

Matter, Chemical Properties, and Periodic Trends

Chemistry · Practice Test · 10 Questions

1. What is defined as anything that has mass and occupies space?

- A) Atom
- B) Matter
- C) Energy
- D) Compound

2. Which state of matter has a fixed volume but takes the shape of its container as particles slide past each other?

- A) Solid
- B) Gas
- C) Liquid
- D) Plasma

3. What is the direct transition of a substance from a gas to a solid without becoming a liquid?

- A) Sublimation
- B) Deposition
- C) Condensation
- D) Freezing

4. Salt water and air are examples of which type of mixture?

- A) Heterogeneous mixture
- B) Compound
- C) Homogeneous mixture (Solution)
- D) Element

5. What is a pure substance formed when two or more different elements are chemically combined in fixed ratios?

- A) Element
- B) Compound
- C) Solution
- D) Heterogeneous mixture

6. Which term describes how well light passes through a substance (clear, cloudy, or opaque)?

- A) Luster
- B) Texture
- C) Clarity
- D) Solubility

7. If an object has a mass of 6.00 g and a volume of 0.500 cm³, what is its density?

- A) 3.00 g/cm³
- B) 12.00 g/cm³
- C) 0.083 g/cm³
- D) 6.50 g/cm³

8. What property describes the ability of a metal to be stretched into long, thin wires?

- A) Malleability
- B) Brittleness
- C) Ductility
- D) Combustibility

9. Which of the following is considered a sign of a chemical change?

- A) Change in shape
- B) Precipitate formation
- C) Melting
- D) Dissolving in water

10. How did Dmitri Mendeleev arrange the elements in the first periodic table?

- A) In order of increasing atomic number
- B) In order of increasing atomic mass
- C) By alphabetical order
- D) By physical state at room temperature