Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Comparing Viruses and Bacteria – Review Worksheet

1. List the 7 catagories of the Linnaeus Classification System.

2. What are the 6 kingdoms of the Linnaeus classification system?

3. Are bacteria multicellular or unicellular?

If they don’t have nucleus, they are referred as: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cells with a nucleus are referred to as: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. How do bacteria reproduce?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ This is considered (sexual/asexual) because there is no exchange of genetic material.

5. What is the kingdom name for the ancient, mostly extinct bacteria? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What is the kingdom name for the newer, present day bacteria?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6.Use the rules of binomial nomenclature to correctly write the following genus species name;

homo sapien

7. What do gram + and gram - bacteria have surrounding their cell membrane? If gram-, what is makes up the 3rd layer and is stained by safranin?

8. Draw and label the three shapes of bacteria in the space below:

9. What are the two main parts of a virus? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. What part of a virus allows it to attach to a cell? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

11. What do viruses need to reproduce?

12. What are the two types of nucleic acids viruses may have?

13. A virus that attacks bacteria is shaped like a space ship and is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

14. What is used to fight a bacterial infection?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. What is used to prevent a viral infection?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16. Viruses that enter a host and almost immediately start replication are referred to as \_\_\_\_\_\_\_\_\_\_\_\_ while viruses like HIV that hide and activate their lytic cycle after a longer period of time are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

17. Amoxicillin and Penicillin are examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ use to treat bacterial disease.

18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used in gram staining to decolorize the bacteria and wash away unused stains.

19. The area around a chemical that is placed in a bacteria sample the stops the bacteria from growing is called the zone of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

20. Which level of the Linneaus classification system would be the most precise and be made of only one population that can interbreed and produce fertile offspring. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

21. Draw a strand of *Streptococcus* that is gram -. What color should it stain? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. Which of the following would be treated with antibiotics? (virus, bacteria)