

## Chapter 2 Properties of Matter

**Section 2.3 Chemical Properties****(pages 54–58)**

*This section discusses chemical properties and describes clues that may show that a chemical change has taken place.*

**Reading Strategy (page 54)**

**Relating Text and Visuals** As you read, complete the table by finding examples of the clues for recognizing chemical changes in Figures 19 and 20. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Recognizing Chemical Changes	
Clue	Example
Change in color	Copper roof changing color from red to green when exposed to moist air
Production of gas	
Formation of precipitate	

**Observing Chemical Properties (pages 54–55)**

- Circle the letters of the compounds formed when a candle burns.
  - paraffin
  - water
  - carbon
- What is a chemical property? \_\_\_\_\_  
\_\_\_\_\_
- Is the following sentence true or false? Flammability is a material's ability to burn in the presence of carbon dioxide. \_\_\_\_\_
- The property that describes how readily a substance combines chemically with other substances is \_\_\_\_\_. Circle the correct answer.  
 reactivity      malleability      conductivity
- Circle the letter of each property that is a chemical property.
  - hardness
  - density
  - flammability

**Chapter 2 Properties of Matter**

**Recognizing Chemical Changes (pages 56–57)**

6. A \_\_\_\_\_ change occurs when a substance reacts and forms one or more new substances. Circle the correct answer.

distillation      physical      chemical

7. Circle the letters of examples of evidence for a chemical change.

- a. a change in color
- b. a filter trapping particles
- c. the production of a gas

Match each example to evidence of a chemical change.

Example	Chemical Change
_____ 8. Lemon juice is added to milk.	a. the production of a gas
_____ 9. A silver bracelet darkens when exposed to air.	b. the formation of a precipitate
_____ 10. Vinegar is mixed with baking soda.	c. a change in color

**Is a Change Chemical or Physical? (page 58)**

11. Is the following sentence true or false? When iron is heated until it turns red, the color change shows that a chemical change has taken place.

\_\_\_\_\_

12. During a chemical change the composition of matter \_\_\_\_\_, but during a physical change, the composition of matter \_\_\_\_\_.

\_\_\_\_\_.

13. Complete the following table about chemical changes.

Chemical Changes		
Type of Change	Are New Substances Formed?	Example
Chemical	Yes	
Physical		Sugar dissolving in water