

Describing Acids and Bases

(pages 236–241)

Properties of Acids (pages 236–238)

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 238–239)

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 240–241)

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

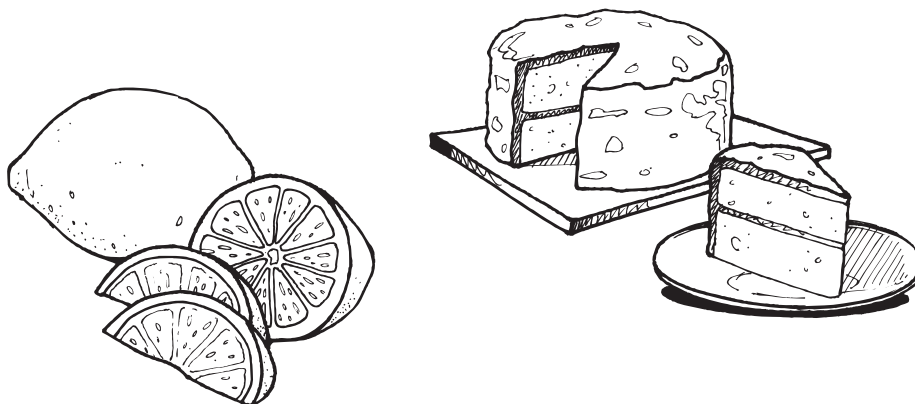
- Acids found in foods like tomatoes and oranges have important jobs in your body.
- Fertilizer and batteries contain acids.

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 107 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