

Fundamental Physics Concepts

Physics · Answer Key · 10 Questions

1. What is the SI unit of force?

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

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

- A) First Law
- B) Second Law
- C) Third Law**
- D) Law of Conservation of Energy

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

- A) 3×10^8 meters per second**
- B) 1.5×10^8 meters per second
- C) 3×10^5 meters per second
- D) 1.5×10^5 meters per second

4. What fundamental force is responsible for holding atoms together?

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

5. Energy cannot be created or destroyed, only transformed from one form to another. This is known as the:

- A) Principle of Relativity
- B) Law of Thermodynamics**
- C) Law of Conservation of Mass
- D) Uncertainty Principle

6. What is the SI unit of electric current?

- A) Volt
- B) Ohm
- C) Ampere**
- D) Coulomb

7. Which type of energy is associated with the motion of an object?

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

8. What is the term for the rate at which work is done or energy is transferred?

- A) Momentum
- B) Torque
- C) Frequency
- D) Power**

9. The phenomenon where light bends as it passes from one medium to another is called:

- A) Reflection
- B) Diffraction
- C) Refraction**
- D) Interference

10. What is the SI unit of mass?

- A) Gram
- B) Pound
- C) Kilogram**
- D) Ounce