

# Mass of Water vs. Ice

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

When ice changes from a solid to a liquid, the volume changes. The water takes up less space in liquid form than it does when in the form of a solid. (Ice cube)

**Problem:** What happens to the mass of the ice cube when it changes from a solid to a liquid?

**Hypothesis:** \_\_\_\_\_

## Procedure:

1. Place 2 large ice cubes or 4 small ice cubes into the cup.
2. Close the lid tightly making sure that no water will be able to escape.
3. Measure the mass of the cup and ice cubes with the lid on the cup.
4. Without opening the cup, melt the ice cubes into liquid water.  
\* Be sure not to let any water escape. If any water escapes you will have to start over. Also, do not bang the cup against the table.
5. When the ice is completely melted, measure the mass of the cup and water without taking the lid off.
6. Find the difference between the starting mass and the ending mass of the cup and water.
7. Clean and dry the cup and lid and place it back on the front edge of the table.

<b>Mass of cup and ice cube with lid on cup:</b>	<b>grams</b>
<b>Mass of cup and water after ice is melted:</b>	<b>grams</b>
<b>Difference between ice and liquid water:</b>	<b>grams</b>

**Results:** (Your results cannot be written until you have compiled the data from the entire class.)

1. Draw the graph of the class results on the back of this paper.
2. What did the graph show you? \_\_\_\_\_

**Conclusion:** \_\_\_\_\_