AS Chemistry Summer Assignment for Fall 2019

Dear Student,

In order to have the most positive start and a successful year in AS Chemistry, we need you to review some science that is considered background knowledge for the AS Chemistry student. Please do the following things to help you prepare for an exciting year of chemistry at a fast pace and challenging level.

This summer assignment is mandatory! (You will need to have completed Biology successfully with a teacher recommendation for AS Chemistry and have completed Geometry with a B- and concurrently in Algebra 2 or above next year in order to be enrolled in AS Chemistry – check with your counselor).

1) **Pick up Modern Chemistry Holt edition textbook from library** – check library for hours (mabears.org). Library is closed during July. *We do not have online textbook access.*

2) Get to know your textbook. Please complete **textbook scavenger hunt** on back side of this sheet.

3) **Read the first two chapters (Ch 1 Matter and Change + Ch 2 Measurements and Calculations)** of the textbook and take notes, Cornell style (questions in margins - summary at end of each section – each chapter has 3 sections). (notes should be written by hand unless you have special issues that you have discussed with school counselor in advance.) Please do on binder paper. Please make sure notes include basic concept, definition, and specific examples. If notes are regarding a calculation, please include a sample calculation problem. Each chapter should take about 3 pages of notes and should be your reference when doing the review questions.

4) **Answer chapter 1 and 2 review questions** P.22 #1-26 ALL and P.59-60 #1-46 EVENS on binder paper. Please answer questions in a way that incorporates the question – show work for calculations. All numbers need appropriate units.

**BRING #2-4 ON FIRST DAY OF SCHOOL! (DO NOT BRING TEXTBOOK!)** The summer assignment is your first graded assignment and you will have a test on it MONDAY, AUGUST 19th. You will be able to use your Cornell notes and review questions for certain portions of the test. The information in the first two chapters is a review of previous science concepts and math skills that should have been covered as part of your middle school science and biology classes. You must know the metric system (prefixes kilo-pico) and be comfortable with basic algebra and % problems. Review lessons on dimensional analysis and significant figures are available on Khan Academy. Also please make sure you have the following school supplies to work with on a daily basis: Binder, pen, #2 pencil, ruler, non programmable scientific calculator with exponent (EE or exp) button and Log button, colored pencils.

Thank you so much and have a great summer! We look forward to meeting you in the fall.

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Chemistry Textbook Scavenger Hunt
Directions: Use the textbook to complete the following questions.
1. Index Number of pages _____ location ___________________
   a. What is a topic that has several pages of information? ________________
   b. What is a topic that has a single page listed? _________________

2. Table of Contents number of pages _________ location __________ number of sections ______
   a. List three sections that interest you: ___________ ____________ ____________

3. Glossary Number of pages __________ location __________
   a. What kind of information does it contain? How can a glossary help you?
   b. Find two interesting vocabulary terms that start with your initials: ex: Mike = molarity

Chapters (ch 23 is a good one to look at)
4 a. Look at the first page of a chapter. What information is provided here?
   b. Look at the last three sections of a chapter. What do you find there?
   c. How can this help you?

5. Boldfaced Words
   a. List three boldfaced words in the same chapter. What do they mean?
   b. In what ways can you use a textbook to find the meanings of words?

6. Photographs
   a. Pick a photo you find interesting and write down the page number: ___________
   b. Describe the photo: c. Study the caption and write down what you learned about this photo:

7. Visual Aids
   a. Locate a graph, chart, diagram, or map and write down the page number: ___________
   b. Study it and read all of the print that accompanies it. Explain what this visual aid can teach you.

8. Find the Element Handbook-group 17 Halogens p.___________
   Which halogen is most interesting to you?______ Why?________________________________________________________

9. What are some other features in your textbook? How do these help you learn new information?