

Comprehensive Introduction to Chemistry

Chemistry · Practice Test · 15 Questions

1. What is the smallest building block unit of matter?

- A) Molecule
- B) Atom
- C) Electron
- D) Element

2. Which state of matter has a fixed volume but takes the shape of its container?

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

3. What is the process called when a solid turns directly into a gas?

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

4. Which type of mixture has a completely uniform composition throughout?

- A) Heterogeneous
- B) Compound
- C) Element
- D) Homogeneous

5. What is the formula for calculating density?

- A) Mass / Volume
- B) Volume / Mass
- C) Mass * Volume
- D) Mass + Volume

6. Which physical property describes a metal's ability to be stretched into wires?

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

7. Which of the following is a chemical property?

- A) Texture
- B) Combustibility
- C) Density
- D) Clarity

8. What is a sign of a chemical change?

- A) Melting ice
- B) Crushing chalk
- C) Gas formation
- D) Dissolving sugar

9. The modern periodic table arranges elements by increasing what?

- A) Atomic mass
- B) Atomic number
- C) Density
- D) Boiling point

10. Which group of the periodic table is known for being unreactive due to full valence shells?

- A) Alkali Metals
- B) Halogens
- C) Noble Gases
- D) Transition Metals

11. Where are metalloids located on the periodic table?

- A) Far left
- B) Far right
- C) Along the staircase line
- D) Bottom section

12. What do the periods (horizontal rows) on the periodic table indicate?

- A) Valence electrons
- B) Electron shells
- C) Reactivity
- D) Atomic mass

13. Which element is essential for oxygen transport in hemoglobin?

- A) Carbon
- B) Iron
- C) Calcium
- D) Sodium

14. What happens to the atomic radius as you move down a group?

- A) It decreases
- B) It stays the same
- C) It increases
- D) It fluctuates

15. Which subatomic particles are found in the nucleus and have a positive charge?

- A) Protons
- B) Neutrons
- C) Electrons
- D) Ions