

***InterActions* Unit 5 Chapter 2 Sample Quiz**

See the Scientists' Consensus Sheets for assistance.

1. Which list contains *only* physical interactions
 - a. heating, rusting, burning
 - b. tearing, sawing, boiling
 - c. digesting, exploding, sawing
 - d. stretching, bending, cooking

2. 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

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

4. When you dissolve salt in water the substance is called
- an element.
 - a single substance.
 - a solution.
 - a solvent.
5. You can separate a solution by
- interactions that cause a phase change.
 - a chemical interaction.
 - using filter paper.
 - There is no way to separate a solution.
6. 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)
- solution
 - suspension
 - compound
 - element

7. 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
8. 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
9. 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.

10. 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.

11. Metalloids are

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

12. 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.

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

- a. gases.
- b. non-metals.
- c. metals.
- d. water.