

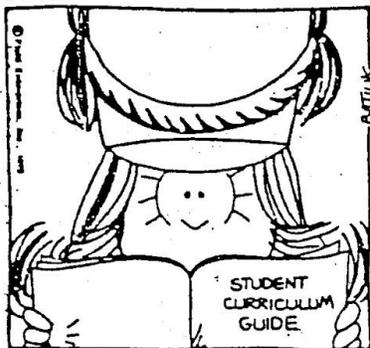
Welcome to AP Chemistry!

I look forward to working with all of you this year & hope that you are excited to continue your study of chemistry. This document contains information about your summer review assignment and will hopefully answer any questions you have before the first day of school. If you have additional questions, please email me.

jhall@atlantagirlsschool.org

FUNKY

By Tom Batiuk



CHEMISTRY - AP (Prerequisite: Chemistry I or one year of watching Mr. Wizard.)

In Chemistry AP, you'll go deeper into the study of atomic theory and you'll be making greater use of the periodic table which gets its name from the fact that you have to keep looking at it periodically during a test.

Textbook -- The textbook for this class is available for FREE! [OpenStax Chemistry](#) is available in many formats: e-book, online or pdf. If you prefer a physical copy, a hardback is available through Amazon for about \$50.

AP Chemistry Summer Assignment 2018

[Khan Academy AP Chemistry](#) - Use the videos to review key concepts, then try the quiz and test to assess your understanding of these basic concepts. (If you need a little more detail in your review, check out the (non-AP) [General Chemistry](#) version.)

Unit 1 - Atoms, Compounds, Ions

- Introduction to the atom - isotopes, Avogadro's number
- Compounds & Ions - chemical nomenclature, empirical/molecular formulas
- Mass Spectrometry - average atomic mass using isotope data

Unit 2 - Chemical Equations

- Balancing chemical equations
- Stoichiometry - mole ratio, reaction yield
- Limiting reactant stoichiometry
- Molecular composition - % composition, empirical/molecular formula calculations

We will QUICKLY review material covered in chapters 1-3 in our first days of class. The Khan Academy videos cover this material well, but you are encouraged to also read these chapters in the OpenStax textbook.

Your **first homework assignment** is due at the end of the second week of classes. Get a head start over the summer using the [OpenStax pdf](#). (Note: the online version of the text does NOT have problem numbers.)

- It is NOT necessary to copy the question onto your paper, but you MUST show your work clearly when solving problems. Feel free to add additional commentary to your work using words.
- Answers to the odd problems can be found at the end of the book. I will make the full solutions available to you on the first day of school so that you can correct your work.

Ch 1: #23, 25, 32, 40, 53, 59, 86

Ch 2: #4, 11, 17, 20*, 23, 29, 31, 35*, 41, 43, 47, 51, 53, 55, 57, 59

Ch 3: # 9, 25, 30, 35 (a,c), 37, 39, 43, 49, 53, 59, 61, 65, 72

Other review materials:

Memorize these [polyatomic ions](#)! - You will be quizzed on the proper name and formula (including the charge on the ion!) during the first days of school. Be sure you know & understand how to use the oxyanion rules for those ions marked with *. I expect you to be able to change the number of oxygens or add hydrogen to anions and know the proper name. [This video](#) walks through patterns that make it easier for you to remember them.

[Chemical Nomenclature](#) - Use this online quiz to practice your nomenclature skills. There will be a quiz during the second week of classes. (I suggest working up to the 100 question, Acid/Ionic/Molecular, Mix & match version!)

I will have printed copies of this [periodic table](#) for you on the first day of school. This is also the version that will be provided to you on all assessments, as well as on the AP Exam.

Finally, let me know if there is anything I can do to help you be more successful this year. I look forward to meeting you all soon!

Mrs. Hall