**Scientific Notation and Conversion Review**

**Remember converting:**

**King Henry Died by drinking chocolate milk……..**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **King** | **Henry** | **Died** | **by**  | **drinking**  | **chocolate** | **milk** |
| **Kilo** | **Hecto** | **Deka** | **base** | **deci** | **centi** | **milli** |

**Example:**

Convert 1 km to millimeters:

**K H D b d c m**

Step 1: start with your given (1 km)

Step 2: find it on the chart (kilo)

Step 3: move the decimal place

however many times until you

get to what you are looking for (milli)

In this case, we started with 1 km. We moved the decimal to the right 6 times.

There are 1,000,000 millimeters in 1 km.

**Do #1-3 Using K H D b d c m :**

1. Convert 4 km to millimeters

2. Convert 18,000 centiliters to hectoliters

3. Convert 11 decimeters to dekameters

**Scientific Notation:**

Using powers of ten, we will simplify really large numbers or really small numbers.

For example:

300,000,000 is also equal to 3.0 x 10⁸

Step 1: Find the decimal point.

Step 2: Move the decimal point until

you get it to the right of the first whole number.

Step 3: Count how many times you moved

your decimal point—this is your power.

Example:

300,000,000

We moved the decimal point 8 times to the left.

This means 300,000,000 is equal to 3.0 x 10⁸

If we had the number .00000003 ---

This would be equal to 3.0 x 10-8

Why??

**When we move the decimal to the left, the power is positive**

**When we move the decimal to the right, the power is negative**

**Extending KHDbdcm:**

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**Do # 1-5 using Extended KHDbdcm ----- Put answers in standard notation and scientific notation!!!!!!!!**

1. Convert 8 gigameters to meters

2. Convert 4.2 gigahertz to nanohertz.

3. Convert 84,600 micrograms to kilograms

4. Convert 0.405 Megahertz to microhertz