

Chemical Reactions ▪ *Guided Reading and Study***Fire and Fire Safety** (pp. 74–77)

This section describes the three things necessary to maintain a fire. It also explains how to prevent fires in the home.

Use Target Reading Skills

Before you read, write what you know about fire safety in the graphic organizer below. As you read, continue to write in what you learn.

What You Know
1. A fire needs fuel to burn.
2. A fire needs oxygen to burn
3. All homes should have smoke detectors

What You Learned
1. Fire is the result of a combustion reaction
2. The most deadly fires start with cigarettes
3. Baking soda can be used to put out small fires

Understanding Fire (pp. 75–76)

1. What is combustion?

Combustion is a rapid reaction between oxygen and a substance called a ~~fire~~ fuel.

2. A material that releases energy when it burns is called a(n)

fuel.

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3. What are the three things necessary to start and maintain a fire?

Fuel, Oxygen and Heat

4. Circle the letter of the source of oxygen for a fire.

- a. air
- b. fuel
- c. reactants
- d. products

5. Is the following sentence true or false? An electric spark can provide the activation energy needed to start a combustion reaction.

True

6. How does water remove two parts of the fire triangle?

Water covers the fuel, which keeps the fuel from coming into contact with oxygen. The evaporation of water also uses up heat, which cools the fuel

Home Fire Safety (pp. 76-77)

7. What are the three most common sources of home fires?

Small heaters, cooking, and faulty electrical wiring

8. Covering a small fire on the stove with the lid of a pot or baking soda may put the fire out.

9. Circle the letter of each of the following that is a safety aid in a fire-safe home.

- a. smoke detectors
- b. gasoline can in the basement
- c. fire extinguisher
- d. box of baking soda in the kitchen

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