

Use with textbook pages 220–229.

Acids and bases

Match the Term on the left with the best Descriptor on the right. Each Descriptor may be used only once.

Term	Descriptor
1. _____ acid	A. a solution with a pH of 7
2. _____ base	B. can burn skin or eyes on contact
3. _____ neutral	C. number of hydrogen ions in a specific volume of solution
4. _____ pH scale	D. a chemical compound that produces a solution with a pH less than 7
5. _____ corrosive	E. a number scale for measuring how acidic or basic a solution is
6. _____ pH indicator	F. a chemical compound that produces a solution with a pH greater than 7
7. _____ concentration of hydrogen	G. a chemical that changes colour depending on the pH of the solution it is placed in

8. Which of the following describes acids?

I.	has a pH of less than 7
II.	can conduct electricity
III.	produce hydroxide ions when dissolved in solution

- A.** I and II only
- B.** I and III only
- C.** II and III only
- D.** I, II, and III

- 9.** What happens to the number of H^+ after H_2SO_4 is added to water?
 - A.** it increases
 - B.** it decreases
 - C.** it stays the same

10. Which of the following is a base?

- A.** KCl
- B.** HBr
- C.** LiOH
- D.** HNO_3

11. What is the name for $HClO_3$?

- A.** chloric acid
- B.** chlorous acid
- C.** perchloric acid
- D.** hypochlorous acid

12. What is the chemical formula for sulphurous acid?

- A.** HS
- B.** HSO_4^-
- C.** H_2SO_3
- D.** H_2SO_4

13. What is the pH of a substance that causes methyl orange to turn yellow and methyl red to turn red?

- A.** 3
- B.** 4.5
- C.** 6.5
- D.** 8

14. Which of the following would occur if eggs were tested with various pH indicators?

I.	indigo carmine turns blue
II.	phenolphthalein turns pink
III.	bromothymol blue turns blue

- A.** I and II only
- B.** I and III only
- C.** II and III only
- D.** I, II, and III