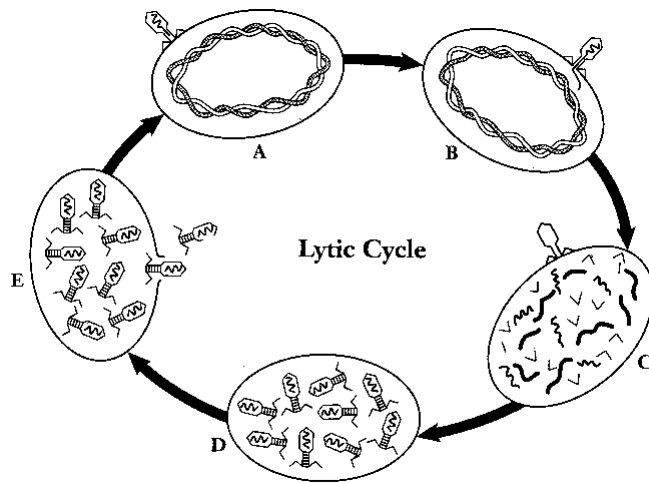


## Bio.10-Q2W4-H.W.-Bacteria and Viruses

### Completion

Complete each statement.



**Figure 18-1**

1. The virus attaching to a host cell is shown in stage \_\_\_\_\_ of Figure 18-1.
2. Virus injecting its nucleic acid into the host cell is shown in stage \_\_\_\_\_ of Figure 18-1.
3. New virus particles are assembled in stage \_\_\_\_\_ of Figure 18-1.
4. The host cell breaks open, and the new virus particles are released, as shown in stage \_\_\_\_\_ of Figure 18-1.
5. The host DNA is destroyed, and the viral genes are copied as shown in stage \_\_\_\_\_ of Figure 18-1.

### Matching

Match each item with the correct statement below.

- |                          |                   |
|--------------------------|-------------------|
| a. conjugation           | f. binary fission |
| b. reverse transcriptase | g. toxin          |
| c. bacteriophage         | h. virus          |
| d. nitrogen fixation     | i. host cell      |
| e. endospore             |                   |

- |       |   |
|-------|---|
| _____ | 6. bacterial form that is in a state of slow metabolism and that does not reproduce |
| _____ | 7. process by which bacteria reproduce asexually                                    |
| _____ | 8. virus that infects bacteria  |
| _____ | 9. nonliving particle that can reproduce when in a living cell                      |
| _____ | 10. enzyme injected into a host cell, which copies viral RNA into DNA               |
| _____ | 11. simple form of sexual reproduction  |
| _____ | 12. cell in which a virus reproduces  |
| _____ | 13. poison produced by some bacteria  |
| _____ | 14. process by which some bacteria convert $N_2$ gas into ammonia                   |

## Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_ 15. Which of the following is NOT an evolutionary adaptation in bacteria?
- They have a high rate of mutation.
  - They can utilize substances harmful to other organisms.
  - They cannot exist under adverse conditions.
  - They reproduce rapidly.
- \_\_\_\_ 16. A structure in some bacteria that is resistant to adverse environmental factors is a(n) \_\_\_\_.
- coccus
  - endospore
  - autotroph
  - prophage
- \_\_\_\_ 17. Viruses are found in \_\_\_\_.
- air
  - soil
  - water
  - all of these
- \_\_\_\_ 18. Penicillin kills bacteria by \_\_\_\_.
- imprisoning them
  - causing holes to develop in their cell walls
  - depriving them of nutrients
  - consuming them
- \_\_\_\_ 19. Bacteria are used in \_\_\_\_.
- farming
  - the food industry
  - the medical industry
  - all of these
- \_\_\_\_ 20. A(n) \_\_\_\_ is a virus that infects a bacterial cell.
- endospore
  - decomposer
  - bacteriophage
  - plasmid
- \_\_\_\_ 21. The name streptococcus tells you that the bacteria are arranged as \_\_\_\_.
- groups of spirals
  - pairs of round cells
  - long chains of round cells
  - chains of rods
- \_\_\_\_ 22. Viruses are \_\_\_\_.
- consumers
  - decomposers
  - parasites
  - producers
- \_\_\_\_ 23. Which of the bacteria is the cause of pneumonia?
- streptococcus pneumoniae
  - rickettsia
  - Treponema pallidum
  - staphylococci
- \_\_\_\_ 24. Cyanobacteria are \_\_\_\_.
- photosynthetic autotrophs
  - chemosynthetic autotrophs
  - salt-loving archaeobacteria
  - eubacterial heterotrophs
- \_\_\_\_ 25. Which of the following processes brings about an exchange of genetic information between bacterial cells?
- mutualism
  - replication
  - conjugation
  - binary fission

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