

History of Electromagnetism

Physics History · Answer Key · 8 Questions

1. Which scientist is famously associated with the 1752 kite experiment involving lightning and electricity?

- A) Benjamin Franklin**
- B) Nikola Tesla
- C) Thomas Edison
- D) Michael Faraday

2. Who discovered that an electric current creates a magnetic field by observing a compass needle deflect near a wire?

- A) Hans Christian Oersted**
- B) James Clerk Maxwell
- C) Alessandro Volta
- D) Andre-Marie Ampere

3. What device, invented by Alessandro Volta in 1800, is considered the first true battery?

- A) Leyden jar
- B) Voltaic pile**
- C) Cathode ray tube
- D) Galvanometer

4. Which scientist formulated the set of equations that mathematically describe how electric and magnetic fields interact?

- A) James Clerk Maxwell**
- B) Isaac Newton
- C) Galileo Galilei
- D) Albert Einstein

5. Michael Faraday is credited with the invention of which device that converts mechanical energy into electricity?

- A) Electric motor
- B) Electric generator**
- C) Resistor
- D) Transistor

6. In 1820, who formulated the mathematical law describing the magnetic force between two electric currents?

A) Andre-Marie Ampere

B) Charles-Augustin de Coulomb

C) Heinrich Hertz

D) Georg Ohm

7. What unit of electrical resistance is named after the German physicist who defined the relationship between voltage and current?

A) Volt

B) Ampere

C) Ohm

D) Watt

8. Heinrich Hertz provided the first experimental proof of the existence of what phenomenon predicted by Maxwell's equations?

A) Electromagnetic waves

B) Gravity

C) Atomic fission

D) Dark matter