

Physical Science Fundamentals

Physical Science · Practice Test · 25 Questions

1. Which subatomic particle carries a negative electrical charge?

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

2. What is the unit of measurement for electrical resistance?

- A) Volt
- B) Ampere
- C) Ohm
- D) Watt

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

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

4. What is the chemical symbol for the element Gold?

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

5. Which law states that for every action, there is an equal and opposite reaction?

- A) Newton's First Law
- B) Newton's Second Law
- C) Newton's Third Law
- D) Hooke's Law

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

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

7. In the periodic table, what do elements in the same group share?

- A) Same number of protons
- B) Same number of valence electrons
- C) Same atomic mass
- D) Same number of energy levels

8. What is the process of a gas turning directly into a solid called?

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

9. Which form of electromagnetic radiation has the longest wavelength?

- A) X-rays
- B) Visible light
- C) Radio waves
- D) Gamma rays

10. What is the pH level of a neutral solution at 25 degrees Celsius?

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

11. Which quantity is defined as the rate of change of velocity?

- A) Speed
- B) Displacement
- C) Acceleration
- D) Momentum

12. What is the main component of the Earth's atmosphere by volume?

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

13. Which color of visible light has the highest frequency?

- A) Red
- B) Green
- C) Yellow
- D) Violet

14. What force opposes the motion of two surfaces in contact?

- A) Gravity
- B) Tension
- C) Friction
- D) Inertia

15. Which particle is located in the nucleus of an atom and has no charge?

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

16. What is the SI unit of power?

- A) Joule
- B) Watt
- C) Newton
- D) Pascal

17. Which scientist is credited with the discovery of the law of universal gravitation?

- A) Albert Einstein
- B) Nikola Tesla
- C) Isaac Newton
- D) Galileo Galilei

18. What is the term for a substance that cannot be broken down into simpler substances by chemical means?

- A) Compound
- B) Mixture
- C) Element
- D) Molecule

19. Which of these is a noble gas?

- A) Oxygen
- B) Neon
- C) Nitrogen
- D) Chlorine

20. What is the measurement of the total kinetic energy of particles in an object?

- A) Temperature
- B) Heat
- C) Density
- D) Pressure

21. Which device is used to measure electric current?

- A) Voltmeter
- B) Ammeter
- C) Ohmmeter
- D) Galvanometer

22. What is the most abundant metal in the Earth's crust?

- A) Iron
- B) Aluminum
- C) Copper
- D) Gold

23. Which principle explains why an object floats or sinks in a fluid?

- A) Bernoulli's Principle
- B) Archimedes' Principle
- C) Pascal's Law
- D) Boyle's Law

24. What is the process where atomic nuclei combine to form a heavier nucleus?

- A) Nuclear fission
- B) Nuclear fusion
- C) Radioactive decay
- D) Chemical synthesis

25. Which property of a wave is measured in Hertz?

- A) Amplitude
- B) Wavelength
- C) Frequency
- D) Velocity