Getting Ready for A&P Unit 6 – Cell Biology

Use Get Ready for A&P – Unit 6: Cell Biology, Life’s Little Factories (Pages AR-97 to AR-140 in your text) to do the following exercises and questions

Due Date: __________________

1) After reading pages AR-99 thru AR-102, list and **briefly** describe the 5 main principles of the Cell Theory.
2) What 3 common characteristics are shared by all cells?
3) What basic (cell) membrane selectivity results from the structure of phospholipid molecules and their arrangement within the membrane?
4) What functionality is added by adding other molecules (proteins, etc.) to the membrane?
5) Using the “cell as factory” analogy, which organelles correspond to the following “factory departments?”
   a. Management
   b. Production Line
   c. Shipping
   d. Power Plant
   e. Janitorial/Recycling
   f. Hazardous Waste Disposal
   g. Building Frame work
6) Differentiate between “active” and “passive” transport mechanisms and list them.
7) Why might cells need to use active transport mechanisms?
8) Differentiate between mitosis and Cytokinesis
9) Describe what is happening during each of the following phases of the cell cycle:
   a. Interphase
   b. Prophase
   c. Metaphase
   d. Anaphase
   e. Telophase
10) How does Mitosis differ from Meiosis.