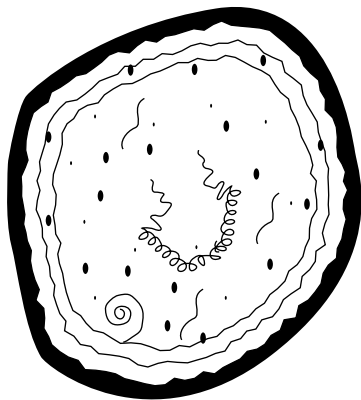


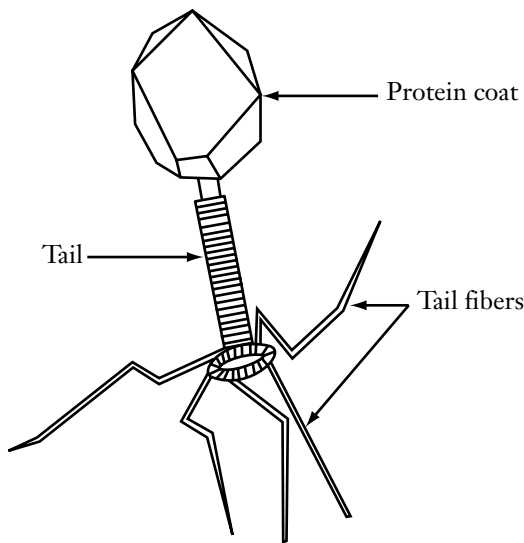
CHAPTER 21 VIRUSES AND BACTERIA

Get the Big Picture

Study the pictures. Then write *B* after each sentence below that describes bacteria. Write *V* after each sentence that describes viruses.



Bacteria are the oldest forms of life. They were the only life forms until about 2.1 billion years ago. Other life forms evolved from bacteria. Bacteria grow, reproduce, and carry out respiration.



Viruses are much smaller than bacteria. They are not an ancient life form. Viruses can cause diseases like the flu or chicken pox. Most biologists agree that viruses are not alive. Viruses do not move, grow, or carry out respiration. Viruses need living host cells to reproduce.

1. They are *not* the oldest life form on Earth. _____
2. They can grow, reproduce, and carry out respiration. _____
3. They are the oldest life form on Earth. _____
4. Most biologists agree they are not alive. _____
5. They are alive. _____
6. They do not move, grow, or carry out respiration. _____
7. They need a living host to reproduce. _____
8. Other life forms evolved from them. _____

CHAPTER 21 VIRUSES AND BACTERIA

**Section 21.1 Viruses
Study the Cycle**

Viruses use a host cell to make new viruses, then destroy the cell. This is called the **lytic cycle**. Here are the steps of the lytic cycle.

1. The virus attaches to the cell.
2. DNA from the virus enters the cell.
3. The cell's DNA is destroyed. The cell then makes new viral DNA and proteins.
4. New viruses are made from the proteins and DNA.
5. The cell breaks open and viruses are released.

The steps of the lytic cycle are shown in the diagram below. Use the list above to number the steps.

