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**States of Matter: Aluminum Can Demonstration**

**Observe the following demonstration and then answer the following questions.**

1. Based on the statements provided select a description of the density of the water molecules in the aluminum can before the can was heated up.

A. The water molecules were denser than room temperature water

B. The water molecules were as dense as room temperature water.

C. The water molecules were less dense than room temperature water.

D. The water molecules do not have density.

2. Draw a model of the motion and arrangement of the water molecules in the aluminum can before the can was heated, after the can was heated, and once the can was cooled.

3. Describe what happened to the water molecules in the can in the last step of the experiment?

4. Write a three-sentence statement to support the claim that adding heat to water affects its density.