Dear AP chemistry students,

We want you to come back in September happy, well rested, but also ready for a college chemistry course. To that end, we have prepared a summer assignment for you. It is not compulsory, but it will certainly help you with the first major topics of the course. If possible, begin this assignment about 2 weeks before school starts, and do the chapter 3 part the last few days before school starts.

Go to my website, pinchaschemsite.com. You will find a page for AP chem, 2019-2020. Near the top left of the page are three power point presentations, summerpp1, 2, and 3. They will each take a short time to go through.

Power point 1 is entirely review, including measurement and significant figures, and some old definitions.

Power point 2 is also almost entirely material you learned this year. Go through it slowly, and make sure you recall everything in the first 40 slides. Slides 41 and 42 are very important. You need to memorize the symbols and names of all the BOLDED common cations on slide 41. You should find that you already know most of them.

Similarly, you need to know the names, formulas, and charges of all the BOLDED common anions on slide 42. Read through to slide 53.

Power point 3 is about chapter 3 in your text, stoichiometry, which does contain some old material, but also some completely new material. Pay attention to slides 22 and 23.

Slides 24 to 30 cover new material. See if you can follow the procedure in slides 25 to 29. We will cover this in class during the first week or so.

Slides 31 to 33 show the path we use to solve gram to gram problems. (grams to moles, moles to moles, moles to grams).

THE TEXT BOOK. *The assignments refer to the 12th edition. Some of you may get copies of the 10th or 11th edition, which have the same material, but the questions have different numbers. See the bottom of the next page if you have the 10th or 11th edition.*

Chapter 1 is mostly review. It focusses a lot on conversions between units; these are not very important in AP chem.

In Chapter 2, ignore sections 2.8 and 2.9. You have already learned just about everything in this chapter, but answer the following problems, which begin on page 71.

26, 35,37, 45,49, 55, 57, 65, 67. (Answers to the RED problems are in the back of the text! )

Chapter 3 is one of the most important of the entire course. Try the sample and practice exercises from page 80 to 92. The text provides answers and explanations.

Section 3.6, page 96 is VITAL!! Do the practice and sample exercises on pages 98 and 99. Stop there, and move on to the problems at the end of the chapter. The ones with a \* next to them cover material you probably did not learn last year. Remember, the text provides answers to the red problems.

Do problems 3.1, 3.4, 3.11, 3.21, 3.23, 3.33 ( \*c and \*d are new material), 3.35, (\*c is new material)

\*3.65, \* 3.67.

We hope to BEGIN the course with chapter 3, after a very brief review of chapters 1 and 2. See you in September!

If you do not wish to take home a textbook, you can still complete the assignment. Go to my website, Pinchaschemsite.com, and on the APchem 2019-2020 page you will find “AP chem chapters 2 and 3.pdf” This file contains the 2 complete chapters from the 12th edition.

Changes if you have the 10th edition: (white cover)

In chapter 2, answer 23, 29, 43, 47, 53, 59, and 61.

In chapter 3, Try the sample and practice exercises from pages 83 to 96. Section **3.6** on page 100 is vital! Do the sample and practice exercises on pages 102 – 104.

Do problems beginning on page 110: 3.1, 3.4, 3.11, 3.21, 3.23, 3.33, 3.35, 3.59, and 3.61

Changes if you have the 11th edition. (gray cover)

In chapter 2, answer (beginning on page 71) 23, 25, 31, 45, 49, 55, 65, 67.

In Chapter 3, Try the sample and practice exercises from page 82 to page 95 (top)

Section 3.6, which begins on page 98 is vital!! Do the exercises on pages 100 to 102.

Do problems, beginning on page 108 3.1, 3.4, 3.11, 3.21, 3.23, 3.33, 3.35, 3.59, 3.61.

I will be available on line most of the summer. ([kinggama34@aol.com](mailto:kinggama34@aol.com)) If you have any questions about this material, please get in touch with me. I will teach the material in chapter 3, so don’t be frightened by any of it.