

Microbiology Essentials: Facts and Figures

Microbiology · Practice Test · 20 Questions

1. In what year did Antonie van Leeuwenhoek first report his observations of 'animalcules' to the Royal Society?

- A) 1676
- B) 1776
- C) 1876
- D) 1576

2. How many microns (micrometers) are typically contained in one millimeter?

- A) 10
- B) 100
- C) 1,000
- D) 10,000

3. Louis Pasteur developed the first vaccine for rabies in which year?

- A) 1885
- B) 1855
- C) 1905
- D) 1825

4. Robert Koch received the Nobel Prize in Physiology or Medicine in 1905 for his work on which disease?

- A) Malaria
- B) Tuberculosis
- C) Cholera
- D) Anthrax

5. Alexander Fleming discovered penicillin in a London laboratory in which year?

- A) 1918
- B) 1928
- C) 1938
- D) 1948

6. Approximately what percentage of the atmosphere is composed of nitrogen, which nitrogen-fixing bacteria help process?

- A) 28%
- B) 78%
- C) 50%
- D) 10%

7. The Gram stain procedure was developed by Hans Christian Gram in which decade?

- A) 1850s
- B) 1860s
- C) 1870s
- D) 1880s

8. How many domains of life are recognized in the system proposed by Carl Woese in 1990?

- A) 2
- B) 3
- C) 4
- D) 5

9. Dmitri Ivanovsky is credited with discovering the first virus (Tobacco Mosaic Virus) in which year?

- A) 1892
- B) 1912
- C) 1872
- D) 1922

10. What is the approximate number of bacterial cells estimated to inhabit the human microbiome?

- A) Trillions
- B) Billions
- C) Millions
- D) Thousands

11. In 1952, which scientists confirmed that DNA is the genetic material of bacteriophages?

- A) Hershey and Chase
- B) Watson and Crick
- C) Franklin and Wilkins
- D) Darwin and Wallace

12. Joseph Lister introduced the use of carbolic acid as an antiseptic in surgery during which year?

- A) 1867
- B) 1887
- C) 1857
- D) 1897

13. The first human case of the H5N1 avian influenza virus was identified in which year?

- A) 1997
- B) 1987
- C) 2007
- D) 2017

14. How many micrometers wide is a typical E. coli bacterium?

- A) 1-2
- B) 5-10
- C) 15-20
- D) 50-100

15. Edward Jenner successfully tested the first smallpox vaccine in which year?

- A) 1796
- B) 1896
- C) 1696
- D) 1756

16. Approximately how many species of bacteria have been formally named according to the LPSN database?

- A) Over 20,000
- B) Under 1,000
- C) Exactly 5,000
- D) Over 1,000,000

17. The process of pasteurization involves heating liquids to a temperature of about 63°C for how many minutes?

- A) 30
- B) 10
- C) 5
- D) 60

18. How many subunits comprise the 70S ribosome found in prokaryotes?

- A) 2
- B) 3
- C) 4
- D) 5

19. In 1977, Carl Woese used which specific molecule to define the Archaea domain?

- A) 16S rRNA
- B) DNA polymerase
- C) Mitochondrial DNA
- D) ATP

20. How many micrometers are typically in the length of a human red blood cell?

- A) 7-8
- B) 1-2
- C) 20-30
- D) 50-60