SCIENTIFIC NOTATION

Example: $b \times 10^0 = b \times 1 = b$ $7 \times 10^0 = 7 \times 1 = 7$

1. 2.36×10^0 = **2.36 = 2.4**
2. 5.8×10^0 = **5.8**
3. 9.2×10^3 = **9,200**
4. 6.3×10^2 = **630**
5. 4.2×10^0 = **4.2**
6. 8.9×10^2 = **890**
7. 6.6×10^3 = **6,600**
8. 8×10^{-3} = **0.008 = 0.01**

Convert to scientific notation

1. 0.00075 = **7.5×10^{-4}**
2. 20000 = **2.0×10^4**
3. 630000000 = **6.3×10^8**
4. 0.000047 = **4.7×10^{-5}**
5. 300000 = **3.0×10^5**

PRACTICE PROBLEMS:

#	UNIT	ABBREV	EXPRESS AS EXPONENT	EXPRESS AS MULTIPLICATION PROBLEM	EXPRESS AS FUNDAMENTAL UNIT
1.	*1 kilometer*	*(km)*	*1 x 10^{3} meters*	*1 x 1000 meters*	*1000 meters*
2.	1 megameter	(Mm)	**1 x 10^{6} meters**	**1 x 1,000,000 meters**	**1,000,000 meters**
3.	2 deciliters	(dL)	**1 x 10^{-1} liters**	**1 x 0.1 liters**	**0.1 liters**
4.	10 centimeters	(cm)	**10 x 10^{-2} meters**	**10 x 0.01 meters**	**0.1 meters**
5.	4 millimeters	(mm)	**4 x 10^{-3} meters**	**4 x .001 meters**	**0.004 meters**
6.	1.6 gigagrams	(Gg)	**1.6 x 10^{9} grams**	**1.6 x 1,000,000,000 grams**	**1,600,000,000**
7.	22 nanometers	(nm)	**22 x 10^{-9} meters**	**22 x 0.000000001**	**0.000000022**
8.	1000 micrograms	(mcg)	**1000 x 10-6 grams**	**1000 x 0.000001 grams**	**0.001 grams**
9.	5.5 hectograms	(hg)	**5.5 x 10^{2} grams**	**5.5 x 100 grams**	**550 grams**
10.	14 decaliters	(daL)	**14 x 10 grams**	**14 x 10 grams**	**140 grams**