Unit 3 Test Review

**Chapter 3 (pages 70-91)**

1. What are the 3 statements of the Cell Theory?
2. How would you determine whether a cell is prokaryotic or eukaryotic?
3. What organelles store genetic information?
4. What organelles supply energy to the cell?
5. What organelles are unique to plant cells?
6. Describe a solution if it is hypotonic to a cell.
7. What process of transportation across a cell membrane requires NO energy from the cell?
8. Which organelles are involved in endocytosis?
9. Describe the rough ER.
10. Which organelle contains enzymes that break down old cell parts?
11. What process occurs in the cytoplasm?
12. Compare and contrast animal and plant cells.
13. Where in the cell is the cytoplasm located?

**Chapter 4 (pages 98-125)**

1. What molecule carries chemical energy used for cell functions?
2. What molecule in the food we eat is broken down to make ATP?
3. How does ATP provide the energy needed for cell function?
4. In which process of photosynthesis is water required?
5. What are the reactants of photosynthesis?
6. What are the energy –absorbing molecules located in plant cells?
7. The process of Cellular Respiration that requires oxygen takes place in what organelle?
8. Write the equation for Cellular Respiration.
9. The Electron Transport Chain is used in what process?
10. Where in the cell does lactic acid fermentation occur?
11. What is the name of the process that breaks down glucose?
12. What are the products of the Krebs’s Cycle?

**Chapter 5 (pages 134-155)**

1. Before a cell can undergo mitosis, what must occur in gap 2?
2. What occurs during interphase?
3. Why would cells in the stomach lining divide more frequently than the cells in the liver?
4. Of gap 1, synthesis, gap 2, and mitosis, in which stage does the cytoplasm of a cell divide?
5. What are the chemicals called OUTSIDE the cell that stimulates the cell to divide?
6. In unicellular organisms, what is mitosis used for?
7. What can occur with malignant tumors?
8. Draw and label the parts of a chromosome.
9. What are the differences between normal cells and cancer cells?
10. What occurs during prophase of mitosis?
11. List the order of the phases of mitosis.

**Chapter 6 (pages 168-176)**

1. What occurs during anaphase II?
2. What types of cells are diploid?
3. What is the result of mitosis?