

# Milestones in Biological Science

Advanced Biology · Answer Key · 8 Questions

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**1. Which scientist is credited with the 1865 publication of 'Experiments on Plant Hybridization', laying the foundation for modern genetics?**

- A) Gregor Mendel**
- B) Charles Darwin
- C) Thomas Hunt Morgan
- D) Hugo de Vries

**2. In 1953, who utilized X-ray diffraction images to help determine the double helix structure of DNA?**

- A) Barbara McClintock
- B) Rosalind Franklin**
- C) Erwin Chargaff
- D) Alfred Hershey

**3. What 1928 experiment by Frederick Griffith demonstrated the phenomenon of bacterial transformation?**

- A) The Meselson-Stahl experiment
- B) The Hershey-Chase experiment
- C) The Streptococcus pneumoniae experiment**
- D) The Miller-Urey experiment

**4. Which biologist coined the term 'cell' in his 1665 publication 'Micrographia' after observing cork tissue?**

- A) Anton van Leeuwenhoek
- B) Theodor Schwann
- C) Robert Hooke**
- D) Matthias Schleiden

**5. In 1977, which team developed the chain-termination method for DNA sequencing, revolutionizing molecular biology?**

- A) Frederick Sanger et al.**
- B) James Watson and Francis Crick
- C) Kary Mullis
- D) Francis Collins

**6. Who proposed the theory of 'endosymbiosis' in 1967 to explain the origin of eukaryotic organelles?**

**A) Lynn Margulis**

B) Carl Woese

C) George Gamow

D) Stanley Miller

**7. What is the name of the 1952 experiment that proved DNA, not protein, is the genetic material of bacteriophages?**

A) The Avery-MacLeod-McCarty experiment

**B) The Hershey-Chase experiment**

C) The Beadle-Tatum experiment

D) The Luria-Delbrück experiment

**8. Which scientist discovered the existence of 'jumping genes' or transposons while studying maize in the 1940s?**

**A) Barbara McClintock**

B) Ronald Fisher

C) Sewall Wright

D) August Weismann