

Name: _____ Period: _____ Date: _____

Dimensional Analysis Worksheet #2

Remember to show all of your work neatly. Include units throughout and show how they cancel out.

1. $90.889 \text{ Ms} = ? \text{ Ts}$

2. $6.99 \times 10^{12} \text{ mm} = ? \text{ km}$

3. $12.5 \text{ years} = ? \text{ seconds}$

4. $4.0090 \times 10^{-9} \text{ Gm} = ? \text{ m}$

5. $30 \text{ m} = ? \text{ micrometers}$

6. $55.009 \text{ GL} = ? \text{ cm}^3$

7. The record long jump is 349.5 in. Convert this to meters (1 in=2.54 cm).

8. Karl bought a steak to cook on his barbecue. The steak weighed 2 pounds, 12 ounces and cost \$3.99 a pound. How much did Karl have to pay for the steak?

9. In 1980, the U.S. produced 18.4 billion lb of phosphoric acid to be used in the manufacture of fertilizer. The average cost of the acid is \$318/ton (1 ton=2000 lb). What was the total value of the phosphoric acid produced?

10. The price of a ream of paper is \$4.00. There are 500 sheets of paper in a ream. If a sheet of paper weighs 0.50 oz., what is the price of one pound of paper? (16 oz. = 1 lb)

Extra Fun Bonus Question:

Let's say you weigh 160 lbs. You get sick with the geebies and your grandma gives you some tonic that reads: *Take 1 drop per 10 lbs. of body weight per day divided into 4 doses until the geebies are gone.* How many drops do you want to take per dose?