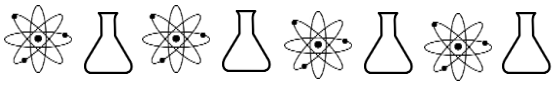


Endothermic Reaction

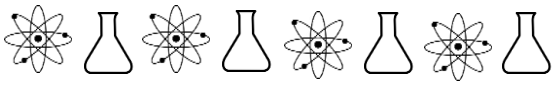
Use these sheets to conduct your endothermic and exothermic experiments.

Endothermic Reaction Procedure:

1. Measure 10 ml of vinegar and pour it into a clear container.
2. Place a thermometer in the container. Measure and record the temperature of the vinegar on the chart.
3. Leaving the thermometer in the cup, add ½ teaspoon of baking soda.
4. Watch the thermometer and observe the changes in temperature. When the thermometer stops moving, record the temperature on the chart.

	Temperature
Vinegar without baking soda	
Vinegar with baking soda	
Total change in temperature	
Increase or decrease?	

(continued on next page)



Exothermic Reaction

Exothermic Reaction Procedure:

1. Measure 10 ml of baking soda solution and pour it into a clear container.

2. Place a thermometer in the container. Measure and record the temperature of the baking soda on the chart.

3. Leaving the thermometer in the cup, add ½ teaspoon of calcium chloride.

4. Watch the thermometer and observe the changes in temperature. When the thermometer stops moving, record the temperature on the chart.

5. Now add another 5°C or 10°F to the temperature you achieved. This is your target temperature for your next three trials. Fill it in on the chart in all three columns.

6. Try changing the amount of baking soda solution or calcium chloride in each trial to reach the target temperature.

Trials	As written	1st Trial	2nd Trial	3rd Trial
Baking soda solution	10 ml			
Initial temperature				
Calcium chloride	½ tsp			
Final temperature				
Target temperature				
Difference between final and target temperature				