**CHAPTER 7: CELLULAR STRUCTURE AND FUNCTION RFC #1**

\* Read the following questions, **THEN** read from Chapter 7 p. 180 to p. 186, **THEN** answer the following questions on your own paper in complete sentences. ***ANSWERS ARE NOT IN ORDER, YOU MUST READ FIRST!***

1. Compare and contrast a TEM and SEM microscope. Be sure to include which each stands for.
2. What is a disadvantage of TEM and SEM microscopes?
3. Describe the endosymbiont theory.
4. What function does the genetic information found in cells serve?
5. How are the advances in microscope technology related to discoveries about cells?
6. What do all cells have in common in reference to structure?
7. How do the lenses magnify objects in a compound light microscope?
8. What did Robert Hooke observe **AND** what did he observe?
9. How have eukaryotic cells contributed to the evolution of multicellular higher organisms?
10. What are the principles of the cell theory?
11. What does an electron microscope use to observe objects?
12. How is what Leeuwenhoek observed different than what Hooke observed?
13. What is the BIG IDEA for chapter 7?
14. What are organelles?
15. What does the atomic force microscope (AFM) measure?
16. **TYPE II:** COMPARE AND CONTRSAST eukaryotic and prokaryotic cells. INCLUDE EXAMPLES OF EACH AND UNDERLINE THEM.
17. What is a STM microscope and how is it different then TEM and SEM microscopes?
18. Give a brief description of what the following scientist observed **AND** how is their findings related?
    1. Schleiden
    2. Schwann
    3. Virchow
19. What is the MAIN IDEA for section 1?
20. When did scientist discover the cell nucleus?

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