Unit 2 Outline – Chapters 2 (p. 39-47) and 4 (p. 77-82)
Chemical Constituents of Cells and Metabolism

Anatomy and Physiology – Mrs. Michaelsen

Chapter Objectives:

1. What are the four major inorganic substances that are critical to the human body and why is each important? (Ch 2)
2. What are the four major organic substances? (Ch 2)
3. What are the three types of carbohydrates and list examples of each? (Ch 2)
4. What are the three types of lipids and list examples of each? (Ch 2)
5. What are the building blocks of proteins? (Ch 2)
6. Why are proteins important to the human body? (Ch 2)
7. What are the building blocks of nucleic acids and what makes them up? (Ch 2)
8. What are the two types of nucleic acids in the human body? (Ch 2)
9. What is metabolism? (Ch 4)
10. List and explain the difference between anabolism and catabolism. (Ch 4)
11. Describe how metabolism is controlled through enzymes? (Ch 4)
12. How is energy stored and retrieved for use in metabolic reactions? (Ch 4)
13. Describe the events of cellular respiration – glycolysis, the citric acid cycle, and the electron transport chain. Please include whether they are anaerobic or aerobic in your explanation and why. (Ch 4)
14. What is a metabolic pathway and explain where the most common entry into the citric acid cycle through the breakdown of carbohydrates, proteins, and fats. (Ch 4)

Other Assignments/Activities:

- None

Website: Access at http://www.chetekhighscience.yolasite.com

- Complete the assignment on the physiology of anabolic steroid use found at the website above. Email the completed assignment (word document) to Mrs. Michaelsen at denisemichaelsen@chetek.k12.wi.us