

# Describing Acids and Bases

(pages 98–103)

## Properties of Acids (pages 98–100)

**Key Concept:** An acid is a substance that tastes sour, reacts with metals and carbonates, and turns blue litmus paper red.

- An **acid** is a compound that tastes sour, reacts with metals, and turns blue litmus paper red. Examples of acids are hydrochloric acid and acetic acid.
- Acids tastes sour. Citrus fruits like lemons and grapefruit are acidic. Never taste a chemical to identify it as an acid.
- Acids are corrosive. **Corrosive** means to eat away at other materials. When an acid reacts with some metals, the metals seem to disappear.
- Litmus paper is an indicator. An **indicator** is a compound that changes color when in contact with an acid or a base. Acids turn blue litmus paper red.

*Answer the following questions. Use your textbook and the ideas above.*

1. Circle the letter of what is NOT a property of an acid.
  - a. sour taste
  - b. reacts with some metals
  - c. turns litmus paper blue
2. A compound that changes color when in contact with an acid or a base is a(an) \_\_\_\_\_.
3. Because acids eat away at some metals, acids are \_\_\_\_\_.

**Acids, Bases, and Solutions** ▪ *Adapted Reading and Study***Properties of Bases** (pages 100–101)

**Key Concept:** A base is a substance that tastes bitter, feels slippery, and turns red litmus paper blue.

- A **base** is a compound that tastes bitter, feels slippery, and turns litmus paper blue. Bases are the opposite of acids.
- Bases taste bitter. Soaps and detergent taste bitter. Never taste a substance to identify it as a base.
- Bases feel slippery. Soap feels slippery between your fingers. Strong bases can burn your skin. Never touch a substance to identify it as a base.
- Bases turn red litmus paper blue. An easy way to remember this is to remember the letter *b*.

*Answer the following questions. Use your textbook and the ideas above.*

4. Circle the letter of what is NOT a property of a base.
  - a. sour taste
  - b. slippery feel
  - c. turns litmus paper blue
5. Is the following sentence true or false? It is safe to taste or touch an unknown substance to identify it as a base. \_\_\_\_\_

**Uses of Acids and Bases** (pages 102–103)

**Key Concept:** Acids and bases have many uses around the home and in industry.

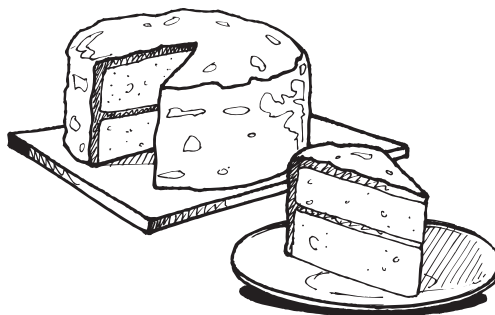
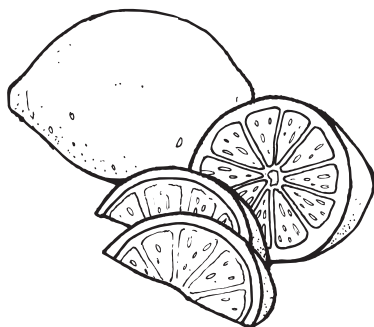
- Acids found in foods like tomatoes and oranges have important jobs in your body.
- Fertilizer and batteries contain acids.

**Acids, Bases, and Solutions** ▪ *Adapted Reading and Study*

- Baking soda is a base that makes cakes and cookies light and fluffy.
- Many cleaning products have bases. Cement is made with bases.

*Answer the following questions. Use your textbook and the ideas on page 43 and above.*

6. The picture shows two foods, a lemon and a cake. Circle the food that has an acid. Underline the food that is made with a base.



7. Draw a line from each type of compound to its use. Compounds can be used more than once

**Compound**

acid

base

**Use**

a. fertilizer

b. cleaning products

c. cement

d. batteries