

Fundamental Scientific Principles

Basic Science · Practice Test · 8 Questions

1. Which fundamental force is responsible for holding the nucleus of an atom together, overcoming the electrostatic repulsion between protons?

- A) Gravitational Force
- B) Electromagnetic Force
- C) Weak Nuclear Force
- D) Strong Nuclear Force

2. The process by which plants convert light energy into chemical energy in the form of glucose is known as:

- A) Respiration
- B) Transpiration
- C) Photosynthesis
- D) Fermentation

3. What is the chemical symbol for gold, a noble metal renowned for its historical and economic significance?

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

4. According to Newton's Third Law of Motion, for every action, there is an equal and opposite:

- A) Inertia
- B) Momentum
- C) Reaction
- D) Acceleration

5. The unit of electrical resistance, named after a German physicist, is called the:

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

6. Which planet in our solar system is known for its prominent ring system, composed primarily of ice particles?

- A) Jupiter
- B) Saturn
- C) Uranus
- D) Neptune

7. The primary gas that makes up Earth's atmosphere, essential for respiration, is:

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

8. What is the process by which a solid changes directly into a gas without passing through the liquid phase?

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