## **Biology I Review: Viruses and Immunology**

Instructions: Answer the following questions and will be prepared for tomorrow's test!

- 1. What is a virus made of?
- 2. List five reasons why we consider viruses to be non-living.
- 3. List three characteristics viruses share with living things?
- 4. Do viruses usually have many or few hosts?
- 5. Viruses called bacteriophages attack what living things?
- 6. How can a virus find a host cell?
- 7. When a virus takes over the machinery of a cell, what does it cause the cell to do?



- 8. Name stages A-E of the lytic cycle
- 9. List the events that occur in stages A-E of the lytic cycle
- 10. What does latent mean?
- 11. What is a provirus and when is it formed? Why is the immune system ineffective against a provirus?

- 12. Compare and contrast the lytic and lysogenic cycle?
- 13. Would a person feel ill more quickly if they had a lytic or lysogenic virus?
- 14. How is the AIDS virus spread?
- 15. What type of cells does HIV attack?
- 16. What is the body's first line of defense against pathogens (germs)?
- 17. Openings in the body must be protected. Explain how the eye, ears and mouth are protected.
- 18. The foreign protein patterns on a germ are called \_\_\_\_\_\_.
- 19. What cells could engulf a germ by phagocytosis?
- 20. When a macrophage engulfs a germ, what does it become?
- 21. What type of cell binds to an APC (antigen presenting cell)?
- 22. What happens when a T-cell binds with an APC?
- 23. What do B-cells do?
- 24. What is the function of a plasma cell?
- 25. Where do plasma cells come from?
- 26. How do antibodies attack germs?
- 27. When do memory cell form and what is their function?
- 28. How does a vaccine work?
- 29. How do cytotoxic T-cell or T-killers attack germs?
- 30. What activates Cytotoxic T-cell?