

## How do you know?

Draw a bag listing REACTANTS & PRODUCTS.

Write a paragraph to convince someone that a chemical reaction occurred. See pg 53 & 202 in CPO

Underline words NOT SENTENCES:

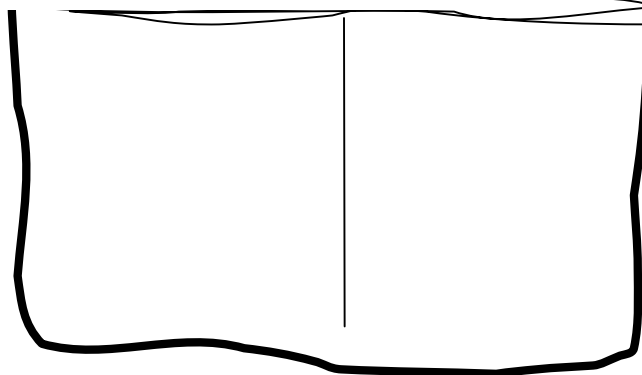
Chemical Change (in answer to question)

2 warning signs discussed

"New substances"

Where you explained that there was no other reason for the change.

### REACTANTS & PRODUCTS



## 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?