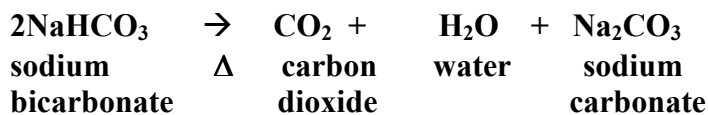


LAB: Decomposition of Baking Soda

Name: _____



Block: _____

Teacher: _____

<i>Procedure</i>	<i>Measurements</i>
1. Get a crucible and lid. Make sure it is clean and <i>completely dry</i> . Using the triple beam balance, record the mass.	
2. Add about a teaspoon of baking soda. Using the triple beam balance, record the <i>exact mass</i> of the crucible, lid and baking soda.	
3. What is the mass of the baking soda by itself?	
4. Set up a ring stand, wire mesh and Fisher burner.	
5. SLOWLY heat the crucible with the lid closed on the crucible. Then, after about 5 minutes, begin a "harder" heat – using the crucible tongs, SLIGHTLY cock the crucible lid to allow the water and carbon dioxide to escape. This second phase of the heating should be for about 10 minutes.	
<i>NOTE: If you break either the top or the bottom of the crucible, the cost is \$3 for each part to replace it. You will also need to start over.</i>	
6. Allow the crucible to cool.	
7. Using the triple beam balance, record the final mass of the crucible, lid and final product.	
8. Calculate the mass of the final product inside the crucible by itself.	
9. Calculate the mass of the gases that were driven off by the heating.	
10. What is the % by mass of the gases that were driven off by heating?	<i>Show math setup below and final calculation:</i>
% = $\frac{\text{mass of gases driven off}}{\text{mass of baking soda before heating}} \times 100$	
11. Dispose of the crucible contents in the trash . Thoroughly clean out and dry your crucible and lid. Return it to the front lab table for inspection by your teacher.	
12. CLEANUP: Take a <i>wet</i> paper towel and thoroughly swab down your lab table. Then, take a <i>dry</i> paper towel and thoroughly clean out the middle sink area of your lab table.	