**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signs of a Chemical Reaction**

**using Elimination method**

Problem: What is the role of each substance inside the ziplock bag?

Materials: Phenol red, water, Calcium chloride, baking soda, 1-quart Ziploc bag, plastic pipettes, balance.

Procedure:

1. Place the Ziploc back flat on the lab counter, open.
2. Carefully place one teaspoon of baking soda in the right back corner.
3. Carefully place one teaspoon of calcium chloride in the left back corner.
4. Using a labeled pipette, pour about 5mL of water in the right front corner.
5. Using a new labeled pipette, pour about 5mL of phenol red in the left front corner. Quickly zip the bag.
6. Holding the bag up right, mix all four ingredients together and record all observations.

Observations:

1. Repeat the experiment, eliminating the baking soda.

Observations:

1. Repeat the experiment, eliminating the calcium chloride.

Observations:

1. Repeat the experiment, eliminating the water.

Observations:

1. Repeat the experiment, eliminating the phenol red.

Observations:

Questions:

1. Which ingredient was responsible for the **rise** in temperature? Explain how you figured this out.

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1. Which ingredient was responsible for the **drop** in temperature? Explain.

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1. Which ingredient was responsible for the color changes? Explain.

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1. Which ingredient was responsible for the bubbles? Explain.

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1. Explain how the elimination method was used in this lab.

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