

ROBINSON SECONDARY
SUMMER '09 ASSIGNMENT
IB Chemistry Higher Level

Purpose: The purpose of this assignment is for you to target material that was most difficult for you in IB Chemistry 1 and review it until it is mastered. Mastery of the material covered in IB Chemistry I is absolutely essential for success in HL. In order that we are all ready to start off on the same page next year, I ask that you take a few hours this summer to put together a review notebook:

Directions:

1. Check out a textbook *Zumdahl, Chemistry* in room C210
2. Purchase a 1 inch, 3 ring binder.
3. Make tabbed dividers with the following topics listed on each tab:

Units from IB Chemistry 1

1. Introduction
 2. Atomic Structure and Periodic Trends
 3. Mole and Chemical Bonding
 4. Reactions and Stoichiometry
 5. Gases and States of Matter
 6. Solutions, Kinetics, and Equilibrium
 7. Acids and Bases
 8. Organic Chemistry (use your quiz for this unit)
4. Behind each tab place a copy of the unit objectives that you were given from first year and the graded test for that unit.
 5. For each test question missed, highlight the corresponding objective on the unit objectives page.
 6. On a separate piece of paper, copy the objective that you highlighted
 7. Using *Zumdahl* and any other available chemistry resources you might have (HINT: your notes from first year are always VERY helpful!!)
 - a. Take notes to further explain the objective that you missed. If you missed a problem, list an additional related example problem or question
 - b. **Correctly answer any test item that you missed and all additional problems that you listed.**
 8. Please REVIEW AND MEMORIZE the polyatomic ions on p. 67 of *Zumdahl*. You should know the **name, charge and formula**. **Be prepared for a quiz over polyatomic ions the third day of class. This list is also posted on Blackboard.**
 9. In order to effectively review stoichiometry, work the following problems from *Zumdahl*, chapter 3 pages 124-127 (#55, 63, 73, 95, and 100). Do this on separate paper, showing the factor label method (dimensional analysis) where appropriate. Round to the correct number of significant figures. Place these problems with the Unit 4 material from the 1st year.
 10. In the event that you no longer have one of these unit tests or lists of objectives, see me in Room C210 ASAP! You will also want to check out a textbook before leaving for the summer. If you cannot find the unit objectives you will be enrolled in the HL Chemistry Summer Assignment Course where you can find the unit objectives. Please contact the instructor if you cannot access the Blackboard course.
 11. **Very IMPORTANT: Please purchase an organic chemistry molecular modeling kit over the summer and bring it to class the first day. Your kit really needs to have a minimum of 12 C atoms in order to be useful to you. I have always liked using the molymod kits (Prentice-Hall) ISBN 0-205-08136-3. You may shop for them online (sometimes you can even get a good deal on e-bay). They are also available at GMU's bookstore or at Murphy's college book store. Expect to pay about \$55.00 or more at a university book store. Another type of kit that you could purchase is the Molecular Visions organic model kit ISBN 0-9648837-4-0.**

Assessment and Due Date: The above assignment will be collected the **first week of class** and will count as a 30 point grade.

Contact Person: I can be contacted over the summer by email - Karen.McLean@fcps.edu.

If you would like to be a part of a blog or discussion board over the summer please send me your email address