

CHECK YOUR LEARNING

Suggested Answers

1. Sample answers:
 - (a) Before reading this lesson, I knew that lemons tasted sour.
 - (b) I learned this when I tasted lemon juice.
 - (c) I now know that lemons taste sour because they are acidic. I also know that lemons have a low pH.
2.
 - (a) Lemon juice has a pH of 2.
 - (b) Milk of Magnesia has a pH of 10.
 - (c) Borax has a pH of 9.
3.
 - (a) A solution with a pH of 13 is highly basic.
 - (b) A solution with a pH of 6 is slightly acidic.
 - (c) A solution with a pH of 1 is highly acidic.
 - (d) The moisture on your skin is slightly acidic.
 - (e) Water in a swimming pool is slightly basic.
4.
 - (a) The following substances are listed in order of increasing acidity: bleach, baking powder, pure water, black coffee, tomatoes, stomach acid.
 - (b) The pH of the substances are in decreasing order. Bleach has the highest pH of the listed substances, and stomach acid has the lowest pH of the listed substances.
5.
 - (a) Acids can react with the metals, forming metallic compounds that can be dissolved by water and washed away.
 - (b) Lime can be added to acidic soil, or compost can be added to basic soil, to make the soil an appropriate pH for most successfully raising the desired crop.
 - (c) We can add acid or base to adjust the pH of the pool water to a range of 7.2 to 7.8.
6. The original containers are designed for safety when using the product and to prevent the product from deteriorating.
7.
 - (a) I found most of the products with HHPS symbols in the bathroom and kitchen.
 - (b) Most cleaners and drain chemicals are basic.
8. They are slightly acidic to be balanced with normal skin pH.
9. Phytoremediation is not disruptive to the environment and is less expensive.
10. To prevent your teeth from losing minerals, you could eat fewer acidic foods like lemons and coffee. Washing your mouth out with water after eating an acidic food and brushing your teeth often will help to remove acids.