Chem 3.1

Goals:

\*measure and calculate density of different types of matter

\*design and carry out an experiment to find the density of water

Plan:

Bellwork: Determine the precision and accuracy available on the rulers we will be using, how will we be estimating amounts

Pre-lab: Safety concerns using balances (no glasses required for today’s lab

Lab:

* Correct calculations and use of significant figures
* Implementation of a scientific plan to calculate density for water

Clean-up

HW: Complete calculations for density, complete post-lab questions, prepare notes for first chemistry quiz

Chem 3.2

Bellwork: prepare notes for quiz (quiz is open note)

Plan: Chemistry quiz (scientific method and measurement)

HW: Article <https://www.livescience.com/57050-4-new-superheavy-elements-names-approved.html>

1. How did they choose the names of these elements?
2. Why might some countries and places in the world disagree with a name that other people have no problem with?
3. Describe an “island of stability”
4. If we discovered a new element at our school, what would you propose we name it? Use the conventions discussed in the article.

Chem 3.3

Goals:

* Define matter and how we classify it
* Compare and contrast homogeneous and heterogeneous mixtures
* Compare and contrast elements and compounds

Bellwork:

Imagine yourself in the old west when a prospector comes to you and wants to sell you a nugget of what he claims is gold

1. What visual characteristics would indicate it is gold?
2. What other properties could we test to determine the identity?

Discussion: intensive vs extensive properties

How do we define a mixture and determine if something is a mixture

* Brainstorm examples of mixtures that can be seen with the naked eye and those that are not obviously mixtures
* Classify each as either homogeneous or heterogeneous
* How would we separate certain mixtures?
* Experimentally separate a mixture in class (water, salt, iron filings, paper and tape balls)

Contrast between elements and compounds

HW: Notes summary