**Scientific Notation and Conversion Review**

**Remember converting:**

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **King** | **Henry** | **Died** | **by** | **drinking** | **chocolate** | **milk** |
|  |  |  |  |  |  |  |

**Example:**

Convert 1 km to millimeters:

**K H D b d c m**

Step 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Step 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Step 3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_millimeters in \_\_\_\_\_\_\_\_\_\_\_\_ 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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, we will simplify really \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

numbers or really \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ numbers.

For example:

300,000,000 is also equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Step 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Step 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Step 3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example:

300,000,000

We moved the decimal point \_\_\_\_\_\_\_\_\_\_\_ times to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This means 300,000,000 is equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

If we had the number .00000003 --- This would be equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why??

**When we move the decimal to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the power is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**When we move the decimal to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the power is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**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

5. Convert 14 meters to nanometers