Welcome to AP Chemistry! This is a very challenging course which necessitates a bit of review before we meet together in September. We will begin the year with a few lab activities. This will give you ample time to ask any questions and firm up your understanding of the review topics, yet still allow us to move forward by learning lab techniques and practicing additional problems on review material. This summer assignment is designed to get your brain working on chemistry again by reviewing topics that are taught in the first year but are needed for success in AP Chemistry.

I expect the summer assignment will take you between 1-2 hours per chapter listed below. My recommendation is to do no work until mid-August. In the 3 weeks prior to the school year, do 1 chapter’s worth of work per week. Past students report that it looks intimidating but isn’t really once you get started. Memorizing your ions can be started whenever you like…the earlier, the better!

Students can access the documents needed for the summer assignment by joining the AP Chemistry Suumer 2016 class in Google Classroom (class code: 80akmq). Students who need assistance in joining the class or do not have access should contact me by email to get the assignment. Several hard copies will be in the main office for students who enroll during the summer.

The summer assignment should be handed in during the first week of school. Students who enroll in the course in late August should email/see me if an extension is needed. The material on the summer assignment (as well as a few new topics) will be assessed on the first test of the year. The first test will be at the start of the 3rd week of school.

I look forward to a great school year with you! Please contact me during the summer if I can be of help.

Mrs. Hicks (clhicks@fcps.edu)

What topics are you reviewing?

From Chapter 1:

Measurement
Units
Metric Prefixes
Accuracy and Precision
Significant Figures
Dimensional Analysis

Matter
Density
Classification of Matter

From Chapter 2:

Fundamental Law
Conservation of Mass
Definite Proportions

History
Dalton
Electron discovery
Rutherford
Basic Atomic Structure

From Chapter 3: Stoichiometry

Isotopic notation
Nucleus
Ions
Periodic Table
Basic arrangement
Metals vs. nonmetals
Nomenclature/Formulas
Ionic Cpd
MEMORIZE YOUR PAIs
Covalent cpds
Acids

Average atomic mass
Mole conversions
Molar mass
Percent composition
Empirical Formulas
Molecular Formulas
Balancing Equations
Stoich calculations
Limiting reactant
Percent yield
What do you need to do?
1) Learn your ions. You have a list of ions to memorize and some quizzes you can use to practice the ions. I will expect you to know the ions all year long.
2) Use the resources provided below to read the book/view powerpoints/watch videos to get up to speed on the topics above.
3) Do the problems below from the text book. Label each page with the chapter you are working on. SHOW YOUR WORK!! Answers to the problems are attached – check your work.
4) Get your digital stuff ready
   a) If you have a smartphone, download the Remind app and sign up for receiving messages from me. (Email and Remind will be our 2 primary communication methods over the summer).
      Text the message: @2ech6 to: 81010 to join!
   b) If you have smartphone, download the Socratic Student app. We will use this app a lot to practice in class next year. No worries if you don’t have a smartphone, we’ll use the laptops in class.
   c) *Join Google classroom for your section for the school year. Go to classroom.google.com, click on the + in the upper right corner and enter the appropriate codes
      Period 2: 0jblh9s   Period 4: pci04h   Period 6: c8crh1q
   d) *Join Edpuzzle for your section. Go to edpuzzle.com – use your school email (fcpsschools.net) and real name to create an account
      kimpema (period 2)
      ekipepw (period 4)
      lurbori (period 6)

* c) and d) need to be done in the week just before school so that you know which class period to join.

Chapter 1: Chemical Foundations
Active Learning Questions #6, 8, 15
Complete Exercises #29, 31, 33, 35, 37, 39, 49, 55(Kelvin only), 63, 65, 73, 75, 81

Chapter 2: Atoms, Molecules, and Ions
Review Questions p. 68 #2, 4, 5
Complete Questions/Exercises #17, 19, 21, 23, 25, 27, 31, 33, 41, 47b, 53, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79

Chapter 3: Stoichiometry
Review Questions p. 116-7 #3, 6
Complete Exercises #33, 37, 43, (part a only for: 47, 49, 51, 53, 55, 57), 61, 65, 67(ab), 71, 75(bc), 77, 79, 83, 89, 93, 99, 101, 105, 109, 113, 115

What can you use to help you complete the problems?
Your notes from the 1st year class as well as:

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<td><a href="https://www.clutchprep.com/chemistry/zumdahl-8e">https://www.clutchprep.com/chemistry/zumdahl-8e</a></td>
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<td>Great powerpoints that summarize the chapters</td>
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