

Pretest

Part A: Completion

Complete each sentence or statement

- Changes in state are examples of Physical changes.
- Mass is the measure of the total amount of Matter in any object.
(substance)
- What are the three principle states of matter?
 - solid
 - liquid
 - GAS
- Weight is a measure of the force of gravity pulling on a object.
- List four signs or indicators which may signal a chemical change:
 - color change
 - change in TEMP
 - Bubbles - GAS given off
 - Sound

light
Solid form
New smell
foaming
Rusting
Tarnish
- Matter in which all the atoms are alike? Element
- Each element is represented by a Chemical Symbol ?
- Each specific substance can be indentified by the combination of Elements it has.
- A mixture composed of different materials which are spread uneven is called a Hetergenous mixture?
- List 6 physical properties of matter:
 - state
 - size
 - color
 - Ductility
 - mass
 - Boiling pt
 - freezing Pt
 - magnetic
 - Density
 - Electric Conduct
 - Texture
 - Luster

Part B: Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- One example of chemical change is
 - Cutting up napkin
 - Crushing a car
 - Burning propane in an grill
 - Melting water
- Which of the following statements about the properties of matter is true?
 - The properties of all mixtures are the same
 - All kinds of matter have the same properties
 - Each specific substance can be identified by its properties
 - 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	c. Water
<input checked="" type="radio"/> b. Table salt	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. Heter Raisins and cereal
2. Homo Vinegar
3. Homo Pure water
4. Heter Vegetable soup
5. Heter 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. <u>P</u> Sharpening a pencil | 2. <u>C</u> Flammability of a substance |
| 3. <u>P</u> Color of an object | 4. <u>P</u> Iron is magnetic |
| 5. <u>P</u> Freezing point | 6. <u>C</u> Reactive to light |
| 7. <u>C</u> Explosive | 8. <u>P</u> 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

- C Fruit decaying
- P dissolving of sugar
- P crushing of rock
- C magnesium added to acid (a gas is produced)
- P tearing of paper
- C burning of gasoline
- P water boiling
- P mud settling out of river water
- C iron bolts rusting
- C 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.

- C Sugar
- E magnesium
- M sugar water
- M dirt
- E mercury
- M granite
- E lead
- M Concrete
- M Milk
- E Silver

Part G: Lab Questions: Complete each sentence or statement

- When a nail rusts it gains mass.
- What happened when you mixed the Hydrochloric acid (HCl) and Zinc (Zn) together?
Bubbles
- Did the Zinc have a physical or chemical change? Chemical
- What was produced when the magnesium ribbon was placed in the flame? light