InterActions Unit 5 Sample Quiz

See the Scientists' Consensus Sheets for assistance.

1. When you increase the magnification of a microscope to look at a leaf, you see an *increase* in

    a. the amount of the leaf you see.

    b. the details seen in the image of the leaf.

    c. the size of the image of the leaf.

    d. None of these increases.

2. Which of the following is a chemical property of a substance?

    a. color

    b. texture

    c. flammable (burns)

    d. shape

3. Which list contains *only* physical interactions

    a. heating, rusting, burning

    b. tearing, sawing, boiling

    c. digesting, exploding, sawing

    d. stretching, bending, cooking

4. During a chemical interaction

    a. a new substance with different properties may appear

    b. a substance may disappear

    c. a new substance in a different phase may appear (at room temperature)

    d. All of the above

5. Which property is the most useful in identifying a certain chemical?
    a. mass.
    b. density.
    c. color.
    d. flexibility.

6. Which of the following is NOT a mixture?
    a. Muddy water.
    b. Tabasco sauce.
    c. Pure water.
    d. Salt water.

7. You can separate a solution by
    a. interactions that cause a phase change.
    b. a chemical interaction.
    c. using filter paper.
    d. There is no way to separate a solution.

8. Which of the following is not a suspension?
    a. granola
    b. brass
    c. chocolate chip cookie
    d. river water

9. When a white substance is heated, it undergoes a phase change but no new chemicals are formed and it does not separate into distinct substances. However, when this powder is mixed with water it produces three new substances. The white solid is a(n)

    a. solution

    b. suspension

    c. compound

    d. element

10. When a green single substance is heated it interacts with the oxygen in the air and produces two new substances. The green substance is a(n)

    a. solution

    b. suspension

    c. compound

    d. element

11. A substance does not break down during phase changes or chemical interactions. This substance is a(n)

    a. solution

    b. suspension

    c. compound

    d. element

12. Noble gases

    a. are chemically reactive and unstable.

    b. are poor conductors and chemically reactive.

    c. are poor conductors and have low densities.

    d. are good conductors and have boiling points below room temperature.

13. Metals are

    a. are good conductors and have high melting temperatures.
    b. shiny when polished and poor conductors.
    c. poor conductors and have high melting temperatures.
    d. have low densities and are good conductors.

14. Metalloids are

    a. non-shiny and usually brittle.
    b. Non-shiny and poor conductors.
    c. Shiny and good conductors.
    d. Shiny and brittle

15. The periodic table organizes elements

    a. into families with similar properties.
    b. alphabetically.
    c. according to color.
    d. according to their phase (gas, solid, liquid) at room temperature.

Learning About Activities

Activity 12

16. In the pH scale, values above 7 are

    a. bases.

    b. acids.

    c. neutral.

    d. None of the above.

17. Drain opener is

    a. a base.

    b. an acid.

    c. a neutral substance.

    d. None of the above.

Activity 13

18. Group 17 of the periodic table are called halogens. Halogens react well with

    a. gases.

    b. non-metals.

    c. metals.

    d. water.