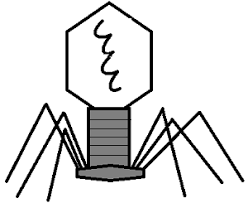
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| **Biology 11**  **Microbiology Review** | **Name: Date:**  **Block:** |

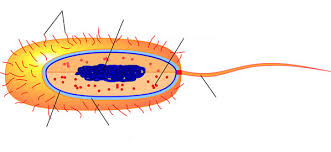
Unit test will be on Viruses, Immune System and Bacteria. Test will be comprised of multiple choice, matching and short answer questions.

**Viruses**

1. Examine the image of a typical bacteriophage (virus that infects bacteria). Identify each part of the virus and describe its function.
2. With the aid of a diagram, describe the steps of the lytic life cycle of infection.
3. With the aid of a diagram, describe the steps of the lysogenic life cycle of infection.
4. With the aid of a diagram, describe the steps of the lytic and lysogenic life cycles of infection.
5. Compare and contrast the lytic and lysogenic life cycles of infection.
6. Describe why a virus is not considered to be living.
7. What is a retrovirus? Provide and example.

**Bacteria**

1. Label the parts of the bacteria below and indicate the function of each part.



1. Use a diagram to explain the process of reproduction in bacteria. This process is called: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Use a diagram to explain the process of how bacteria diversify. This process is called: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Be sure to include the following terms: donor bacterium, recipient bacterium, plasmid, cytoplasmic bridge.
3. What is an Endospore? How does it form?
4. List three shapes of bacteria (scientific name) and draw them.
5. What is the difference between autotroph and heterotroph? Chemotroph and phototroph?
6. List some benefits of bacteria.
7. List some harmful aspects of bacteria.
8. How do bacteria cause disease?
9. Explain the difference between gram-positive and gram-negative bacteria.
10. What is the Germ Theory of Infectious Disease?
11. Describe Koch’s postulates (in the correct order)

**Immune System**

1. What is a pathogen?
2. How does the first line of defense work to protect our bodies?
3. How does the second line of defense work to protect our bodies?
4. How does the third line of defense work to protect our bodies?
5. How does your body become immune to certain infections? Think about memory cells and vaccines.