

Part A: Completion**Complete each sentence or statement**

1. Changes in state are examples of _____ changes.
2. Mass is the measure of the total amount of _____ in any object.
3. What are the three principle states of matter?
 - a.
 - b.
 - c.
4. _____ is a measure of the force of gravity pulling on a object.
5. List four signs or indicators which may signal a chemical change:
 - a.
 - b.
 - c.
 - d.
6. Matter in which all the atoms are alike? _____
7. Each element is represented by a _____ _____?
8. Each specific substance can be indentified by the combination of _____ it has.
9. A mixture composed of different materials which are spread uneven is called a _____ mixture?
10. List 6 physical properties of matter:
 - a.
 - b.
 - c.
 - d.
 - e.
 - f.

Part B: Multiple Choice**Identify the letter of the choice that best completes the statement or answers the question.**

1. One example of chemical change is
 - a. Cutting up napkin
 - b. Crushing a car
 - c. Burning propane in an grill
 - d. Melting water
2. Which of the following statements about the properties of matter is true?
 - a. The properties of all mixtures are the same
 - b. All kinds of matter have the same properties
 - c. Each specific substance can be identified by its properties
 - d. The properties of specific kinds or matter frequently change

3. Which type of matter consists of two or more substances that are NOT chemically combined?
 - a. atoms
 - b. elements
 - c. compounds
 - d. mixtures

4. Substances that CANNOT be broken down chemically into other substances are
 - a. Elements
 - b. Mixtures
 - c. Liquids
 - d. Compounds

5. The SI unit for mass is the
 - a. Kilogram
 - b. Ounce
 - c. Pound
 - d. Liter

6. Which of the following is a rule for Chemical symbols?
 - a. One to 4 letters can be used for the symbol
 - b. All letters are lower case
 - c. The first letter is upper case
 - d. All symbols come from Spanish names

7. All elements are composed of extremely small particles called
 - a. Gases
 - b. Mixtures
 - c. Atoms
 - d. Molecules

8. A group of atoms that are bonded together is called a(n)
 - a. Ratio
 - b. Compound
 - c. Element
 - d. Mixture

9. NaCl is the formula for which of the following?
 - a. Baking soda
 - b. Table salt
 - c. Water
 - d. sodium bicarbonate

10. One example of physical change is
 - a. Burning propane
 - b. Baking a cake
 - c. The rusting of iron
 - d. Mixing Kool-Aid

Part C: Determine whether the following are homogeneous or heterogeneous

1. _____ Raisins and cereal
2. _____ Vinegar
3. _____ Pure water
4. _____ Vegetable soup
5. _____ Granite

Part D: Properties

Determine whether the following are physical property or chemical property. Write “P” for physical property and “C” for chemical property

1. _____ Sharpening a pencil
2. _____ Flammability of a substance
3. _____ Color of an object
4. _____ Iron is magnetic
5. _____ Freezing point
6. _____ Reactive to light
7. _____ Explosive
8. _____ Density of wood

Part E: Change

Determine whether the following are physical change or chemical change. Write “P” for physical change and “C” for chemical change

1. _____ Fruit decaying
2. _____ dissolving of sugar
3. _____ crushing of rock
4. _____ magnesium added to acid (a gas is produced)
5. _____ tearing of paper
6. _____ burning of gasoline
7. _____ water boiling
8. _____ mud settling out of river water
9. _____ iron bolts rusting
10. _____ fermenting of grape juice

Part F: Elements, Compounds, and Mixtures

Determine whether the following are elements, compounds, or mixtures. Write “E” for elements, “C” for compounds, and “M” for mixtures.

1. _____ Sugar
2. _____ magnesium
3. _____ sugar water
4. _____ dirt
5. _____ mercury
6. _____ granite
7. _____ lead
8. _____ Concrete
9. _____ Milk
10. _____ Silver

Part G: Lab Questions: Complete each sentence or statement

1. When a nail rusts it _____ mass.
2. What happened when you mixed the Hydrochloric acid (HCl) and Zinc (Zn) together?

3. Did the Zinc have a physical or chemical change? _____
4. What was produced when the magnesium ribbon was placed in the flame? _____