

# 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 ( $\text{CaCl}_2$ ): \_\_\_\_\_
- b. Baking Soda ( $\text{NaHCO}_3$ ): \_\_\_\_\_
- c. Phenol Red ( $\text{C}_{19}\text{H}_{13}\text{O}_5\text{S}$ ): \_\_\_\_\_

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?