

Immaculate Conception High School
Summer Assignment
Chemistry College Prep

* Email Ms. Lusamba if you have any questions: plusamba@ichspride.org

Direction: This assignment consists of two parts, each of which addresses one area of chemistry you will encounter throughout the year. Complete the entire summer assignment by Tuesday September 04, 2019. For each part create a new document and answer. Share all documents with Ms. Lusamba by the due date when completed.

Part 1: Quick Review of Metrics

We will be using the International System (SI) for unit conversion through the year. It is therefore important that you know how the system works. The SI is a worldwide known system of measurement and unit conversions for a number of measurements in science. Our class will focus on Mass, Length, and Volume.

General SI units

Mass = Grams (g)

Length = Meters (m)

Volume = Liters (L)

Conversions: Use the following phrase to help you remember the order of units

“King Henry Died Monday Drinking Chocolate Milk”
Kilo Hecto Deca Meter Deci Centi Mili

1 Kilo = 1000 g

1 Hecto = 100g

1 Deca = 10g

1 Deci = 0.1g 1g = 10 Deci

1 Centi = 0.01g 1g = 100 Centi

1 Mili = 0.001g 1g = 1000 Mili

You try it!!

1. If you have 9900 g of donuts, how many donuts do you have if each donut has a mass of 150 g?
2. If the recipe calls for 10 kiloliters to bake 1000 cakes. How many centiliters do you need in total?
3. How many miles are found in 10 centimeters.
4. It takes Dylan 3 days to travel from New York to California. How many hours does it take Dylan to arrive at his destination?

Part 2: Exploring elements of the Periodic Table

You will explore 25 elements on the periodic table using webelements.com. For each element you will create a flashcard using Google Drawings. Your specific elements are assigned by your last name in the table below:

Last Name A-F	Last Name G-L	Last Name M-S	Last Name T-Z
Hydrogen - Manganese	Iron - Tin	Antimony - Rhenium	Osmium - Fermium

Procedure:

1. Go to www.webelements.com.
2. You need to make 25 flashcards of the 25 elements assigned to you, by your last name, using

Google Drawings

3. By searching the site you will be able to find all the information you need for each flashcard.
4. The tabs on the site that you will need to use are “Key Information”, “Uses”, “Physical Properties” and “Compounds”. You can click on an element under this tab and explore the important information.
5. Each flashcard must include the following information:
 - Element Name
 - Element Symbol
 - Element Number
 - Element Atomic Mass
 - An drawing of the atomic structure
 - Description of physical properties of the element, including:
 - Is it a solid, liquid or gas at room temperature o
 - It is a metal, a nonmetal or a metalloid
 - What is it melting or boiling point in °C
 - An example of the elements use.
 - How the element is useful? For example, what is produced from this element?
 - How is the element used in consumer or industrial products?