

Chemistry Essentials

Chemistry · Answer Key · 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