

Directed Reading B *continued*

- _____ **14.** The group of atoms that make up a single unit of a covalent compound is called a(n)
- a.** bond.
 - b.** electron.
 - c.** molecule.
 - d.** atom.

15. What does it mean if a substance is not soluble in water?

16. Why are some covalent compounds not soluble in water?

17. Why do covalent compounds tend to have lower melting points than ionic compounds?

18. Why doesn't sugar dissolved in water conduct electric current?

Directed Reading B

Section: Acids and Bases

ACIDS AND THEIR PROPERTIES

- _____ 1. Any compound that increases the number of hydronium (H_3O^+) ions dissolved in water is called a(n)
- base.
 - acid.
 - indicator.
 - neutral.
- _____ 2. To form hydronium ions, each hydrogen ion bonds with
- an oxygen atom.
 - a water molecule.
 - an acid.
 - a base.
- _____ 3. When hydrogen ions (H^+) bond to water molecules (H_2O) they form
- hydrogen ions (H^+).
 - hydronium ions (H_3O^+).
 - water molecules (H_2O).
 - bases.
- _____ 4. What flavor do acids have?
- | | |
|----------|---------|
| a. sweet | c. sour |
| b. salty | d. none |
- _____ 5. Why should a person NEVER taste or touch an unknown chemical?
- Many are flavorless.
 - Many are too sweet.
 - Many are corrosive.
 - Many are too salty.
- _____ 6. A compound that can reversibly change color depending on conditions such as pH is called a(n)
- indicator.
 - color meter.
 - color changer.
 - water molecule.
- _____ 7. Two commonly used indicators are bromthymol blue and
- hydrochloric acid.
 - silver nitrate.
 - litmus paper.
 - color changer.

Directed Reading B *continued*

- _____ **19.** What should you NEVER do to identify a chemical?
- a. add salt to it
 - b. use an indicator
 - c. taste or touch it
 - d. look in a book
- _____ **20.** What color does a base change red litmus paper to?
- a. blue
 - b. purple
 - c. green
 - d. orange
- _____ **21.** Because bases increase the number of hydroxide ions, OH^- , solutions of bases can
- a. indicate temperature.
 - b. split atoms.
 - c. conduct electric current.
 - d. stop electric current.

Match each product with the correct base. Write the letter in the space provided.

- | | |
|---------------------------|-------------------------------|
| _____ 22. soap | a. magnesium hydroxide |
| _____ 23. antacids | b. sodium hydroxide |
| _____ 24. cement | c. calcium hydroxide |