

Milestones in Biological Science

Advanced Biology · Practice Test · 8 Questions

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