

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