

# Investigating a Chemical Change

## *Investigate Activity*

### Materials (per group)

#### Kit Items

2 balloons (13")  
funnel  
plastic spoon  
baking soda  
white vinegar

#### School-Supplied Items

safety goggles  
paper towel  
water  
2 plastic bottles (16 oz or 20 oz size)

#### Hints and Tips

- Have students place the baking soda into the funnel a little at a time so that the baking soda does not clog the neck of the funnel. Students should tap the sides of the funnel to free any clogs that may occur.

**Activity Rubrics**

**Scoring Key**

**4** correct, complete, detailed

**3** partially correct, complete, detailed

**2** partially correct, partially complete, lacks some detail

**1** incorrect or incomplete, needs assistance

**Investigate Activity**

Investigating a Chemical Change

**Scoring Criteria**

Student followed instructions to make a chemical change occur.

Student made predictions about what would happen when baking soda was added to water and to vinegar.

Student recorded observations.

Student made inferences about new substances being formed.

Student identified the combination that caused a chemical change to occur.

**Score**

total points

% equivalent




# Investigating a Chemical Change

## Follow This Procedure

Record your predictions and observations in the chart.

	Predictions	Observations
Baking soda and water		
Baking soda and vinegar		

## Interpret Your Results

1. Make an inference to answer the following question: When you combined baking soda and water, was there evidence of a new substance being formed? Explain.

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2. Make an inference to answer the following question: When you combined baking soda and vinegar, was there evidence of a new substance being formed? Explain.

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Name \_\_\_\_\_ Date \_\_\_\_\_

3. Which combination caused a chemical change to occur? Explain.

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**Inquire Further**

What do you think would happen to the solutions if you allowed them to evaporate? Develop a plan to answer this or other questions you may have.

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<b>Self-Assessment Checklist</b>	
I followed instructions to make a chemical change occur.	_____
I made <b>predictions</b> about what would happen when baking soda was added to water and to vinegar.	_____
I recorded my <b>observations</b> .	_____
I made <b>inferences</b> about new substances being formed.	_____
I <b>identified</b> the combination that caused a chemical change to occur.	_____



**Notes for Home** Your child produced and identified a physical and a chemical change.

**Home Activity:** Ask your child to name two physical changes and two chemical changes that occur at home.