**Worksheet #1**

**Name: Period: Seat#:**

**Directions:** The first part of this assignment is to take notes in your composition book on the YouTube Video Lecture “N1- Chemistry Math Review,” link below. Once you are done with the notes, answer the worksheet questions on this paper to make sure you practice and understand what you took notes on.

* *Page 1 in notebook (very first right hand page when you open your notebook) – saved for your “All About Me” page*
* *Page 2 (the back of page one, left hand page) – saved for Safety Notes*
* *Page 3 (right hand page, second sheet of paper in your notebook) – where your notes for this assignment go.*

You may take notes in any way you like (bullet points, traditional Roman numeral outline, etc) but make sure you meet the following requirements. Check them off below to ensure you follow them!

* Title the notes with a big, bold, underlined, obvious title of “N1- Chemistry Math Review”
* Under your title in RED PEN write the “Target” you see below. This is our objective, goal, etc.
*Target: I can use scientific notation and the metric system this year in my chemistry class.*
* Capture all key ideas BUT do NOT copy the slides word for word!
You are a *note taker*, you are NOT a *photocopier machine* – no copying!
* Leave some space between ideas – our brains need visual “gaps” around key ideas to help us store and process the information. I do NOT want to see people writing on every single line all squished together. Chunk your info, leave gaps, spread things out, etc.

**Link to Mrs. Farmer’s YouTube Lecture: Need to hear someone else explain it a 2nd time?** <https://youtu.be/IfPJ7xKOfQU> Metric Conversions: Scientific Notation:

[tinyurl.com/bcva5sds](https://tinyurl.com/bcva5sds) [tinyurl.com/55s5b36n](https://tinyurl.com/55s5b36n)

**Directions:** You *must* show work the way you were shown in the video.
You should be using the little “loops” to show how many times you are moving the decimal.

**Standard Notation into Scientific Notation** – Put the number in Scientific Notation

|  |  |  |
| --- | --- | --- |
| **1)** 2455  \_\_\_ . \_\_\_\_\_\_ x 10 \_\_\_\_\_  | **2)** 0.0000874  | **3)** 3.204 |

**Scientific Notation into Standard Notation** – Put the number in Standard Notation

|  |  |  |
| --- | --- | --- |
| **4)** 1.25 x 104  | **5)** 7.052 x 10-2  | **6)** 6.4 x 10-6 |

***Turn paper over! Not finished yet...sorry!* ☺**

**Metric Units** – Write the correct abbreviation for each metric unit.

|  |  |  |  |
| --- | --- | --- | --- |
| **7)** Kilogram | **8)** Milliliter | **9)** Kilometer | **10)** Meter |
| **11)** Decimeter | **12)** Centimeter | **13)** Gram | **14)** Liter |

**Metric Conversions** – Convert into the unit asked for. Show your loops on the King Henry Line given, and then write your own King Henry Line for the ones where I didn’t write it for you.

|  |  |
| --- | --- |
| **15)** 75 mL 🡪 Liters*K H D B d c m* | **16)** 82 cm 🡪 m*K H D B d c m* |
| **17)** 0.1298 km 🡪 mm | **18)** 56.4 g 🡪 kg |

**Metric Conversions** – Convert the measurements into the same units *before* you try to compare them! It doesn’t matter which one you convert to, as long as they have the same unit when you are done. Show your loops on the King Henry Line given. Write a <, >, or = sign in the circle once you compared them.

|  |  |
| --- | --- |
| **19)**56cm 6m*K H D B d c m* | **20)** 7g 698mg*K H D B d c m* |