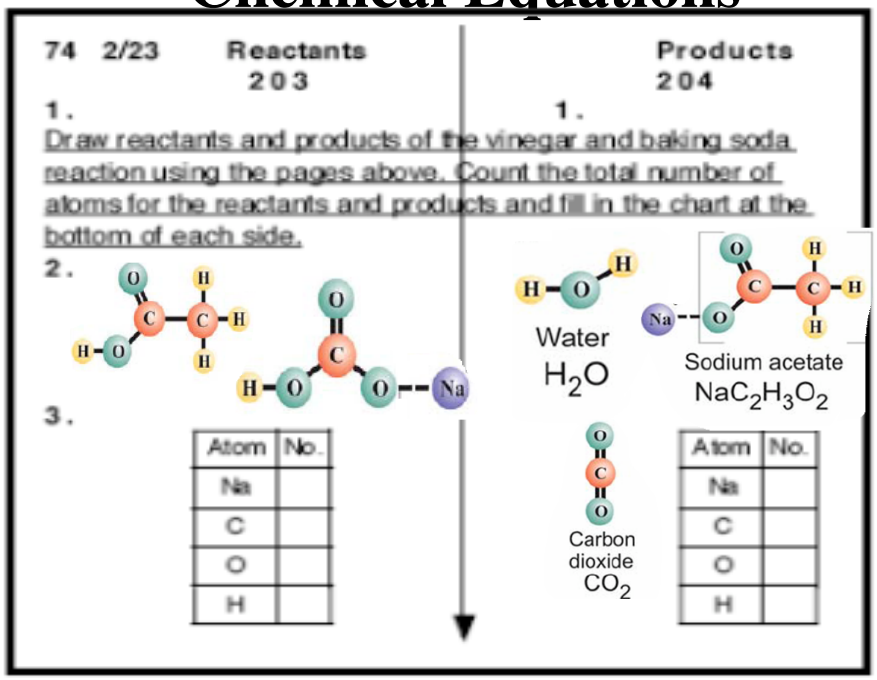
Chemical Equations



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.

Conservation of Mass

3. total starting mass.	
4. observations.	
5. ending mass.	
6. mass difference	

Stop and think

a. Does this experiment agree with the law of conservation of mass? Look at the data that you just recorded. Use it to help you to explain why or why not.

b. Explain why you observed a difference in mass. Where did the missing mass go? Did it really disappear?

c. Modeling the reaction

Scientists write chemical reactions like mathematical formulas. The reactions are on the left of the arrow and the products are on the right of the arrow. Look on page 203-204. Find the reactants and the products of this reaction

$HC_2H_3O_2 + NaHCO_3 \longrightarrow NaC_2H_3O_2 + H_2O + CO_2$

Acetic Acid + Sodium bicarbonate ------> sodium acetate + water + carbon dioxide