

Section 19–2 Viruses (pages 478–483)

This section describes the structure of a virus. It also explains how viruses cause infection.

What Is a Virus? (pages 478–479)

1. What are viruses? _____

2. What do all viruses have in common? _____

3. Is the following sentence true or false? Most viruses are so small that they can be seen only with the aid of a powerful electron microscope. _____
4. What is the structure of a typical virus? _____

5. Circle the letter of what a virus's protein coat is called.
a. capsid b. envelope c. head d. lysis
6. How does a typical virus get inside a cell? _____

7. What occurs when viruses get inside of cells? _____

8. Why are most viruses highly specific to the cells they infect? _____

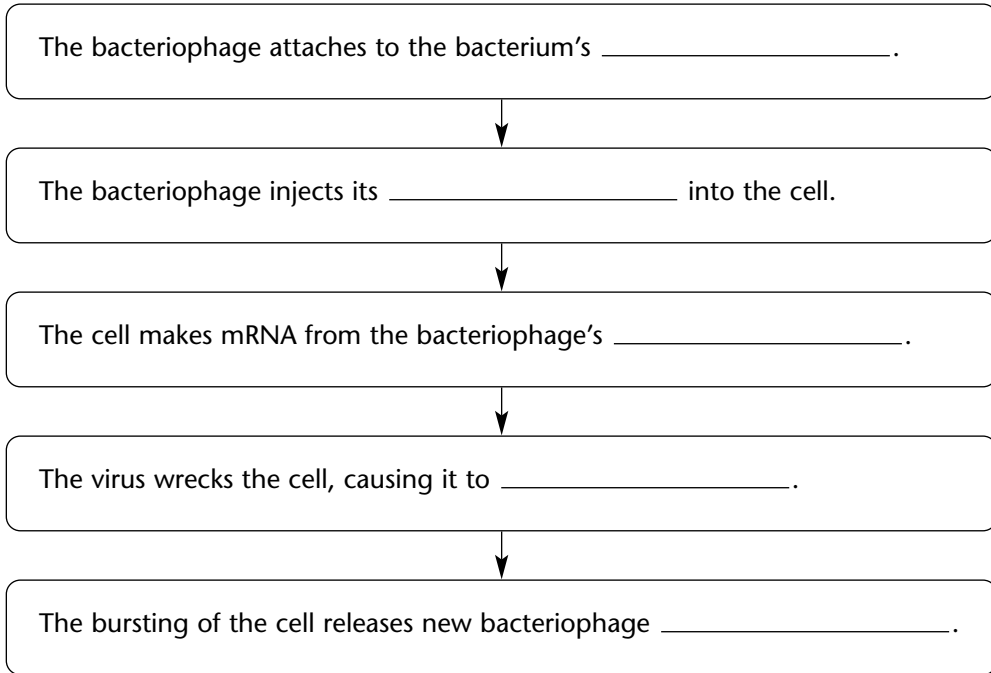
9. What are bacteriophages? _____

Viral Infection (pages 480–481)

10. Why is a lytic infection given that name? _____

11. Circle the letter of each sentence that is true about a lysogenic infection.
 - a. The virus lyses the host cell immediately.
 - b. The virus embeds its DNA into the host's DNA.
 - c. The virus's DNA is replicated along with the host cell's DNA.
 - d. A host cell makes copies of the virus indefinitely.

12. Complete the flowchart about a lytic infection.



13. What is a prophage? _____

Retroviruses (page 482)

14. What are retroviruses? _____

15. What happens when retroviruses infect a cell? _____

Viruses and Living Cells (pages 482–483)

16. Circle the letter of each reason why some biologists do not consider viruses to be alive.
- a. They can't infect living cells.
 - b. They can't evolve.
 - c. They can't regulate gene expression.
 - d. They can't reproduce independently.