

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)