

Unit 1Hd 4 Conversion Problems (Honors)

Convert each of the following quantities. You must do the work like I did in class or **no credit!!!** See example below. Use another sheet of paper if you need more room. **Show all your work using the factor label method!!!!**

Example: 3.56×10^7 grams to Kg

Part One:

1) 234.09 ml to ounces (oz)

2) 70.84 meters to yards

3) 531 gal to L

4) 718 in to cm

5) .032 Kg to lbs

6) 24.7 g to Kg

7) 3.98×10^{14} nm to m

8) 31.5 lbs to Kg

9) 45.6 Km to miles

10) .0975 m to nm

11) 302.1 mL to cm^3

Part 2: Word Problems using Dimensional Analysis

1. How many nickels could you trade for 250 yen? \$1 = 150 yen.
2. Your school club sold 600 tickets to a chili supper. The chili recipe for 10 persons requires 2 teaspoons of chili powder. How many teaspoons of chili powder will you need altogether?
3. How many cups of chili powder will you need? Three teaspoons (tsp) equal one tablespoon (TBS) and 16 tablespoons equal 1 cup.
4. How many seconds in a year? (assume 30 days in an average month)
5. How many inches long is a football field?
6. How many m^3 is 4.6 cm^3 ? Express your answer in scientific notation.
7. How many mg is 59.0 kg? Express your answer in scientific notation.

Double Conversions: Convert like it was 2 problems!!!!

- 8) 848 lb/quart to g/ml
- 9) 81.42 cm/sec to m/min
- 10) 1.45×10^{-5} Kg/L to lbs/gallon
- 11) .0326 ml/cm to oz/in
- 12) 8.95×10^6 Km/hour to in/sec (**hard one**)