



AP CHEMISTRY SUMMER 2018 ASSIGNMENT

The goal of this assignment is not to be overwhelming but to properly prepare you to start AP Chemistry in the fall. The work will seem like a lot if you wait until the week before school starts. We are following a college level curriculum, and you must be competent in the material covered in honors chemistry to efficiently progress to the next level. This assignment is intended to be done gradually over break, so that the information sticks with you for the beginning of the year.

There are lists of **IONS and Solubility Rules**, you must **memorize** these. Sorry but they are not given on the AP Exam and you need to know them to complete many different questions. There are also four small review packets reviewing information from Honors Chemistry. Each packet has Exercise questions in them that should be completed for practice. The answers to all the problems are given so that you can check your work, but you should be able to do these all independently by the end.

Packet 1 Chemical foundations: A brief review of Matter, Scientific Method, Major Discoveries, Units of Measure, Unit Conversion, Density, and Classification of Matter (8 questions)

Packet 2 History of Atomic Theory, Periodic Table, Formula Writing and Naming (9 questions)

Packet 3 Atomic Structure, Quantum Theory, Electron Configuration, and Periodic Trends (10 questions)

Packet 4 Stoichiometry! Average Atomic Mass, Moles, Molar Mass, Mass Percent, Empirical and Molecular Formulas, Balancing Equations, Stoichiometry, Percent Yield, and Theoretical Yield (19 questions)

FIRST DAY OF SCHOOL: There will be a quiz on naming and solubility. You will be given a written name or formula for a substance. You will convert names into formulas or formulas into names and then tell if it is soluble in water.

Example	Given		Answer
	Barium Sulfate	→	BaSO ₄ insoluble
	Fe(OH) ₃	→	Iron III Hydroxide insoluble

SECOND WEEK OF SCHOOL: We will quickly review much of the honors chemistry material the first two weeks and will have our first exam which covers much of this summer assignment information.

Hard copies of all the packets are available in the office or can be downloaded here if you need to print again at home. Also below are links to tutorials, videos, and resources if you need additional review. Feel free to message me or ask questions anytime. Have a CHEMTASTIC SUMMER and I can't wait to meet all my future chemists this fall!

- <http://apchemistrynmsi.wikispaces.com/> Use the AP classroom lecture notes and videos on the left to access videos)
- <https://chemfiesta.org>
- www.chemmybear.com
- <http://www.sciencegeek.net/Chemistry>
- <http://www.champaignschools.org/index2.php?header=./central/&file=./staffwebsites/reidda/index> (has good lectures).
- <http://www.khanacademy.org/>