AP Chemistry Summer Work 2024

The objective of the AP Chemistry summer work is to practice/review the ideas within the first three chapters of the textbook. This will ensure that all of you are on the same footing heading into AP Chem. You will need to sign out a copy of the AP Chemistry textbook in Room 325 and/or you may use the textbook pdf. Please DO NOT download the textbook pdf - access it online from this link as needed: <u>AP Chemistry Textbook: The Central Science.pdf</u>

For each chapter, start by reading the chapter and taking notes, then do the assigned problems found at the back of each chapter. The assigned problems are all in red, which means that the answers are at the back of the book. Be sure (after you complete the problem) that you check to see if you got the correct answer. If you didn't, keep working until you do! Go back to the text for an example problem, watch a Kahn Academy video, call a friend to work through it together. This is the kind of stick-to-it-ness that you will need to be successful in this course. Do not simply copy the correct answer onto your problem set. *You must show all of the work in order to receive credit.*

Please complete these problems on separate paper (and not in a notebook with your notes) so that you can turn the entire problem-set in. *Exercises will be collected on the first day of class and there will be a Unit 1 test the first week of class.*

Chapter	Problems
1 – Introduction: Matter and Measurement	1, 5, 7, 15, 21, 23, 29, 37, 39, 47, 51
2 – Atoms, Molecules and Ions	1, 4, 6, 21, 25, 31, 39, 47, 53, 57, 59, 65, 67, 69, 71, 75
3 – Stoichiometry	7, 11, 17, 19, 33, 51, 53, 63, 77, 81, 83

If you struggle with any of the assigned material above, we strongly suggest that you read through the notes and watch the associated videos listed on the next page from The National Math and Science Initiative (NMSI). NMSI created an excellent set of lectures, notes and problems just for AP Chemistry students. If you need extra help, download the note packets, do the additional problems and watch the lectures as needed to help you. *None of the CH1-3 content will be retaught in class, as it is all review. We expect you to know it and be able to do it on Day One.*

*Information continues on the backside/next page.

Additional NMSI Resources

Chapter	NMSI Packet	NMSI Lecture Video
1 – Introduction: Matter and Measurement	<u>CH1 Intro to Chem.pdf</u>	https://vimeo.com/channels/164000/14216778
2 – Atoms, Molecules and Ions	<u>CH2 Atoms, Molecules,</u> <u>Ions.pdf</u>	https://vimeo.com/channels/164000/14217141
3 – Stoichiometry	CH3 Stoichiometry.pdf	https://vimeo.com/channels/164000/13588248

There is a video lecture that goes along with each chapter packet on Vimeo. The main page for all videos at the following link: <u>https://vimeo.com/channels/164000</u>. The links above should take you to the correct video for each packet. There may be others that you find helpful, but they are not listed in order, so you may have to do some digging around. If you need a password to access the Vimeo videos it is: **linuspauling**

Have a great summer and be in touch. We are looking forward to seeing you in the fall!

Best wishes, Mrs. Rivera and Mrs. Bodmer