

# A Cool Change

## Procedure

1. **Collaborate** Work with a partner. Record your observations in the chart below.

Chemical Change	
Starting temperature	
Observations of vinegar and baking soda	
Final temperature	

2. **Measure** Add four tablespoons of vinegar into a cup. **Safety:** Wear goggles.
3. **Measure** Use a thermometer to find the temperature of the vinegar. Record this starting temperature in your chart.
4. **Observe** Measure one-half teaspoon of baking soda and add it to the vinegar. Record your observations in your chart.
5. **Record Data** When the change stops, measure the temperature of the liquid in the cup as you did in step 3. Record this final temperature in your chart.

## Conclusion

Write the answers to the questions below.

1. **Communicate** Describe what happened after you added baking soda to the cup.

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2. **Analyze Data** How did the temperature change after you added baking soda?

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3. **Hypothesize** What do you think happened to the baking soda after you added it to the cup? What observations led you to make this hypothesis?

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## Investigate More!

**Design an Experiment** Did the properties of the vinegar change? Try adding more and more baking soda to the liquid from step 5. Do you get the same reaction? Is this a physical change?

