

Chemistry Essentials

Chemistry · Practice Test · 25 Questions

1. Which chemical element has the atomic number 1?

- A) Helium
- B) Hydrogen
- C) Oxygen
- D) Carbon

2. What is the chemical symbol for gold?

- A) Gd
- B) Au
- C) Ag
- D) Fe

3. Which state of matter has a definite volume but no definite shape?

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

4. What is the most abundant gas in Earth's atmosphere?

- A) Oxygen
- B) Nitrogen
- C) Carbon Dioxide
- D) Hydrogen

5. Which subatomic particle carries a negative electrical charge?

- A) Proton
- B) Neutron
- C) Electron
- D) Nucleus

6. What is the chemical formula for water?

- A) CO₂
- B) H₂O
- C) O₂
- D) NaCl

7. Which element is a diamond made of?

- A) Carbon
- B) Silicon
- C) Iron
- D) Gold

8. What is the pH level of pure water at 25 degrees Celsius?

- A) 0
- B) 7
- C) 10
- D) 14

9. Which metal is liquid at room temperature?

- A) Lead
- B) Mercury
- C) Iron
- D) Copper

10. What does the atomic number of an element represent?

- A) Number of neutrons
- B) Number of protons
- C) Atomic mass
- D) Number of electrons in the outer shell

11. Which gas do plants absorb from the atmosphere for photosynthesis?

- A) Oxygen
- B) Nitrogen
- C) Carbon Dioxide
- D) Helium

12. What is the common name for sodium chloride?

- A) Baking soda
- B) Table salt
- C) Sugar
- D) Vinegar

13. Which element is represented by the symbol 'O'?

- A) Osmium
- B) Oxygen
- C) Gold
- D) Neon

14. What type of bond involves the sharing of electron pairs between atoms?

- A) Ionic
- B) Covalent
- C) Metallic
- D) Hydrogen

15. Which substance is known as the 'universal solvent'?

- A) Alcohol
- B) Water
- C) Oil
- D) Vinegar

16. What is the center of an atom called?

- A) Shell
- B) Nucleus
- C) Orbital
- D) Ion

17. Which element is essential for human respiration and makes up about 21% of the atmosphere?

- A) Hydrogen
- B) Oxygen
- C) Nitrogen
- D) Argon

18. What color is copper sulfate pentahydrate typically?

- A) Red
- B) Blue
- C) Yellow
- D) White

19. Which gas is produced when vinegar reacts with baking soda?

- A) Oxygen
- B) Carbon dioxide
- C) Nitrogen
- D) Methane

20. What is the lightest element in the periodic table?

- A) Helium
- B) Hydrogen
- C) Lithium
- D) Oxygen

21. Which noble gas is commonly used in lighting signs to create a red-orange glow?

- A) Helium
- B) Neon
- C) Argon
- D) Xenon

22. What is the main component of natural gas?

- A) Ethane
- B) Methane
- C) Propane
- D) Butane

23. Which particle is found in the nucleus of an atom and has no electrical charge?

- A) Proton
- B) Electron
- C) Neutron
- D) Ion

24. What is the process of a liquid turning into a gas called?

- A) Freezing
- B) Condensation
- C) Evaporation
- D) Melting

25. Which element is abbreviated as 'Fe'?

- A) Fluorine
- B) Francium
- C) Iron
- D) Fermium