

ACIDS AND BASES

Have you ever heard the terms *acid* and *base*? Acids and bases play important roles in your life. Acids and bases can be found in just about everything. Almost every liquid you see is either an acid or a base. The only liquid that is not an acid or a base is distilled water.

An acid has more hydrogen ions. The word *acid* comes from the Latin word *acidus*, which means "sharp." Acids usually have a sour taste. Examples of acids are lemon juice and vinegar. Most citrus fruits have a lot of acids, as do teas and yogurt. Not all acids can be eaten. Some of them can be very harmful. Some acids can burn holes in clothing or skin. These strong acids are used to produce dyes, plastic, fertilizers, and more.

A base is a bitter-tasting chemical. Egg whites and ammonia are bases. Soap is also made from a base. Did you know that your blood is a base? There are many bases that can be eaten, but there are many that are very dangerous to touch, taste, or smell.

Acids and bases are opposites. So when you mix them together, they can neutralize each other. Mixing them together takes a bit of potency away and makes them weaker. When there is too much of an acid, a base will be added to counteract the acidity. Gardeners are constantly working to get the right balance in the soil. If there is too much acid, plants won't grow.

STORY QUESTIONS

- 1. Which of the following statements is true?
 - a. Acids and bases are both dangerous to your body.
 - b. Bases are the weakened form of acids.
 - c. Acids and bases should never be mixed together.
 - d. Acids and bases can be found in just about everything.
- 2. Which sentence from the passage supports the previous statement?
 - a. The only liquid that is not an acid or a base is distilled water.
 - b. Almost every liquid you see is either an acid or a base.
 - c. Most citrus fruits have a lot of acids, as do teas and yogurt.
 - d. These strong acids are used to produce dyes, plastic, fertilizers, and more.
- **3.** Which question could be answered after reading this passage?
 - a. What are some examples of acids and bases?
 - b. Does a banana have acids in it?
 - c. How do I neutralize the acids and bases in the food I eat?
 - d. What is the pH scale?
- **4.** What is the meaning of word *potency* in this passage?
 - a. influence
 - b. strength
 - c. speed
 - d. understood