Microbiology Pre-Test Study Sheet

Name: Date:

1. Define (or draw) the following terms:

Prokaryote   Coccus

Bacillus   Spirillum

Streptobacilli   Chemoheterotroph

Photoheterotroph   Photoautotroph

Chemoautotroph   Obligate aerobe

Obligate anaerobe   Facultative anaerobe

R_{-0} (R naught)   CDC

WHO   Patient zero

Prophage   Provirus

2. Draw the process of binary fission. Label everything! What is the end result?

3. Draw the process of conjugation below. Label everything!!! Why is conjugation thought of as a form of sexual reproduction?

4. Draw a Venn diagram comparing archaebacteria and eubacteria.

5. List three shapes of bacteria and draw them. Draw and label some of the arrangements of the 'spheres' and 'rod' that you made with playdough.

6. What is the difference between autotroph and heterotroph? Chemotroph and phototroph?

7. List some benefits of bacteria.

8. List some harmful aspects of bacteria.

9. What is a plasmid? What process of reproduction is it used in?

10. Draw a prokaryotic cell and label all the parts. Include a function of each.

11. Explain the difference between a Gram positive and a Gram negative bacteria.

12. Explain and/or draw the processes of transformation and transduction.

13. Draw **and** explain how antibacterial resistance can occur.

14. Draw and label a bacteriophage. Draw and label an enveloped retrovirus.

15. A typical virus is composed of a core of _____ or _____ surrounded by a _____.

16. What are the characteristics of viruses? Do these support the idea that they are living or non-living?

17. Describe some of the body's basic lines of defense against infection. (Textbook p. 1036 – 1042 is a helpful read, but you know this already because you did your reading guide! Your notes have just a few of your body's defenses)

18. What is an advantage to having a viral envelope? What are two advantages that retroviruses have over normal viruses?

19. Draw and label the lytic and lysogenic cycles. Explain what is happening in each well labeled step!

20. What is an antigen? How is it related to viral specificity?