

Name: \_\_\_\_\_

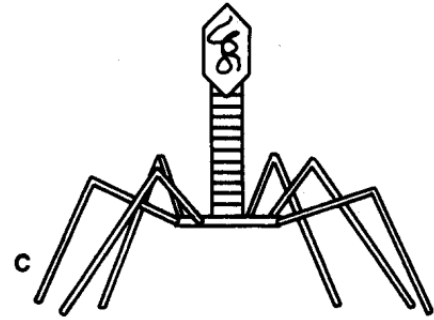
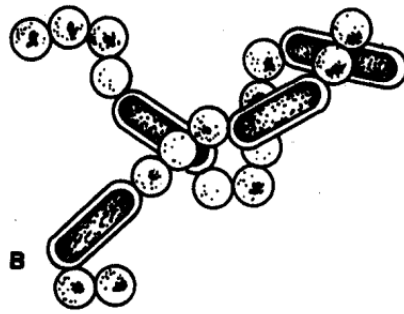
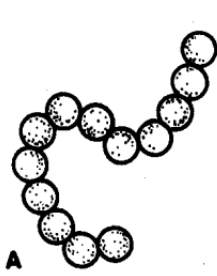
Period: \_\_\_\_\_

## WHY ARE MEDICINES NOT USED TO TREAT VIRUS DISEASES?

Tonda had an upset stomach and a fever. Her mother took her to the family doctor. The doctor examined Tonda. She said Tonda had flu, or influenza, a disease caused by a virus. The doctor told Tonda to stay in bed for two to three days and drink a lot of liquids. She did not prescribe any medicine. Tonda reminded the doctor that she had treated Tonda's strep throat with an antibiotic. The doctor explained that strep throat is named for the Streptococcus bacteria that cause the infection. Antibiotics can kill bacteria, but will not act against a virus disease. Why didn't the doctor give Tonda a medicine for this virus infection?

Use available resources (like your book) to find information that will help you answer the following questions.

1. What is a virus?
2. How is a virus different from a bacterium?
3. How do bacteria reproduce?
4. How do viruses reproduce?
5. How can medicine be used to treat bacterial disease?
6. Why can medicine not be used to treat viral disease?
7. What things in the body destroy viruses?
8. (T or F) Communicable diseases can be caused by bacteria or viruses



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|--|--|
| _____ 1. These have no cell parts      | _____ 2. Can be stored for years and remain active       |
| _____ 3. Can produce oxygen            | _____ 4. May be classified based on the cell they infect |
| _____ 5. Do not require food           | _____ 6. Are made of DNA and Protein                     |
| _____ 7. May be symbiotic or parasitic | _____ 8. Members of this group have 3 basic shapes       |
| _____ 9. Only parasitic                | _____ 10. Important for making cheese and other foods    |

Choose the words that best match the terms or phrases

A. problem caused by bacteria

B. problem caused by viruses

C. helpful bacteria

- |   |                           |
|---|---------------------------|
| _____ Producing antibiotics                   | _____ Flavors food        |
| _____ Produce vitamins in the human intestine | _____ Anthrax             |
| _____ Rabies                                  | _____ Cold sores, measles |
| _____ Decomposers                             | _____ Polio, AIDS         |

## Archaea

Scientists have discovered some major differences in the ribosomal RNA of a group of prokaryotes that live in extreme environments. These Archaea have some characteristics that are similar to bacteria, others that are more similar to eukaryotes and some that are unique to just themselves. The Archaea seem to have changed very little from the ones discovered in the fossil record. **Review the first three section of Chapter 11 in your textbook. What are the characteristics do each of the three groups of Archaea have that make them unique?**

Thermoacidophiles

Halophiles

Methanogens