

# Historical Milestones in Organic Chemistry

Organic Chemistry · Answer Key · 12 Questions

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**1. Which German chemist is famously credited with synthesizing urea from inorganic materials in 1828, effectively challenging the theory of vitalism?**

**A) Friedrich Wöhler**

B) August Kekulé

C) Justus von Liebig

D) Dmitri Mendeleev

**2. In 1865, which scientist proposed the cyclic hexagonal structure of benzene after allegedly dreaming of a snake biting its own tail?**

A) Louis Pasteur

**B) August Kekulé**

C) Emil Fischer

D) Linus Pauling

**3. Who is known as the father of modern organic chemistry for his work in the 19th century, particularly regarding the development of the structural theory of organic compounds?**

A) Robert Boyle

B) Antoine Lavoisier

**C) August Kekulé**

D) Alfred Nobel

**4. Which English chemist discovered the first synthetic organic dye, 'mauveine', by accident in 1856?**

**A) William Henry Perkin**

B) Michael Faraday

C) John Dalton

D) Ernest Rutherford

**5. What was the first mass-produced synthetic drug, marketed by Bayer in 1899, which revolutionized the treatment of pain and inflammation?**

A) Penicillin

**B) Aspirin**

C) Morphine

D) Sulfanilamide

**6. Which scientist is credited with developing the 'lock and key' model in 1894 to explain the specificity of enzyme-substrate interactions?**

- A) Emil Fischer**
- B) Gregor Mendel
- C) Marie Curie
- D) Thomas Edison

**7. The 1828 synthesis of urea disproved the long-held scientific belief in which concept?**

- A) Atomic theory
- B) Vitalism**
- C) Thermodynamics
- D) Evolution

**8. In the history of organic chemistry, what did the 1856 synthesis of mauveine by William Henry Perkin launch?**

- A) The plastics industry
- B) The synthetic dye industry**
- C) The petroleum industry
- D) The fertilizer industry

**9. Which chemist was the first to use the term 'organic chemistry' to describe the study of compounds derived from living organisms?**

- A) Jöns Jacob Berzelius**
- B) Isaac Newton
- C) Carl Wilhelm Scheele
- D) Joseph Priestley

**10. Which major breakthrough in 1902 allowed chemists to understand the structure of proteins through the identification of peptide bonds?**

- A) The invention of the microscope
- B) The work of Emil Fischer**
- C) The discovery of DNA
- D) The development of chromatography

**11. Which compound was isolated from willow bark and later served as the basis for the development of modern aspirin?**

- A) Salicin**
- B) Caffeine
- C) Nicotine
- D) Quinine

**12. What century is widely considered the era in which organic chemistry emerged as a distinct scientific discipline separate from inorganic chemistry?**

- A) 17th century
- B) 18th century
- C) 19th century**
- D) 20th century