

Milestones in Advanced Physics

History Of Physics · Answer Key · 20 Questions

1. Who is credited with formulating the laws of motion and universal gravitation?

A) Isaac Newton

B) Albert Einstein

C) Niels Bohr

D) Max Planck

2. In which year did Albert Einstein publish his theory of special relativity?

A) 1900

B) 1905

C) 1915

D) 1925

3. Which scientist discovered the electron in 1897?

A) Ernest Rutherford

B) J.J. Thomson

C) James Chadwick

D) Enrico Fermi

4. Who received the Nobel Prize in Physics for explaining the photoelectric effect?

A) Werner Heisenberg

B) Erwin Schrödinger

C) Albert Einstein

D) Richard Feynman

5. Marie Curie was the first person to win Nobel Prizes in two different scientific fields: Physics and what else?

A) Biology

B) Mathematics

C) Chemistry

D) Medicine

6. What subatomic particle did James Chadwick discover in 1932?

A) Proton

B) Electron

C) Neutron

D) Positron

7. Who developed the planetary model of the atom in 1913?

A) Niels Bohr

B) John Dalton

C) Louis de Broglie

D) Wolfgang Pauli

8. Which physicist is known for the famous uncertainty principle?

A) Max Born

B) Werner Heisenberg

C) Paul Dirac

D) Enrico Fermi

9. Who was the first woman to be awarded a Nobel Prize in Physics?

A) Rosalind Franklin

B) Lise Meitner

C) Marie Curie

D) Ada Lovelace

10. The Manhattan Project, which produced the first nuclear weapons, was led by which physicist?

A) Robert Oppenheimer

B) Leo Szilard

C) Edward Teller

D) Hans Bethe

11. Which scientist is famous for his work on the development of the quantum theory of light?

A) Max Planck

B) Lord Kelvin

C) Michael Faraday

D) James Clerk Maxwell

12. Who proposed the existence of antimatter in 1928?

A) Paul Dirac

B) Richard Feynman

C) Murray Gell-Mann

D) Steven Weinberg

13. What is the name of the constant represented by the letter 'h' in quantum mechanics?

- A) Hubble constant
- B) Planck constant**
- C) Boltzmann constant
- D) Avogadro constant

14. Which experimental apparatus was used to demonstrate the existence of the ether wind, but failed to do so?

- A) Stern-Gerlach apparatus
- B) Michelson-Morley interferometer**
- C) Cloud chamber
- D) Geiger counter

15. Who coined the term 'radioactivity'?

- A) Henri Becquerel
- B) Marie Curie**
- C) Pierre Curie
- D) Ernest Rutherford

16. In 1935, which physicist proposed a thought experiment involving a cat in a box?

- A) Erwin Schrödinger**
- B) Niels Bohr
- C) Max Born
- D) Wolfgang Pauli

17. Which particle accelerator project in Switzerland is the world's largest?

- A) Fermilab
- B) CERN**
- C) DESY
- D) SLAC

18. Who discovered X-rays in 1895?

- A) Wilhelm Röntgen**
- B) Henri Becquerel
- C) J.J. Thomson
- D) Nikola Tesla

19. Which physicist formulated the equations describing the behavior of electromagnetic fields?

A) James Clerk Maxwell

B) Andre-Marie Ampere

C) Michael Faraday

D) Alessandro Volta

20. Who was the primary developer of the matrix mechanics formulation of quantum mechanics?

A) Werner Heisenberg

B) Erwin Schrödinger

C) Louis de Broglie

D) Niels Bohr