

Honors Chemistry Information and Summer Assignment

Welcome to Honors Chemistry! This is a fabulous course and in order to ensure we can get to all the great topics available to us, we have a summer assignment. The goal of the assignment is to review foundational topics you have already covered in prior science courses, memorize important content, practice using OneNote, and apply observational skills to three mini labs.

What You Will Need:

*Textbook

The school will arrange pick up times for your textbook:

Pearson Chemistry, Foundation Edition by Wilbraham, Staley, Matta, & Waterman

*OneNote

Your summer assignment will be uploaded to the appropriate tabs in OneNote. Once you sign up for the class and I have received my roster, I will send you an email invite to the OneNote notebook and you can get started. For those of you who have not used OneNote yet, you can watch the following brief tutorial: <https://www.youtube.com/watch?v=pQrcJWi8EZw&t=16s> .

Make sure you are signed into your JCS OneDrive account before you do any of this. If you are in your JCS OneDrive and using your JCS email address (please don't link it to another email address since this leads to upload glitches) everything works beautifully.

Notice that there is a "Content Library." Content Library is where I will put all your class powerpoints and information. Then, notice that you have your own tab with your name. This is your tab and the only two people who have access to that tab are you and me. If you click on your name, you will see a HW tab. This is where you will upload your summer assignment. Under the HW tab you will see a "Labs" tab. This is where you will upload the 3 mini labs.

Summer Assignment: Due Date – First Friday after School Reopens

There are 3 categories here: Memory work, book work, and 3 mini kitchen labs

I - Memory work

1. Memorize the following elements and symbols of the periodic table: Elements 1-20, 29, 30, 34, 35, 36, 37, 38, 47, 50, 53, 54, 55, 56, 78, 79, 80, 82, 83, 86, 88, 92. Probably the best way to do this is using 3x5 cards – place the symbol on one side and the element on the other. You can also make a quizlet and then have it on your phone to practice whenever you like.

There is a great periodic table on page 946 of your text, but you can use any periodic table available on the internet since the element numbers and symbols are the same!

We will have a quiz over this the first Friday after school goes back in August. I will give you either the symbol and you will write the element name or vice versa. Pay special attention to upper case versus lower case eg: Copper is Cu, not cu or CU (writing

CU would mean Carbon bonded to Uranium and *that* is something completely different than Copper!)

Memorizing these elements will give you a working knowledge of the most common elements and will ensure you don't have to constantly be looking up names!

2. Memorize the "Powers of 10" table on page 69 of the textbook. It is the first table on the page. Understand the last column called "example relationship" but you don't have to memorize that column. **This quiz will be on the 2nd day of school!** I suspect you probably had to memorize these for a prior math or science class, so hopefully this will come easily! Knowing these well gives you a good foundation for when we start manipulating quantities.

II - Book work – Overview

Some of the answers to the following problems are in the back of the textbook. Therefore, you **MUST** show all your work. The goal is to get the answer yourself, check your work against the provided answer, and then trouble shoot where needed. Answers need to be thorough and complete. I will be available this summer via Zoom or email if you get stuck.

Book work: Chapter 1

Read chapter 1 thoroughly. The book is very readable and easy to understand relative to other chemistry textbooks. Don't skip the reading. It will help you remember concepts you learned from your last science course and mesh them with the new knowledge.

Do the following questions and attach them to the HW tab in OneNote labeled: "Chapter 1 HW"

Page 7: Q 2, 4, 5, 6, 7, 8

Page 16: Q 14, 17, 18, 19, 20, 22

Page 23: Q 48, 49, 50, 52

Additional question: What is the difference between a Law and a Theory? Explain fully

Book work: Chapter 2

Read chapter 2 thoroughly. Don't skip the reading. It will help you remember concepts you learned from your last science class! Everything in this chapter is probably review from a prior science class.

Do the following questions and attach them to the HW tab in OneNote labeled: "Chapter 2 HW"

Page 31: Q 3, 4

Page 35: Q 8, 10, 13

Copy the table on page 38 onto your HW paper – this summarizes the whole section!

Page 39: Q 14,

Page 42, Q 16, 17, 20, 21, 22, 23

Page 46 Q 26, 27, 28, 30, 31, 32

III - Kitchen Science Mini Labs:

1. On page 15 of your textbook, conduct the mini lab described. You can do this in your own kitchen. Take a picture of your work. Neatly write out your observations and conclusions. Attach the picture, observations, and conclusions to the “Labs” tab < “Bubbles!” under your name in OneNote.
2. After reading chapter 2, using something edible, come up with one simple way to demonstrate a physical change and take a picture of it; then come up with one way to demonstrate a chemical change and take a picture of it. This MUST be something safe, edible, and already around your house! You must have prior parent approval!!! Upload your pictures to “Labs” tab < “Physical vs Chemical” under your name in OneNote. Label which one is physical and which one is chemical. You should be able to find something and do this in under 10 minutes – keep it very simple.
3. Do the mini lab on page 33 of your text. It is called “Separating Mixtures.” Take a picture of your work. Neatly write out your observations and conclusions. Attach the picture, observations, and conclusions to the “Labs” tab < “Separating Mixtures.”

Assignment Test Rubric

Due: 1st Friday

Categories	Item number	Subcategories	Points	Total
Mini Labs	I	picture	5	15
		observations	5	
		conclusions	5	
	II	picture-physical	3	10
		correct label	2	
		picture-chemical	3	
		correct label	2	
	III	picture	5	15
		observations	5	
		conclusions	5	
Memory work	I	Chem symbols quiz	20	30
	II	Powers of 10 quiz	10	
Book Work	Chapter 1	All Q complete	20	45
	Chapter 2	All Q complete	20	
	Quality	Neat, clear upload	5	
				115

