**Converting from One Metric Unit to Another**

Steps to solve a conversion problem:

Step ONE: Write the value (and its unit) from the problem. Then, in order, write a multiplication sign, a fraction bar, an equals sign, and the unit in the answer. Put a gap between the equals sign and the unit in the answer.

Step TWO: Write the unit from the problem in the denominator of the conversion factor.

Step THREE: Write the unit expected in the answer in the numerator of the conversion factor.

Step FOUR: Examine the two prefixes in the conversion factor. In front of the larger unit, put the number 1.

Step FIVE: Determine the absolute distance between the two prefixes in the conversion unit. Write it as the exponent in front of the other prefix.

Step SIX: Multiply or divide to solve for the answer.

Sample Conversions problem. Please copy the problem I do on the board here:

1. Convert 2.50 milligrams to pictograms.
2. Convert 0.080 centimeters to kilometers.

Perform the following conversions, showing all your work and circling your answer.

1. 0.75 kg to mg
2. 1500 mm to km
3. 2390 g to kg
4. 0.52 km to m
5. 65 kg to g
6. 750 g to g
7. 0.25 Mm to cm
8. 23.8 fg to kg
9. 2.77 kg to mg
10. 2.90 cm to Tm
11. 45.6 L to ML
12. 1.08 kg to mg
13. 9.57 x 10 -8 mm to nm
14. 2.00 L to mL
15. 35.28 mL to L

Make the following conversions:

1. Convert 16.7 inches to feet.
2. Convert 25 yards to feet.
3. Convert 90 centuries to years.
4. Convert 84 miles to kilometers.
5. Convert 4.75 centimeters to meters.
6. Convert 48,987 minutes to days.
7. Convert 27 months to fortnights.
8. Convert 0.09 miles to inches.
9. Convert 4.66 centimeters to miles.
10. Convert 556 degrees Celsius to Kelvins.
11. Convert 25 Kelvins to degrees Celsius.
12. Convert 5 kilometers to miles.
13. Convert 75 degrees Fahrenheit to Kelvins.