

Science Notebook Layout **DON'T COPY UNDERLINED TEXT**

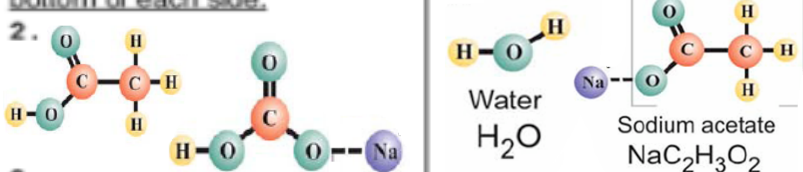
Mrs. Aguirre's Webpage: <http://www.quia.com/profiles/caguirre>

Chemical Equations 3/22/12

Reactants
203

Products
204

1. Draw reactants and products of the vinegar and baking soda reaction using the pages above. Count the total number of atoms for the reactants and products and fill in the chart at the bottom of each side.

2. 

3.

Atom	No.
Na	
C	
O	
H	

Atom	No.
Na	
C	
O	
H	

b. How do the numbers of atoms of each element compare on the reactant and product side of the equation? What does this imply for the law of conservation of mass?

c. What phase are each of the reactants (solid, liquid, or gas)? What phase are each of the three products (solid, liquid, or gas)?

d. Suggest a way to do the experiment that could better demonstrate conservation of mass.

Reaction in a Bag



Problem: Does a chemical reaction happen in the bag?

1. List the "4 deadly warning signs of a chemical reaction." (pg 202)

- a. _____
b. _____
c. _____
d. _____

2. What is the **key characteristic of a chemical change**? In a chemical change, _____ are formed.

3. **Define** Reactant:
(pg 203)

Product:

4. **Observations of the reactants** before mixing.

- a. Calcium Chloride (CaCl₂): _____
b. Baking Soda (NaHCO₃): _____
c. Phenol Red (C₁₉H₁₃O₅S): _____

5. **Data:** List EVERYTHING that happens, temp, change in solids, etc.

6. **Analysis:** List your observations that correspond to the "4 deadly warning signs of a chemical reaction" and for each tell why you believe it is a new substance.

Observation	Warning sign (pg. 202)	Why it's evidence of a new substance

7. **Conclusion:** Was there a chemical reaction? _____ How do you know?