Return to Dr. Svedine-Gaskalka by 6/06/2014 along with a current email where I can reach YOU over the summer. You will receive a test email from me before the end of the current school year where you will obtain my contact information.

Welcome to AP Chemistry!

Congratulations on selecting one of the most rigorous AP courses offered! Students who have successfully completed AP Chemistry in the past have found themselves highly prepared for demanding college majors such as medicine, engineering, pharmacology, and biotechnology. Furthermore, some students have been eligible for advanced standing in their college major saving costly college credit fees.

AP Chemistry is designed to be the equivalent of a first-year college Chemistry course at a highly selective college. Therefore, it is a demanding academic class that will require you to be very dedicated and work extremely hard even if you are one of those "smart" students who have coasted through your highschool career with very little effort. Because the course moves at such a fast pace, there is no time for review of introductory chemistry. Thus, the goal of the summer assignment is to provide a comprehensive review of concepts and principals of which students need a firm understanding in order to succeed in the course during the year. These topics include writing and naming chemical formulas, balancing and predicting chemical reactions, gas laws, and a strong understanding of stoichiometric relationships. **Proper set up of equations, units, significant figures, and dimensional analysis will be emphasized.**

Expectations:

- 1. Sign out a text and return your signed contract before the start of summer.
- 2. Make sure I have a valid email address that you actually check on a regular basis. (a practice test during the summer as well as weekly agendas including homework assignments, test, and quiz info is sent electronically during the academic year.) It is your responsibility to check your email.
- 3. To actually *read* the assigned chapters in the book and retry the problems I do in class. (*It may seem "easy" when I do the work, but may not be so when you go to try it on your own!*)
- 4. Bring your calculator and text to class EVERY DAY!
- 5. To complete summerwork, homework, and all class assignments showing all work, using units and appropriate significant figures. When arithmetic is not needed, write your answers using complete sentences with detail.
- 6. 4-6 homework questions may take you an hour (or two...) Plan accordingly.
- 7. DO YOUR OWN WORK! Spending the time to actually do the work is how you learn the essential concepts & it's the only way to get through your exams! If you don't believe me, ask around or learn the hard way!
- 8. To have prepared a 3-ring 2 inch binder with a hole puncher to hold the year's materials. (Using your book as a folder ruins the binding! Plan on being charged for a new book if you do this!)
- 9. Chapter quizzes and unit tests involve multiple chapters and model the AP exam format. (Open response 40-60%)
- 10. Multiple choice questions require you to know your material well.
- 11. Your first test on the summer assignment will be given during the first week of school. *Be prepared for it on day 1.*
- 12. You *will* have assignments over weekends and during some school vacations. Often, this includes parts of the text we will not have time to cover during class. You are expected to cover this material with the same level of detail and dedication that I provide for topics covered in class.
- 13. Attend afterschool help sessions <u>as soon as you have difficulty</u>. What I cover one day is based on what I covered before. Clear up confusion before it becomes out of control.

- 14. Come to class! Every class period is used, including those that meet first period, last period on Fridays, and before vacations! Should you need to miss class for an appropriate reason, plan on viewing the lecture material online that you missed.
- 15. NO WHINING, PROCRASTINATING, OR SLACKING!!! This course IS difficult. You will need to study no matter how "smart" you are. If you approach this course with the appropriate effort and attitude you CAN be successful!

Textbook:	Chemistry ninth edition. Chang, Raymond (2008).
Web-based materials:	It is highly recommended that you make friends with the AP chemistry site courtesy of the National Math & Science Institute (NMSI). Go to APChemistryNMSI-home. Click on "AP chemistry class lecture." This will bring up supporting materials for the entire course. Notes can be downloaded as PDF files. If there is a section that you did not understand in class, or were absent at that time, you can watch the companion videos for each topic. These feature a lecturer who explains key ideas and will work sample problems. Unlike real class, you can fast forward, rewind to hear topics again, or skip those you do not need.

SUMMER ASSIGNMENT: This assignment follows your text. However, you can find online tutorials, notes & explanations of the NMSI site under "all things stoichiometry" and under "gas laws." Check the pdf files to locate the information of interest, and then you can listen to the companion videos for areas where/if you have difficulty.

1. Read chpt 2.6 & 2.7 (formulas and nomenclature). Answer questions p. 72-73. #40, 57-60.

2. Read chpt 3-all (Stoichiometry). Answer questions p. 107-114. #15, 25, 27, 38, 41, 43, 45, 46, 48, 52-54, 59, 63, 72-74, 81, 84-86, 102, 112, 114, 119, 126, 128-130.

3. Read chpt 5.1-5.5 (gas laws). Answer questions p. 209-212.

2, 3, 7-9, 15-17, 27, 46, 48, 49, 50, 52, 55-60.

An exam consisting of 50% open response and 50% multiple choice questions will be given on this assignment during the first week of school. Make sure to spread out your studies, and whatever you do, don't start it the day before it is due and make sure *to do your own work*. (Plagiarized summer work will result in a zero for all parties involved.) Please, please, please show all your work, including appropriate labels and units. Parts of the summer work many of you may be able to do in your head-show the appropriate work anyway! I am trying to get you to build good habits that will help you be successful when you can no longer do the work in your head!

<u>Summer work due August 12 by 2:30 p.m.</u> (This is so I may have a chance to review your work and give you feedback on day 1!)

You may drop off your work in the main office which will be open all summer from 7:30 a.m.-2:30 p.m. If you know you will be on vacation during this week, drop it off sooner. Late work will not be accepted. This is a <u>test</u> grade.

As the due date approaches, I will send you a reminder by email as well as an old summer work exam (with solutions) so that you may practice and prepare accordingly.

Please make a copy of your work so that you may have it to study.

I agree to complete the AP Chemistry summer assignment. I am aware that failure to complete this assignment will severely impact my grade and does not constitute grounds to drop the course. I understand that I am expected to take the AP exam in May 2015. I am aware that if I do not do so I will be responsible for all exam fees and will not receive AP credit for the course.

Student name-please print

Student signature

Parent name-please print

Parent signature

date

student email_____

During the 2013-2014 academic year, many AP chemistry students signed up for Chemistry Olympiad homeroom, where they could meet in the morning for various chemistry-related activities. Please initial here if you are interested in being a member of homeroom 152 (new science wing) during the 2014-2015 academic year _____.