Please see Ms. McChesney in room 3102 to sign out a textbook and join the course “NSHS AP Chemistry Summer” on Schoology.

Log into [https://schoology.newton.k12.ma.us/]https://schoology.newton.k12.ma.us/
In the top toolbar, click on “Course” tab
Look for the course “NSHS AP Chemistry Summer”
Click on “Join”
Enter the access code: GM6BN-HCRD2
Click “Join

Ms. McChesney’s email address is: marianne_mcchesney@newton.k12.ma.us

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Welcome to the Advanced Placement® Chemistry course!

Dear Future AP Chemistry Students,

We are excited to meet all of you and begin our studies! AP Chemistry is a challenging college level course that requires dedication. The course includes an inquiry-based laboratory sequence and a full year of freshman level college chemistry curriculum. The AP Chemistry Examination is on Thursday, May 9th, 2019.

To get the most out of AP Chemistry, we encourage you to begin the year prepared by checking some of the fundamental knowledge and skills presented in your first year chemistry course. The summer assignment includes a pre-assessment that will help you determine which topics you need to review and a list of materials to help you review each topic. The pre-assessment and review work must be completed by Friday, Sept. 7, 2018.

The summer assignment should be equivalent to 2-6 days of homework, depending on how many topics you need to review. The review is meant to strengthen your foundation and help you begin the year on the right foot, not take up your whole summer. We recognize the value of time spent with your family and loved ones. Summer vacation should be the optimal time to relax, rejuvenate, and re-connect to what you are passionate about.

We look forward to seeing you in the fall, and best of luck in your studies!

~ AP Chemistry Teachers
## AP Chemistry Summer Assignment:

1. Do the pre-assessment on Schoology. The pre-assessment is to be used as a diagnostic test to determine which topics you are confident in and which topics you need to review.
2. Use the chart below to determine what topics you need to review. You are expected to do the review that goes with all the questions you missed on the pre-assessment. For the questions you got correct, the review is optional.

**Pre-assessment and review work must be completed by Friday, Sept. 7, 2018.**

**Textbook:** *Chemistry - The Central Science* by Brown & LeMay, 11th ed
Answers are provided at the back of the textbook for all problems in red.

<table>
<thead>
<tr>
<th>Questions from pre-assessment</th>
<th>Topic and Textbook Chapter</th>
<th>Review Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1-4</td>
<td>Names &amp; Formulas (Ch. 2)</td>
<td>Read and do exercises from Chapters 2-4 in the Ultimate Chemical Equations Handbook (found in the Summer Assignment folder in the materials section in Schoology) Ch. 2 Simple Inorganic Formulas &amp; Nomenclature Ch. 3 Oxidation Numbers: Cations &amp; Anions Ch. 4 Ternary Nomenclature: Acids &amp; Salts</td>
</tr>
<tr>
<td>#5-8</td>
<td>Stoichiometry (Ch. 3)</td>
<td>Watch the video Bozeman Science #28 Stoichiometry <a href="http://www.bozemanscience.com/ap-chem-028-stoichiometry">http://www.bozemanscience.com/ap-chem-028-stoichiometry</a> Do problem set from the textbook, Chapter 3: 3.1, 3.3, 3.5, 3.13, 3.21 a&amp;c, 3.23 a, 3.25a, 3.43 a, 3.45 a, 3.47a, 3.63, 3.71, 3.73</td>
</tr>
<tr>
<td>#9-12</td>
<td>Significant Figures</td>
<td>Do as many practice problems from these on-line resources as you like, until you feel you have mastered the rules of significant figures. <a href="https://www.khanacademy.org/math/arithmetic/decimals/significant-figures_tutorial/e/significant_figures_1">https://www.khanacademy.org/math/arithmetic/decimals/significant-figures_tutorial/e/significant_figures_1</a> <a href="http://ths.sps.lane.edu/chemweb/unit1/problems/significantfigures/">http://ths.sps.lane.edu/chemweb/unit1/problems/significantfigures/</a> <a href="http://www.chemistrywithmsdana.org/wp-content/uploads/2012/07/SigFig.html">http://www.chemistrywithmsdana.org/wp-content/uploads/2012/07/SigFig.html</a></td>
</tr>
</tbody>
</table>
| #13-16 | Aqueous Reactions & Net Ionic Equations (Ch. 4) | Watch the video Bozeman Science - #27 Molecular, Ionic, Net Ionic Equations  
Read and do exercises from Chapters 9 in the Ultimate Chemical Equations Handbook: “Double Replacement (Metathesis) Reactions” (found in the Summer Assignment folder in the materials section in Schoology) |
| #17-20 | Bonding & Molecular Geometry (Ch. 8 & 9) | Watch the video Bozeman Science - #22 Lewis Diagrams-VSEPR Models  
Do problem set from the textbook, Chapter 8: 8.39, 8.43, 8.45, 8.53, 8.55  
Do problem set from the textbook, Chapter 9: 9.4, 9.15, 9.21ab, 9.25, 9.31 |
| #21-24 | Gases (Ch. 10) | Watch the video Bozeman Science - #14 Gases -  
[http://www.bozemanscience.com/ap-chem-014-gases](http://www.bozemanscience.com/ap-chem-014-gases)  
Do problem set from the textbook, Chapter 10: 10.3, 10.6, 10.8, 10.9, 10.32, 10.59, 10.121 |

Please utilize the available resources to help you review topics of your choice. The URLs below represent some of the available chemistry addresses available. Please feel free to expand the list and find other web sites that help prepare you for the coming year.

**Resources:**

College Board AP Chemistry Website:

[https://apstudent.collegeboard.org/apcourse/ap-chemistry](https://apstudent.collegeboard.org/apcourse/ap-chemistry)

About the AP Chemistry Exam:

[https://apstudent.collegeboard.org/apcourse/ap-chemistry/about-the-exam](https://apstudent.collegeboard.org/apcourse/ap-chemistry/about-the-exam)

General First Year Chemistry Review:

[http://www.sciencegeek.net/APchemistry/APtaters/directory.shtml](http://www.sciencegeek.net/APchemistry/APtaters/directory.shtml)

Bozeman Science - all AP Big Ideas by Topic:
