

Physical Science Essentials

Physical Science · Answer Key · 15 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 is defined by having a definite volume but no definite shape?

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

4. What is the process called when a substance changes directly from a solid to a gas?

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

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) Archimedes' Principle

6. What is the primary gas that makes up the majority of Earth's atmosphere?

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

7. In chemistry, what does the pH scale measure?

- A) Temperature of a solution
- B) Acidity or alkalinity**
- C) Density of a liquid
- D) Electrical conductivity

8. Which type of electromagnetic radiation has the longest wavelength?

- A) Radio waves**
- B) X-rays
- C) Ultraviolet
- D) Gamma rays

9. What is the term for the energy an object possesses due to its motion?

- A) Potential energy
- B) Thermal energy
- C) Kinetic energy**
- D) Chemical energy

10. Which element is the primary component of organic compounds?

- A) Oxygen
- B) Nitrogen
- C) Carbon**
- D) Iron

11. What is the speed of light in a vacuum approximately?

- A) 300,000 km/s**
- B) 150,000 km/s
- C) 1,000,000 km/s
- D) 3,000 km/s

12. Which force opposes the motion of two surfaces sliding past one another?

- A) Gravity
- B) Magnetism
- C) Friction**
- D) Inertia

13. What process involves the splitting of an atomic nucleus into two or more smaller nuclei?

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

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

A) Gd

B) Au

C) Ag

D) Fe

15. Which scale is the SI base unit for temperature?

A) Celsius

B) Fahrenheit

C) Kelvin

D) Rankine