

Name _____

Bags of Reactions Lab Report Sheet

Date _____

Pre-lab questions:

1. Define *reactants and products*

2. List the evidence that indicates a chemical change has taken place.

Observations

DATA TABLE 1 Antacid Tablet and Water

mass of bag and water		Write observations here:
mass of tablet		
mass of bag and reactants		
mass of bag and products		

DATA TABLE 2 CaCl₂, NaHCO₃, and Water

mass of bag and dry reactants		Write observations here:
volume of water		
mass of water		
total mass of bag and reactants		
mass of bag and products		

Critical Thinking: Analysis and Conclusions

1. How do the values for total mass before and after each reaction demonstrate the law of conservation of mass? (*Interpreting data*) _____

2. What were at least five observations you made that indicated a reaction had occurred in Part A? (*Giving examples*) _____

3. Write an equation in words and then with formulas for the reaction that occurred in the bag in Part B. The products are sodium chloride, calcium hydroxide, and carbonic acid. (*Applying concepts*) _____

Critical Thinking: Applications

1. An indicator changes color when the acidity of a solution changes. What evidence is there that such a change occurred in Part B?

(*Applying concepts*) _____

2. Judge whether the reaction mixture in Part B became more acidic or more basic. Explain. (*Making predictions*) _____

3. Carbonic acid immediately decomposes into water and carbon dioxide. Write the balanced equation for this reaction. (*Applying concepts*) _____

4. What gas was produced in Part A? (*Making predictions*) (Hint: sodium hydrogen carbonate is an active ingredient in the antacid.) _____