

Microbiology Essentials for Students

Microbiology · Answer Key · 25 Questions

1. Which tool is primarily used by scientists to view microorganisms that are too small for the human eye to see?

- A) Telescope
- B) Microscope**
- C) Magnifying glass
- D) Periscope

2. Which type of microorganism is used in the process of making bread rise?

- A) Bacteria
- B) Virus
- C) Yeast**
- D) Algae

3. Bacteria are classified as which of the following?

- A) Single-celled organisms**
- B) Multi-celled animals
- C) Plants
- D) Fungi

4. What is the main purpose of a vaccine?

- A) To clean surfaces
- B) To help the body recognize and fight specific pathogens**
- C) To grow more bacteria
- D) To make viruses stronger

5. Which of the following is considered a beneficial function of bacteria in the human body?

- A) Causing colds
- B) Aiding in digestion**
- C) Creating oxygen
- D) Making skin color

6. Which kingdom do mushrooms belong to?

- A) Bacteria
- B) Protista
- C) Fungi**
- D) Animalia

7. What substance do plants, including some microscopic algae, produce as a byproduct of photosynthesis?

A) Carbon dioxide

B) Oxygen

C) Methane

D) Nitrogen

8. Antibiotics are medicines specifically designed to kill or inhibit the growth of what?

A) Viruses

B) Bacteria

C) Fungi

D) Parasites

9. Where are microorganisms found in the environment?

A) Only in laboratories

B) Only in the ocean

C) Almost everywhere on Earth

D) Only in the human body

10. Which of these is a microscopic organism that lives in water and can perform photosynthesis?

A) Algae

B) Protozoa

C) Virus

D) Bacteria

11. What is the term for microorganisms that cause disease?

A) Antibiotics

B) Probiotics

C) Pathogens

D) Enzymes

12. Which of these is NOT a microorganism?

A) Virus

B) Bacterium

C) Mushroom

D) Protozoan

13. Mold belongs to which group of organisms?

- A) Bacteria
- B) Fungi**
- C) Viruses
- D) Archaea

14. What is the primary way that viruses reproduce?

- A) By splitting in half
- B) By infecting a host cell and using its machinery**
- C) By absorbing sunlight
- D) By eating other bacteria

15. Which organ in the human body contains a large community of beneficial bacteria that help us stay healthy?

- A) Heart
- B) Lungs
- C) Intestines**
- D) Kidneys

16. What do we call a scientist who studies microorganisms?

- A) Geologist
- B) Microbiologist**
- C) Astronomer
- D) Botanist

17. Which structure do some bacteria use to help them move?

- A) Cilia
- B) Flagella**
- C) Roots
- D) Wings

18. Which of the following is a way to prevent the spread of harmful bacteria?

- A) Washing hands with soap**
- B) Touching eyes
- C) Sharing food
- D) Sneezing without covering

19. What is the jelly-like substance inside a cell called?

- A) Cytoplasm**
- B) Nucleus
- C) Wall
- D) Membrane

20. Why are some bacteria considered 'decomposers'?

- A) They create new soil
- B) They break down dead plant and animal matter**
- C) They eat plastic
- D) They grow only in the sun

21. Which is the smallest type of microorganism?

- A) Bacteria
- B) Yeast
- C) Virus**
- D) Protozoa

22. What is the role of the cell wall in bacteria?

- A) To store water
- B) To provide structural support and protection**
- C) To help the bacteria see
- D) To digest food

23. Which of these is a product made using fermentation by bacteria?

- A) Yogurt**
- B) Orange juice
- C) Bread
- D) Bottled water

24. How do viruses differ from bacteria?

- A) Viruses are larger
- B) Viruses are not considered living cells**
- C) Viruses only live in soil
- D) Viruses are plants

25. What gas do yeast cells release that makes dough rise?

- A) Oxygen
- B) Carbon dioxide**
- C) Nitrogen
- D) Helium