

## AP Biology 2010-2011 Summer Homework

To get a jump start on some information for the first couple of units in AP Biology this fall, you need to complete the following assignments before the first day of school in August. As a resource this summer you will be able to access your textbook online. This option for textbook use will be available all year, and I would recommend using some of the online tools and quizzes to help figure out the material and to study.

To log on to your textbook please go to [http://wps.aw.com/bc\\_campbell\\_biology\\_8ap](http://wps.aw.com/bc_campbell_biology_8ap) and use the login: AllisonAPBio1011 and the password: 1011APBIO

Once you are on the textbook website, use the drop-down menu to access the desired chapter. Clicking on "myeBook" on the left-hand side of the screen will then bring up the online textbook.

I understand that you may not have online access at home. Since you have over 2 months to complete these tasks, I believe you should be able to find some time to use a friend's or family member's computer. You could even make time to go to the public library where you can use one of their computers to access the book.

No books will be checked out until school starts in the fall. If you have any problems while you are working on this assignment email me at [sallison@mchscats.org](mailto:sallison@mchscats.org) I should be able to get back to you within a day or two.

You have 4 assignments to complete over the summer.

1. Complete 3 Reading Guides. - Reading Guides are available for Chapters 2, 3 and 4. These are to be downloaded and completed. Access the textbook website as described above. Use the drop-down menu to access the desired chapter. Clicking on "Chapter Guide" on the left-hand side of the screen will then bring up a list of concepts and a reading guide should be toward the bottom of that list. The reading guides for these three chapters will be due on the first day of class. Use chapters 2-4 of the textbook to help you complete this chemistry review. Answers must be in complete sentences and readable. If your handwriting is lacking, type your answers.
2. Memorize the functional groups on Figure 4.10. - For each functional group you need to know the structure, name of compounds that have the group, an example and the functional properties of the group. All this information is organized in a table in Fig 4.10. You will be quizzed on these within the first week of school.
3. Read Chapter 1 of your text and take notes using one of the listed methods. - Choose any of the following structures to take notes over this chapter: outline, mind map/concept map, T-chart notes (main ideas / details), or other if you email and get it approved. No random ideas just jotted down.
4. Mark your calendar. - The AP Biology Test will be at 8 am on Monday, May 9th. It will cost around \$86. Schools will award you as many as 12 credit hours for doing well on this test. Once you actually begin college classes, you'll find that you can't even get 1 credit hour for \$86. This is a great opportunity. Take some time to look on the website of colleges you are interested in to see what score you need to get credit. Also notice how much credit they give. Set a goal now for what you want to earn on the test. Your summer homework is the start of preparing for that test.

Vocabulary that you should be VERY FAMILIAR with by the first day of class:

### Ch 2

Matter  
Element  
Compound  
Atom  
Neutron  
Proton  
Electron  
Isotope  
Energy  
Potential Energy  
Valence Electrons  
Orbital  
Covalent Bond  
Single Bond  
Double Bond  
Electronegativity  
Nonpolar Covalent Bond  
Polar Covalent Bond  
Ion  
Anion  
Cation  
Ionic Bond  
Salts  
Chemical Reactions  
Reactants  
Products  
Chemical Equilibrium

### Ch 3

Polar Molecule  
Cohesion  
Adhesion  
Surface tension  
Kinetic Energy  
Temperature  
Calorie  
Kilocalorie  
Joule  
Specific Heat  
Heat of Vaporization  
Evaporative cooling  
Solution  
Solvent  
Solute  
Aqueous solution  
Hydration shell  
Colloid  
Hydrophilic  
Hydrophobic  
Mole  
Molarity  
Acid  
Base  
pH  
Buffer

### Ch 4

Organic Chemistry  
Hydrocarbon  
Isomer  
Structural Isomer  
Geometric Isomer  
Enantiomers  
Functional Groups