

MATTER-Review

1. Classify the following substances as element, compound, homogenous mixture, heterogeneous mixture and not matter.

Pencil, water, air, time, wind, carbon dioxide, gold, sea water, heat, copper, bronze, soil, light, salt, silver, chalk, magnesium carbonate, glucose, vinegar, steel, heat.

Element:

Compound:

Homogenous mixture:

Heterogeneous mixture:

Not matter:

2. Fill the blanks.

- A. is anything that takes up space and has mass.
- B. The force applied on matter by gravity is
- C. The states of matter are the physical forms of matter which are,,, and
- D. In state atoms or molecules move freely in all directions.
- E. The change from solid into gas is called
- F. Sublimation is the state change from to
- G. are pure substances that contain only one kind of atom.
- H. An is one of the different molecular forms of an element.
- I. Elements are further classified as and
- J. Usually are good conductors of heat and electricity.
- K. Smallest unit of a compound is
- L. Solid mixtures are called
- M. Homogenous mixtures are also called

3. Determine the following changes whether they are physical or chemical.

- A. Melting of ice,
- B. Burning of coal,
- C. Formation of snow,
- D. Rusting of iron,
- E. Cutting of paper,
- F. Digestion of food,

4. Following properties of matter are given, classify them as physical or chemical.

Color, melting point, flammability, density, solubility, acidity, hardness, electrical conductivity, elasticity, rusting, smell.

Physical:

Chemical:

5. Describe the separation of sand-salt mixture step by step and explain which properties of matter are used.

6. Explain how magnet can be used in the separation of matter with an example.

7. Define the following substances as element, compound or mixture according to changes applied on them.

- A. Substance A dissolves in water and the solution conducts electricity.
- B. Substance B cannot be further decomposed into simpler substances.
- C. Substance C can be separated into two substances by distillation.
- D. Substance D burns and produces water and a gas.