

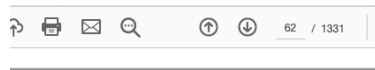
Honor's Chemistry Summer Assignment

For this class you will need some supplies. You will print out a number of items to put into your composition notebooks so you might want to have scissors and tape at home. In class, I have them available for your use. Here's the list:

- Composition notebooks (minimum of 4-2 for lab and 2 for classwork)
- Calculator (discussed below)
- Pens, pencils, markers and highlighters

I am excited about a new year! I have lots of labs and demos planned. In order to get through all the content, you need to be prepared to "hitting the ground running!" So, you do have a summer packet to work through. I will collect it on the second day of class. I expect you to work on it over time. Don't procrastinate. Set aside 20 minutes on 6 days and you will complete the packet! I have set it up as 6 assignments. So, please do in order.

Please download your textbook (as a pdf) [here](#). It is free. Don't delete any pages. I will refer to pages by the page number in the pdf (not the page in the textbook). Here is an example:



The "book page is 52, the pdf page is 62 as you can see in the upper right corner of this picture. So, if I give you a page number, you can type it into the page number box and it will take you to the right location!

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Key Terms

accuracy how closely a measurement a

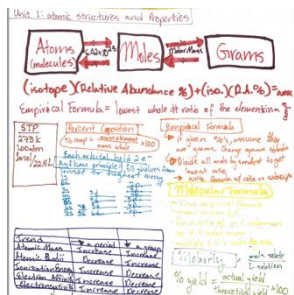
atom smallest particle of an element thi

Contact me with questions as soon as they arise. I will be checking email daily. My email is bautistad@sbaeagles.org.

Assignment 1 Science Skills

Go to page 62 in your book. You need to hand write the definitions for chapter 1. There are a TON! You should write them in your own words (shorten them). You can do these assignments on notebook paper since I will collect them.

Assignment 2 One Page Wonder



For each unit you do in Honor's Chemistry, you will make a summary page for the key concepts, ideas, calculation and some vocabulary. It is in the form of a visual organizer. It should be colorful, organized, accurate and short! This is similar to a cheat sheet.

Here is one from AP Chemistry. Please do one for Chapter 1 in your book. It must be handwritten, the writing needs to be legible, it must cover the entire chapter and it must be one side of one sheet of paper. Color is optional.

Assignment 3 Lab equipment and safety

In order to do more labs, you have to be familiar with lab safety and equipment. The last page of this packet has pictures and names of commonly used lab equipment. Please hand draw pictures of each piece of equipment. Clearly label each. Also you need to read and understand the lab safety contract. We will have a quiz on this material sometime in the first full week of class.

Assignment 4 Chemistry is Applied Math!

You will need a scientific calculator for this class. You can use the one you have for Honor's Algebra 2. It needs to have buttons for Log, Ln, square root, and scientific notation. I will teach you each of these operations when we get to it. I would like you to start with the right calculator. The TI 30 will work but I prefer the TI 83, 84 or above.

End of Chapter questions

Chapter 1 problems: 48-54, 64-70, 89, 91-95

Assignment 5 The ATOM!

You have no doubt heard of atoms. I want you to read chapter 2 sections 1, 2 & 3. Create a one page wonder that includes the following elements. You will get to use this on a quiz so make it good!

- Dalton's atomic theory (5 key points)
- Law of definite proportions
- Law of multiple proportions
- Experiments that lead to the discovery of:
 - Electron
 - Proton
 - Nucleus
 - Mass of an electron
- Isotopes
- Atomic mass
- Atomic number
- Chemical symbols
- Calculation of average atomic mass

Assignment 6 Chemistry in real life?

Chemistry is happening all the time; all around and in you! As a start to class, I want to hear about some chemistry that you have seen. In the first 2 days of class, you will talk about your results for assignment 6. You will have about 5 minutes to share your real life chemistry. If you are having trouble finding a topic, drop me a note. Everyone will talk! If you prefer to make a video or poster, that is fine but it must be done by the first day of school. You might take inspiration from a movie, show, book, meme etc. Keep it clean and if in doubt, ask me. If you wouldn't talk about it in front of one of the sisters, select another topic. As a part of this, I have a list of books for summer reading. Please select one from the list. Your real-life chemistry is not limited to your book, but it might help to inspire you. Below are books that I think might be helpful, but you can select another book, with my approval. Contact me if you need help locating a book. We will discuss our summer reading in class.

Book List

- Sam Kean's *The Disappearing Spoon*
- Oliver Sacks' *Uncle Tungsten*,
- Penny Le Couteur's and Jay Burreson's *Napoleon's Buttons*,
- Theodore Gray's *The Elements*,
- John Emsley's *Molecules at an Exhibition*
- Adrian Dingle *How To Make A Universe With 92 Ingredients*
- *A Tale of Seven Elements*. Eric Scerri.
- *The Transuranium People, The Inside Story*. Darleane Hoffman, Al Ghiorso and Glenn Seaborg
- *The Lost Elements: The Periodic Table's Shadow Side*. Marco Fontani, Mariagrazia Costa and Mary Virginia Orna.
- *Nature's Building Blocks: An A-Z Guide to the Elements*. John Emsley
- *The Periodic Table, its story and its significance*. Eric Scerri
- *Molecules of Murder, Criminal Molecules and Classic Cases*. John Emsley.
- *The Periodic Kingdom: A Journey into the Land of the Chemical Elements*. Peter Atkins
- *The Cartoon Guide to Chemistry*. Larry Gonick and Craig Criddle

Lab Equipment

We will have a quiz on identifying lab equipment during the first full week of school.

