

# Historical Milestones in Life Science

Life Science History · Answer Key · 20 Questions

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**1. In what year did James Watson and Francis Crick publish their discovery of the double helix structure of DNA?**

- A) 1953**
- B) 1948
- C) 1960
- D) 1945

**2. Who is credited with first observing microorganisms, which he called 'animalcules', using a single-lens microscope?**

- A) Louis Pasteur
- B) Antonie van Leeuwenhoek**
- C) Robert Hooke
- D) Gregor Mendel

**3. Which scientist is known as the father of modern genetics for his experiments with pea plants?**

- A) Charles Darwin
- B) Thomas Hunt Morgan
- C) Gregor Mendel**
- D) Alfred Hershey

**4. In 1928, Alexander Fleming discovered the antibacterial properties of which substance?**

- A) Streptomycin
- B) Penicillin**
- C) Aspirin
- D) Insulin

**5. What was the name of the first mammal to be successfully cloned from an adult somatic cell in 1996?**

- A) Dolly the sheep**
- B) Snuppy the dog
- C) CC the cat
- D) Prometea the horse

**6. Which landmark expedition did Charles Darwin join in 1831, which provided the observations for his theory of evolution?**

- A) The voyage of the Endeavour
- B) The voyage of the HMS Beagle**
- C) The Challenger expedition
- D) The Discovery expedition

**7. Which scientist proposed the 'germ theory of disease' and developed the process of pasteurization?**

- A) Joseph Lister
- B) Robert Koch
- C) Louis Pasteur**
- D) Edward Jenner

**8. In 1665, who coined the term 'cell' while observing cork tissue under a microscope?**

- A) Robert Hooke**
- B) Zacharias Janssen
- C) Matthias Schleiden
- D) Theodor Schwann

**9. Which woman's X-ray diffraction images of DNA were critical to identifying its double-helix structure?**

- A) Barbara McClintock
- B) Rosalind Franklin**
- C) Marie Curie
- D) Elizabeth Blackburn

**10. What major biological theory did Matthias Schleiden and Theodor Schwann formulate in the 1830s?**

- A) Evolutionary theory
- B) Germ theory
- C) Cell theory**
- D) Gene theory

**11. Which explorer and naturalist is credited with independently conceiving the theory of evolution by natural selection alongside Darwin?**

- A) Alfred Russel Wallace**
- B) Jean-Baptiste Lamarck
- C) Thomas Malthus
- D) Carl Linnaeus

12. In 1735, who published 'Systema Naturae', establishing the modern system of binomial nomenclature?

- A) Georges Cuvier
- B) Carl Linnaeus**
- C) Ernst Haeckel
- D) John Ray

13. Who developed the smallpox vaccine in 1796, which is widely considered the first successful vaccine?

- A) Louis Pasteur
- B) Edward Jenner**
- C) Jonas Salk
- D) Robert Koch

14. The Human Genome Project, an international research effort to sequence the human genome, was officially completed in which year?

- A) 1995
- B) 2003**
- C) 2010
- D) 1999

15. What did Barbara McClintock discover in the 1940s, which earned her a Nobel Prize decades later?

- A) DNA sequencing
- B) Mobile genetic elements (transposons)**
- C) The structure of proteins
- D) CRISPR technology

16. In 1952, the Hershey-Chase experiment confirmed that which molecule carries genetic information?

- A) Protein
- B) DNA**
- C) RNA
- D) Lipids

17. Who discovered the process of 'transformation' in bacteria in 1928, proving genetic material could be transferred?

- A) Frederick Griffith**
- B) Oswald Avery
- C) Joshua Lederberg
- D) Francis Crick

**18. Which chemical was the first to be identified as an 'antibiotic' by Selman Waksman, who also coined the term?**

- A) Penicillin
- B) Streptomycin**
- C) Tetracycline
- D) Erythromycin

**19. What year did the World Health Organization declare that smallpox had been eradicated?**

- A) 1970
- B) 1980**
- C) 1990
- D) 1965

**20. Which scientist demonstrated in 1861 that spontaneous generation of microorganisms did not occur by using S-shaped flasks?**

- A) Louis Pasteur**
- B) John Tyndall
- C) Lazzaro Spallanzani
- D) Francesco Redi