

All about Acid & Base Quiz

Name: _____

Date: _____

 A. Multiple Choice. Encircle the letter that corresponds to the correct answer.

1. Bases react with _____.
 - a. neither acids, salts, nor water
 - b. water to produce acids and salts
 - c. salts to produce acids and water
 - d. acids to produce salts and water

2. Which of the following is *false* about acids and bases?
 - a. Acids are substances that donate protons.
 - b. Bases are substances that accept electrons.
 - c. A base is any substance that produces OH^- in aqueous solutions.
 - d. An acid is any substance that produces H^+ when dissolved in water.

3. Which type of reaction always forms a salt and water?
 - a. exothermic
 - b. neutralization
 - c. oxidation
 - d. polymerization

4. One of the physical properties that all acids have is _____.
 - a. being colorless
 - b. bitter taste
 - c. color
 - d. sour taste

5. Which ion do bases contain?
 - a. H^+
 - b. H_2O
 - c. NH_4
 - d. OH^-

6. Acids turn litmus paper into _____.
 - a. blue
 - b. red
 - c. violet
 - d. yellow

7. Which of the following is a characteristic of bases?
 - a. dry
 - b. moist
 - c. rough
 - d. slippery

8. A pure substance made of two or more elements that are chemically combined is called _____.
 - a. compound
 - b. mixture
 - c. solution
 - d. suspension

9. How is a mixture different from a compound?
 - a. Mixtures are commonly found in nature.
 - b. Mixtures have two or more components.
 - c. Solids, liquids, and gases can form a mixture.
 - d. Each substance in a mixture keeps most of its characteristic properties.

10. Metals, nonmetals, and metalloids are characteristic properties of _____.

- alloys
- compounds
- elements
- mixtures

11. Which of the following substances can be separated into simpler substances only by chemical means?

- magnesium
- salt water
- silver
- water

12. A(n) _____ can be separated by filtration.

- alloy
- compound
- element
- mixture

13. Which of the following is *not* considered a mixture?

- emulsion
- potassium chloride
- shaving cream
- tea

14. Which of the following lists contain pure elements?

- air, water, oxygen
- air, water, fire, earth
- hydrogen, oxygen, brass
- sodium, nitrogen, oxygen

15. Matter is defined as anything that _____.

- has mass
- occupies space
- both A and B
- none of these

16. A pH scale reading of less than 7 at 25°C indicates a(n) _____ medium.

- acidic
- basic
- neutral
- unknown

17. Phenolphthalein solution turns bases _____.

- colorless
- green
- reddish pink
- yellow

18. A pH scale reading of _____ indicates a weak base.

- 2
- 6
- 8
- 13

19. Methyl orange solution turns bases _____.

- colorless
- orange
- pink
- yellow

20. Acetic acid is a weak acid, while _____ is a strong acid.

- boric acid
- carbonic acid
- hydrochloric acid
- oxalic acid