

## Advanced Placement Chemistry Summer Assignment

You will be expected to **know** the information covered in your first year of chemistry course (Please know that College prep chemistry does not cover the same amount and depth as Honors Chemistry), thus preparing yourself for an assessment (**TEST**) worth up to 15% of your grade given on the second day of school. These chapters below are a review of what you should have learned in Chemistry last year and are foundational. These chapters do not cover everything you learned from your first year in chemistry, but you are still expected to have the basics understood from your first year chemistry course. **The summer program is an important part of the AP course and serves two functions: 1) to keep you active as readers (you have to read this book or success will be more difficult), and 2) to prepare you for the level of material we will be learning throughout the academic year.**

### Summer Assignment

Due Friday of the first week of school [You will get access to the online text when school begins]

To get etext - Go to: [www.masteringchemistry.com](http://www.masteringchemistry.com) >> Log in

Username: dvapchem2016 >> password: Dougherty18

**Memorize** Solubility Rules, ions, and ion colors from: ([www.chemistryrocks.net](http://www.chemistryrocks.net) → Downloads)

**Study up on Acids and Bases and Equilibrium - large part of AP CHEMISTRY**

**Go to coggle.it and create acct - FREE, use gmail from school for account**

For each of the topics in the table below, add a branch point and add as much as you can.

Read over ACID / BASE / EQUILIBRIUM / REDOX

Export coggle as PDF to print and turn in on due date.

**You will staple your coggle to THIS SHEET OF PAPER to turn in on Due date**

**The following topics students are EXPECTED to know before the start of AP Chemistry:  
This list is not complete; it is designed to help you prepare for AP Chemistry**

|  |   |  |  |
|--|---|--|--|
| <b>Empirical formulas</b><br>Combustion analysis<br>Normal                 | <b>Acids and bases</b><br>Strong vs. weak<br>Salts<br>pH calculations | <b>Fundamentals</b><br>Structure of the atom<br>Electron config. | <b>Kinetics</b><br>Rate Laws<br>Meth. of initial rates               |
| <b>Equilibrium</b><br>Le Chatelier's Principle<br>K constant<br>ICE tables | <b>Redox</b><br>Balancing in acidic solutions<br>Oxidation states     | <b>Periodic Table</b><br>Trends<br>Ions                          | <b>Chemical reactions</b><br>Net ionic<br>Types of rxns<br>Acid Base |
| <b>Bonding</b><br>Covalent,<br>Ionic,<br>metallic                          | <b>Acids and Bases II</b><br>Calculate pH with salts                  | <b>Most important:</b><br>Acids and Bases<br>Equilibrium         | Laboratory skills  |
| <b>Name:</b>   | <b>Period:</b>  | <b>ALL or NOTHING</b><br>(Schnell will determine this)           |  |