

Historical Milestones in Chemistry

Chemistry · Answer Key · 8 Questions

1. In 1869, which scientist published the first version of the periodic table, famously leaving gaps for elements that had not yet been discovered, such as gallium and germanium?

A) Dmitri Mendeleev

- B) Lothar Meyer
- C) John Newlands
- D) Henry Moseley

2. Who was the first person to isolate the element fluorine in its gaseous state in 1886, a feat that had previously led to the death or injury of several researchers?

A) Humphry Davy

B) Henri Moissan

- C) Carl Wilhelm Scheele
- D) Joseph Louis Gay-Lussac

3. The 'phlogiston theory,' a discredited scientific theory that proposed a fire-like element was contained within combustible bodies, was definitively debunked by which chemist's work on oxygen?

- A) Robert Boyle
- B) John Dalton

C) Antoine Lavoisier

D) Jöns Jacob Berzelius

4. Which female scientist was the first person to win Nobel Prizes in two different scientific fields, specifically Physics (1903) and Chemistry (1911)?

- A) Dorothy Hodgkin
- B) Irène Joliot-Curie
- C) Lise Meitner

D) Marie Curie

5. In 1828, Friedrich Wöhler famously synthesized urea from inorganic starting materials, effectively shattering which long-held chemical doctrine?

A) Vitalism

- B) The Law of Definite Proportions
- C) The Law of Conservation of Mass
- D) Atomic Theory

6. Ernest Rutherford's 1909 gold foil experiment led to the discovery of which fundamental structure of the atom?

- A) The electron cloud
- B) The atomic nucleus**
- C) The neutron
- D) The valence shell

7. Which scientist is credited with the discovery of 'heavy water' (deuterium oxide) in 1931, for which he was awarded the Nobel Prize in Chemistry in 1934?

- A) Harold Urey**
- B) Gilbert N. Lewis
- C) Frederick Soddy
- D) William Ramsay

8. Before the modern symbol system was adopted, which chemist proposed the use of letters to represent elements (e.g., O for Oxygen, C for Carbon) in the early 19th century?

- A) Amedeo Avogadro
- B) Jöns Jacob Berzelius**
- C) Stanislao Cannizzaro
- D) John Dalton