

**Clearview Regional High School District
2017 Summer Assignment Coversheet**

Course:	AP Chemistry
Teacher(s):	Jim Navins
Due Date:	Online coursework will be completed by: Friday 09/08/2017
Purpose of Assignment:	Students will maintain and sharpen skills established in Honors Chemistry through on-line introduction to Mastering Chemistry Program that will be utilized to meet the rigorous demands in AP Chemistry.
Description of Assignment:	<p>Students will secure online registration from Mr. Navins. Students will complete online activities, utilize tutorials, and solve unit problems. All activities are accessible online.</p> <p>Assignments consist of tutorials and practice test questions in Units Three and Four. Each unit will consist of practice questions that have been part of our Honors Chemistry curriculum. The total amount of time dedicated to the summer work is five (5) hours.</p>
NJ Student Learning Standards covered:	<p>HS-PS1-1. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. Clarification Statement: Examples of properties that could be predicted from patterns could include reactivity of metals, types of bonds formed, numbers of bonds formed, and reactions with oxygen.</p> <p>HS-PS1-8. Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay. Clarification Statement: Emphasis is on simple qualitative models, such as pictures or diagrams, and on the scale of energy released in nuclear processes relative to other kinds of transformations.</p> <p>HS-PS1-2. Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. Clarification Statement: Examples of chemical reactions could include the reaction of sodium and chlorine, of carbon and oxygen, or of carbon and hydrogen.</p>

	<p>HS-PS1-4. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. Clarification Statement: Emphasis is on the idea that a chemical reaction is a system that affects the energy change. Examples of models could include molecular-level drawings and diagrams of reactions, graphs showing the relative energies of reactants and products, and representations showing energy is conserved.</p> <p>HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. Clarification Statement: Emphasis is on using mathematical ideas to communicate the proportional relationships between masses of atoms in the reactants and the products, and the translation of these relationships to the macroscopic scale using the mole as the conversion from the atomic to the macroscopic scale. Emphasis is on assessing students' use of mathematical thinking and not on memorization and rote application of problem-solving techniques.</p>
<p>Grading/Use of Assignment: Category/Weight for Q1:</p>	<p>The summer work is graded as a classwork assignment for MP #1.</p> <p>Category: Multiple (classwork) grades for each unit Classwork Weight: 1.0 out of 1.0 Test/Assessment: Multiple assessment grades designated as an (Assessment) grade with a weight of (0.5 minor assessment or major assessment 1.0) Following check for understanding during the month of September.</p>
<p>Specific Expectations:</p>	<p>Students will establish an online protocol for classwork and homework in the Mastering Chemistry program.</p>
<p>Where to Locate Assignment:</p>	<p>Online (masteringchemistry.com) and protocol was established with each registered student in June with Mr. Navins</p>
<p>Teacher Contact Information:</p>	<p>The coursework is open to AP Chemistry students through Pearson Science in their online Mastering Chemistry program. (masteringchemistry.com) Login and Password information is available from Mr. Navins and assigned to each student in June.</p> <p>Jim Navins - Navinsja@clearviewregional.edu</p>

Additional Help/ Resource(s):	Textbook, e-Book, and online resources available online through Mastering Chemistry (masteringchemistry.com) Princeton Review for AP Chemistry
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