

Name _____

Date _____ Pd _____

Chemistry – Unit 1 - Worksheet 6

Dimensional Analysis

Use the factor-label method to make the following conversions. Remember to use the appropriate number of sf's in your answer.

Part 1

1. $74 \text{ cm} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ meters
2. $8.32 \times 10^{-2} \text{ kg} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ grams
3. $55.5 \text{ mL} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ cm}^3$
4. $0.00527 \text{ cal} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ kilocalories
5. $9.52 \times 10^{-4} \text{ m} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ micrometers
6. $41.0 \text{ mL} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ liters
7. $6.0 \times 10^{-1} \text{ g} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ mg
8. $8.34 \times 10^{-9} \text{ cg} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ g
9. $5.0 \times 10^3 \text{ mm} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ m
10. $1 \text{ day} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$ seconds
11. $5 \times 10^4 \text{ mm} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$ km
12. $9.1 \times 10^{-13} \text{ kg} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$ ng
13. $1 \text{ year} \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ hours (approximately)