AP Biology Summer Assignment Mr. Heidl Chapters 1-5

### Chapter 1

Students need to read Chapter 1 and write at <u>least</u> three pages of notes for chapter 1. The front of the paper is one page and back of the paper is the second page. If you do not understand something within this chapter, I can help you with tutoring sessions. Within each chapter there are sections which are referred to as Concept 1.1, Concept 1.2, 1.3 and 1.4. At the end of each Concept, complete the concept checks to check your understanding for each Concept section. Complete the "Test your understanding" up to level 2 at the end of the chapter. Once the concept checks and the "Test your understanding" are complete, go to Appendix A in the back of the textbook and check your answers. Correct the concept checks as necessary. If you answered the "Test your understanding" questions wrong just mark them as wrong so that I can see your score. Write down your score. The number of questions you got correct over the number of questions. Ex) 8/10. I will be able to see how you are doing based on your score. Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.

## Chapter 2

Complete this chapter in the same format as chapter 1. At least three pages of notes, complete the concept checks and "Test your understanding" up to level 2. Correct the concept checks and "Test your understanding" by using Appendix A. Most of this chapter should be a review from Chemistry, and again if you don't understand a concept or explanation I can help during tutoring.

Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.

#### Chapter 3

Complete this chapter in the same format as chapter 1 and 2.

In addition, you need to memorize the four emergent properties of water within Concept 3.2 Cohesion, Moderation of temperature, Floating ice on Liquid water and The Solvent of Life. Be able to give examples and explain each emergent property for water.

Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.

#### Chapter 4

Complete this chapter in the same format as chapter 1 and 2.

Memorize the functional groups on page 63. Only memorize the chemical group name, the structure by being able to recognize a drawn structure. Memorize the properties. For example Carboxyl is acidic because it is a source of hydrogen ions. These memorized functional properties will help you understand how molecules function within living organisms.

Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.

Chpt 5

Complete this chapter in the same format as chapter 1 and 2.

Memorize the four macromolecules and be able to explain the properties of each one. The four macromolecules are Carbohydrates, Lipids, Proteins and Nucleic Acids. Pages 68 - 87.

Concentrate on learning the primary, secondary, tertiary and quaternary structures of a protein on pages 80-81.

Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.

# Chpt 6 . Extra Credit

Complete this chapter in the same format as chapter 1 and 2 for extra credit.

Memorize the structures and functions of all the structures within the cell on page 100-101. If the explanations are not on these pages, you can find the explanations within chapter 6.

Vocabulary needs to be memorized. You can highlight the bold faced words within your notes as long as the definition is included in the notes. Any bold faced words not included in your notes needs to be written out on a separate piece of paper or make flash cards. The choice is yours. You will be tested on the vocabulary.