

# Advanced Physical Science Knowledge Assessment

Physical Science · Answer Key · 10 Questions

---

**1. In what year did Albert Einstein publish his groundbreaking paper on the photoelectric effect, for which he was later awarded the Nobel Prize in Physics?**

- A) 1900
- B) 1905**
- C) 1915
- D) 1920

**2. The first successful artificial satellite, Sputnik 1, was launched by the Soviet Union on October 4th of which year?**

- A) 1955
- B) 1956
- C) 1957**
- D) 1958

**3. What is the atomic number of the element discovered by Marie Curie and Pierre Curie in 1898, named polonium?**

- A) 82
- B) 84**
- C) 86
- D) 88

**4. On July 20, 1969, Neil Armstrong became the first human to walk on the Moon. What was the name of the spacecraft that carried the Apollo 11 mission?**

- A) Columbia
- B) Eagle**
- C) Challenger
- D) Discovery

**5. The constant speed of light in a vacuum, denoted by 'c', is precisely 299,792,458 meters per second. This value was officially defined in what year?**

- A) 1975
- B) 1983**
- C) 1990
- D) 2000

**6. Henri Becquerel discovered radioactivity in 1896. What specific radioactive element did he initially use in his experiments that led to this discovery?**

- A) Thorium
- B) Uranium**
- C) Radium
- D) Polonium

**7. The fundamental SI unit of electric current is the Ampere, named after André-Marie Ampère. What is the standard symbol for the Ampere?**

- A) Ohm
- B) Volt
- C) Amp
- D) A**

**8. In which year did James Clerk Maxwell publish his theory of electromagnetism, unifying electricity, magnetism, and light?**

- A) 1856
- B) 1865
- C) 1873**
- D) 1880

**9. The first successful controlled nuclear fission chain reaction was achieved by Enrico Fermi and his team at the University of Chicago on December 2, of which year?**

- A) 1938
- B) 1939
- C) 1941
- D) 1942**

**10. What is the approximate half-life of Carbon-14 ( $^{14}\text{C}$ ), a widely used isotope for radiometric dating?**

- A) 5,730 years**
- B) 12,000 years
- C) 57,300 years
- D) 100,000 years