

Historical Milestones in Chemistry

Chemistry · Answer Key · 18 Questions

1. Which scientist is credited with the discovery of oxygen in 1774?

- A) Joseph Priestley**
- B) Antoine Lavoisier
- C) John Dalton
- D) Dmitri Mendeleev

2. In what year did Dmitri Mendeleev publish his first version of the Periodic Table of Elements?

- A) 1859
- B) 1869**
- C) 1879
- D) 1889

3. Which chemical element was discovered by Marie and Pierre Curie in 1898?

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

4. Who proposed the law of definite proportions, stating that chemical compounds always contain the same elements in the same mass proportions?

- A) Robert Boyle
- B) Joseph Proust**
- C) Amedeo Avogadro
- D) Henry Cavendish

5. What substance did Humphry Davy isolate in 1807 using electrolysis, marking the first time it was obtained in its metallic form?

- A) Sodium**
- B) Calcium
- C) Magnesium
- D) Aluminum

6. Which scientist is known for developing the theory of atomic structure, specifically the 'plum pudding' model?

- A) Niels Bohr
- B) Ernest Rutherford
- C) J.J. Thomson**
- D) James Chadwick

7. The Haber-Bosch process, developed in the early 20th century, revolutionized the production of which essential chemical compound?

- A) Sulfuric acid
- B) Ammonia**
- C) Sodium chloride
- D) Ethanol

8. Who coined the term 'radioactivity' to describe the phenomenon observed in uranium salts?

- A) Henri Becquerel
- B) Marie Curie**
- C) Wilhelm Röntgen
- D) Ernest Lawrence

9. In 1828, which chemist demonstrated that urea, an organic compound, could be synthesized from inorganic materials?

- A) Friedrich Wöhler**
- B) August Kekulé
- C) Jacob Berzelius
- D) Louis Pasteur

10. What gas did Henry Cavendish identify as 'inflammable air' in 1766, later named by Lavoisier?

- A) Nitrogen
- B) Oxygen
- C) Hydrogen**
- D) Helium

11. Which English chemist formulated the Law of Octaves in 1864, observing periodic patterns in elements?

- A) John Newlands**
- B) William Ramsay
- C) Henry Moseley
- D) Glenn Seaborg

12. The 1953 discovery of the double-helix structure of DNA involved chemical analysis performed by which researcher?

- A) Rosalind Franklin**
- B) Linus Pauling
- C) Francis Crick
- D) James Watson

13. Which element, discovered in 1894 by Lord Rayleigh and William Ramsay, was the first noble gas to be identified?

- A) Neon
- B) Krypton
- C) Argon**
- D) Xenon

14. Who developed the pH scale in 1909 while working at the Carlsberg Laboratory in Copenhagen?

- A) Søren Sørensen**
- B) Svante Arrhenius
- C) Gilbert Lewis
- D) Walther Nernst

15. Which element was identified by spectral analysis during a solar eclipse in 1868 before it was found on Earth?

- A) Gallium
- B) Helium**
- C) Indium
- D) Thallium

16. What significant chemical discovery did Robert Bunsen and Gustav Kirchhoff pioneer in 1859?

- A) Electrolysis
- B) Radio-carbon dating
- C) Spectroscopy**
- D) Chromatography

17. Which scientist proved the existence of the neutron in 1932?

- A) James Chadwick**
- B) Werner Heisenberg
- C) Enrico Fermi
- D) Wolfgang Pauli

18. Who was the first woman to win a Nobel Prize in Chemistry for the discovery of the elements radium and polonium?

- A) Irene Joliot-Curie
- B) Dorothy Hodgkin
- C) Marie Curie**
- D) Gerty Cori