Biology Extra Credit Opportunity #1

Due Date: Wednesday, October 16, 2013

Focus Points: Macromolecules, Enzymes and pH

Purpose: This extra credit opportunity serves two purposes; one is to allow you (the student) to exemplify your knowledge and understanding of the content covered and the other is to help improve your grade. **Please note that extra credit will not be added into the calculation of your grade until the end of the semester (December).**

Objective: This extra credit opportunity is both a hands-on and research based activity. Your objective is to exemplify your understanding of the content covered so far via model and a one-page paper. There are three content areas (macromolecules, enzymes and pH) of which you must choose 2 to complete the assignment below.

Directions: Choose 2 focus points from the top of this sheet then complete the following assignment for each. Because this is extra credit, my assistance to you will be limited for the completion of this project but you may use your notes, textbook, Internet or peers to complete the assignment.

Assignment: ***Choose only 2***

Macromolecules

- make a model showing how each macromolecule is created by monomers (i.e. amino acids linked together make a protein)
- **Type** a one-page explanation explaining your model including examples, functions, elements present and why they are so important

Enzyme

- make a model showing how enzymes and substrates act together to carry out a reaction (must be labeled)
- **Type** a one-page explanation explaining your model including, definitions (i.e. what are enzymes) you must also explain why enzymes are so important

pН

- make a model representing the pH scale and identify each part of the pH scale
- **Type** a one-page explanation explaining your model including any examples and why pH is so important

Please note: This is extra credit and optional. Therefore, the late penalty will <u>not</u> apply to this assignment. Any assignment not submitted by the deadline of Wednesday, October 16, 2013 will <u>not</u> be accepted for any reason. Plan accordingly.