

AP Chemistry 2017-18

Hi Everyone...

I realize that this school has not yet ended but we are already preparing for next year. Since AP Chemistry covers two college semesters of material, we will be working hard to finish our subject matter before spring break so that we can hopefully have close to a month of review for the national exam. In order to be able to achieve this, we will need to complete three chapters over the summer. We will use an online homework program, webassign.net, to turn in our homework for the entire year. It will cost \$10.50/student but it will give you, as students, an opportunity to have up to three submissions to get a 100% for each homework assignment. Please see the attached for instructions, the class key you will need in order to sign up, and all due dates. The three summer assignments will be spread throughout the summer so that you can NOT put off the total assignment until the week before school starts :) However, you can go ahead and get all assignments finished now if you want!

In addition to completing your assignments, you will also need to know all of the polyatomic ions (their formulas, names, and charges) on the attached sheet and be familiar with the solubility rules listed below (also on page **125** of your text). You will be quizzed on this during the first week of school. Be ready!

Also, Mrs. Washburn will be returning to North Gwinnett next year and she will be teaching some classes of AP Chemistry. We do not know which teacher any of you will have but either way, you will be in good hands.

Should you have any questions at any time, please do not hesitate to email me at lisa_hursey@gwinnett.k12.ga.us. This includes questions about assignments and/or questions about Web Assign in general. I hope that you all have a great summer and return to school feeling refreshed and recharged!

Sincerely,

Mrs. Hursey

*For those of you who have NEVER taken Chemistry:

Are you CRAZY????? That being said, there is a LOT of catching up to do. I am planning to have two COMPLETELY OPTIONAL sessions to help you at least get your feet wet on Tuesday, May 30, and Wednesday, May 31, from 10:00 am until noon. If you can make both, that's great; if you can make just one, that's great. If you can't make either, we will miss

you! We will cover as much info as we can in that time. Bring paper and a calculator with you!!!

KNOW THESE!!!! You will use these rules when completing and writing balanced chemical equations.

Solubility Rules

- 1 All nitrates are soluble
 - 2 Alkali metals ions and NH_4^+ ions are soluble
 - 3 Halides (compounds containing halogens) are soluble except Ag^+ , Pb^{+2} , and Hg_2^{+2}
 - 4 Most sulfates are soluble, except Pb^{+2} , Ba^{+2} , Hg^{+2} , and Ca^{+2}
 - 5 Most hydroxides are slightly soluble (insoluble) except NaOH and KOH .
 - 6 Sulfides, carbonates, chromates, and phosphates are insoluble
- * **Lower number rules supersede so Na_2S is soluble**

Significant Digits – see pages **21-24** in your textbook

1. Any nonzero digit is always significant (1-9).
2. Zeros between nonzero digits are always significant – $1005 \text{ kg} = 4$ sig digs
3. Zeros at the beginning of a number are never significant – $0.02 \text{ g} = 1$ sig dig
4. Zeros at the end of a number are significant if the number contains a decimal point – $0.0200 \text{ g} = 3$ sig digs.

Calculations with Sig Digs

1. Adding and subtracting – the result has the same number of decimal places as the measurement with the fewest decimal places.
2. Multiplication and division – the result contains the same number of sig digs as the measurement with the fewest sig digs.
3. When a calculation involves multiple steps and you write down answers for intermediate steps, either 1) retain at least one additional digit for the intermediate answers or 2) enter all numbers in your calculator and round **ONLY** your final answer.

I cannot tell you how important these rules will be to you for the entire year. Please make sure you understand them because they really can make the difference for you when using Web Assign!