chill.
2. Add hot water to a coffee mug.
3. In the second container, add hot water.
4. Position the empty cold container (from the refrigerator) upside down on top of the second container filled with hot water. Be sure the containers are positioned so no air can escape.
5. Place 2–4 ice cubes on top of the first container (the one that is upside down now).
6. Observe carefully and record what you see happening.

Key Questions:

1. What did you observe taking place? How did it happen?

2. What can you say about the relationship among water, air temperature, and clouds?

Results and Application:

After studying your results, what conclusions can you draw? Do your results support your hypothesis? Explain your reasoning.