CONVERTING AND
SCIENTIFIC NOTATION

Show work on notebook paper!

**Convert:**

1. 1000mg 🡪 g **5)** 80 cm 🡪 m
2. 1L 🡪 mL **6)** 75 mL 🡪 L
3. 160cm 🡪 mm **7)** 5.6 m 🡪 cm
4. 1.4 km 🡪 m **8)** 65 g 🡪 mg

**Compare using < , > , or =**

1. 7g ? 698mg
2. 1,500 mL ? 1.5 L
3. 536 cm ? 53.6 dm
4. 3.6 m ? 36cm

**Write the abbreviation for each metric unit and tell if it measures mass, length, or volume**

1. decigram
2. milliliter
3. meter
4. decameter

Write in scientific notation:

1. 12
2. 0.156000
3. 0.00000000853

Write in standard notation:

1. 1.98 x 104
2. 4.5 x 10-6
3. 2.71 x 10-1

What is wrong with the following #s?

1. 0.54 x 105
2. 97 x 10-4

Why does this not make sense? Look at the number/exponent!

1. The diameter of a particular atom is 1.3 x 108 cm.

Solve the following word problems:

1. In Australia, the people use approximately 2,240,000,000 pounds of bread in a year. Put in scientific notation
2. 0.000065 is the wave length of yellow light. Put in scientific notation.
3. A proton weighs 1.673 x 10-27 kg, a neutron weighs 1.75 x 10-27 kg, and an electron weighs 9.11 x 10 -31 kg. Write the heaviest particle’s mass in standard notation. Make sure you don’t forget to look at the exponent in addition to the number itself!

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