

Biology
Bacteria and Virus Quiz Review

Name: _____

Date: _____ Hour: _____

1. How does a prokaryotic cell differ from a eukaryotic cell? _____

2. Scientists classify prokaryotes into two kingdoms, the Eubacteria and Archaeobacteria. Describe each group, then explain how they are different from each other:
 - a. Archaeobacteria _____

 - b. Eubacteria _____

 - c. How are they different? _____

3. Bacteria (Eubacteria) are identified according to their shape, cell wall composition, and metabolism. Describe each of these below:
 - a. Shape (all three) _____

 - b. Cell wall composition (include how this relates to a Gram stain) _____

c. Describe the different types of metabolism of prokaryotes:

- i. Photoautotrophs _____
- ii. Chemoautotrophs _____
- iii. Heterotrophs _____
- iv. Aerobes _____
- v. Anaerobes _____

4. Draw **and label** the three basic shapes of bacteria.

5. How do bacteria reproduce? Describe what happens: _____

6. What is the function of pili and plasmids in bacteria? Describe what they do: _____

What is the name for the process involving the parts mentioned above? _____

Why is this process important? _____

7. What is a virus? _____

8. Are viruses classified as living or nonliving? _____

What is the evidence for classifying viruses this way? _____

9. What is the main difference between the lytic and lysogenic cycles in viruses?

a. Lytic: _____

b. Lysogenic: _____

10. What types of diseases or infections can viruses with a lytic reproductive cycle cause (minimum 4)?

a. _____

b. _____

c. _____

d. _____

11. Give an example of a disease caused by a virus with a lysogenic reproductive cycle: _____

12. Diagram and label a typical virus (any of the various shapes is OK):