**AP Chemistry 2024 – SUMMER ASSIGNMENT**

**Hazleton Area Academy of Sciences**

**Mr. Moss**

**Introduction**

 Welcome to the wonderful world of Advanced Placement Chemistry. This is a course (and a test) that requires much advanced preparation and work throughout the year. You will have to work hard.

Unit tests will be on a college level with questions that truly test your knowledge and understanding of key concepts in Chemistry. The questions will come from AP Central and help to prepare you for what to expect on the AP Chem test in May 2025. To be successful on these tests you must work and prepare yourself on a daily basis. *Studying the night before the test will not be enough!* And although there are certain things that you will have to **memorize** to be successful, *memorization of concepts will not work in Chemistry*. You must be able to apply your knowledge to answer questions and solve problems that you have not seen before. That requires a deeper understanding of the key concepts and theories and being able to manipulate units to convert to a final answer or plan multistep calculations to solve problems.

**Textbook**

AP Chemistry – The Central Science (Brown & LeMay) 12th edition

You may take a copy of the book as well as the Barron’s AP Chemistry Test Prep book over the summer. This textbook will be used as reference only. Our curriculum will follow the updated CED from AP Central that dictates the topics that students need to know in order to be successful on the AP Exam.

**Assignment:**

1. Download the **UNIT 0 Notes (2 documents)** from my webpage [Moss, K / AP / College Chemistry (hasdk12.org)](https://www.hasdk12.org/Page/22143)

These notes will serve as a review of major concepts that you must be familiar with from Magnet Chemistry and ***will not*** be taught in AP. You will be expected to know this material. Use the notes to review and refresh your memory.

1. Complete the following **SUGGESTED PROBLEMS** from the first 2 chapters of the Brown & LeMay textbook. These are suggested problems and will not be collected for a grade. If you feel comfortable with the material, then you do not have to do the problems. I have chosen problems that ALL have the correct answers in the back of the textbook so it will be easy to check your answers. Be aware that AP requires you to KNOW the formula and charge of all the common ions. ***NO COMMON ION SHEETS ARE ALLOWED on the tests or on the AP EXAM!!!!!***

**SUGGESTED PROBLEMS:**

*PAGES 33 - 36*

1.25, 1.27, 1.29, 1.35, 1.37, 1.39, 1.45, 1.49

*PAGES 70 - 73*

2.21, 2.23, 2.25, 2.37, 2.45, 2.51, 2.53, 2.59, 2.61, 2.63, 2.65, 2.67, 2.69, 2.71

1. **We will have a TEST on the SECOND DAY** (*Wednesday SEPT 4*) dealing with nomenclature and formulas of compounds (ionic, binary molecules and acids). You will NOT be permitted to use a common ion sheet with formulas and names. The formulas, names and charges MUST be memorized for the AP test so we need to know them.