

CHEMISTRY 9701 - AS Level Chemistry Summer Assignment

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Why take "AICE Chem"?

I am so glad you have decided to take AICE Chemistry! This course is designed to give you a more complete experience of chemistry that will prepare you for both the AICE Chemistry exam in the Spring of next year; and for General Chemistry and Organic Chemistry in college. The only way to complete all the topics in this course is to move at a fairly rapid pace. Therefore, it is critical for all students to complete the Summer Assignment and stay sharp! You have probably decided to take this course for several reasons, but here are some of the reasons why this course is beneficial:

- The most obvious answer is that students who successfully pass the AICE Chemistry Exams (AS-level) next May and June are eligible to receive some type of college science/chemistry credit at most public colleges and universities in the United States. This can represent a considerable savings in time and money. To get specific details, contact your intended institution of higher education (USF, FSU, UF, etc).

- Some students, regardless of whether or not they pass the AICE Chemistry Exam, elect, or are required, to take Introduction to Chemistry in college anyway. For most students, freshman college chemistry is difficult course. Students who have taken AICE Chemistry do exceedingly better than those who don't. If you are planning on majoring in ANY science, engineering, veterinary, nursing or other medical field, you will be required take several college chemistry courses; AICE Chemistry will prepare you very well for these courses.

- AICE Chemistry will teach you to think at higher levels and to manipulate information in new and interesting ways. You will be encouraged and taught how to analyze deeply, synthesize concepts and evaluate approaches to problems, often in new situations; it is NOT simply rote memorization of material learned.

- Finally, you will find that it will be more beneficial to learn Chemistry at Pasco High School over the course of one year, rather than in college (over 12 weeks), large in part due to the smaller class sizes and individual time and tutoring that I can offer you. Freshman college chemistry is usually taught in large lecture halls (up to 250 students) where individual assistance is both difficult to find and expensive to attain.

The Commitment

Taking a course such as AICE Chemistry may be very different than courses you have taken in the past or other AICE Courses that you will take during the 2018-2019 school year. It will involve a level of work and commitment that you may not have experienced before. In other words, you might actually have to TRY. There is a very specific amount of material that must be covered before the first AICE Exam in May. It should be noted that for the past three years, the multiple choice component of the AICE Chemistry Exam has been the last one on the International Schedule, occurring during the first week of June. YES, everyone, including, Seniors, must return in June to take your Exam...but don't worry! - I will be there too! You should expect/plan to attend tutoring nearly every week, or develop a study group of your own that meets regularly for study groups or to do homework. Finally, it is also expected that you have already mastered most/all of the concepts taught in preAICE Chemistry; very little time will be spent reviewing or RE-teaching these concepts.

Please complete the Summer Assignment that follows. Students who do not complete this assignment and keep their skills sets “fresh” should expect to struggle during certain units in AICE Chemistry. Most of the material is review from preAICE Chemistry or Chemistry Honors. Some of the material will be new and may seem strange. I will be readily available during the summer months. Use the e-mail above to contact me or follow me on Instagram.

PART ONE - “WEIGHT TRAINING”

... well almost... remember in 4th grade when you had to memorize your multiplication facts? Memorizing these multiplication facts helped you to do higher-level math faster because you didn't have to pick up a calculator or count on your fingers to get an answer. While you can always “Ask Siri” or “Google it”, memorizing facts STILL has relevance in your life (despite your best attempts to convince yourself that it doesn't!) Memorizing facts keeps your brain “in shape”. You have to train your brain to memorize. Much like wrestlers, martial artists and other athletes do weight training before a match or game, this summer, you are going to do CHEMISTRY “**WEIGHT TRAINING**”.

Please visit QUIZLET (online) and Search for the following sets (or click the link). I strongly encourage you to use the “LEARN” feature on Quizlet, not just the Flashcards...

- 1) “Mrs. Bromley Element SYMBOLS” https://quizlet.com/_eynlf
- 2) “Mrs. Bromley Polyatomic Ions & Common Acids” https://quizlet.com/_1fhj43
- 3) “Mrs. Bromley Organic Prefixes, Alkyl Groups & Molecules”

https://quizlet.com/_3btmmn

You can also JOIN the AICE Chemistry “Class Group” on QUIZLET by clicking on this link

<https://quizlet.com/join/jEcP9qHv8>

PART TWO - Chemistry 911

As I'm sure you are well aware, there are a plethora of 'revision' (or review) websites out there for various subjects, and AS Level Chemistry is no exception. It is a really good idea to know WHERE you plan to go for help when you get stuck in AICE Chem (or when you need to go back and review stuff from preAICE/IGCSE). Bottom line, you need to decide which website is easiest to navigate? Which YouTube channel do you enjoy watching/relate to/understand the most?

From the list provided below (or through a search of your own), informally research AS Level Chemistry Websites and/or YouTube Channels. Choose one or two resources and complete the form below on each resource. Each link in the list below is active, so you can just click it, or simply search the title of the resource using Google or your chosen search engine.

YouTube Channels

UnJaded Jade <https://www.youtube.com/channel/UC4-uObu-mfafJyxxZFEwbvQ/featured>

Mr. E Rintoul <https://www.youtube.com/user/MrERintoul>

Allery Chemistry <https://www.youtube.com/channel/UCPtWS4fCi25YHw5SPGdPz0g>

Websites

BBC Bitesize <https://www.bbc.com/education/subjects/zjmtsbk>

Chemguide <https://www.chemguide.co.uk/index.html#top>

LibreTexts: Chemistry: Core <https://chem.libretexts.org/Core>

Remember, you can always perform your own search and review your own Resource; however, please use the form on the following page.



AS Level Chemistry Revision/Review/Tutorial Resource Evaluation Form

Resource Type:

Name of Resource:

Who is the publisher/author/producer of the Resource? What authority does this person have on the subject?

What do you especially like about this Resource? Why would you recommend other students use it?

Is there anything you don't like about this resource? Explain.

Finally, I strongly suggest that you purchase this before the year begins... it will not be a required supply, but it will be under “strongly recommended”.



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- Atoms are color-coded to universal standards making identification easy
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- Sturdy plastic box included with four compartments designed for portability, organization and storage

(Or something like this; this is a very basic set...there are fancier ones!)