Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dimensional Analysis and Metric Conversions Practice**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Conversion Factors | | | |
| 1 yr = 365 days | 1 mi = 5280 ft | 454 g = 1 lb | 1 gal = 3.79 L |
| 1 day = 24 hours | 1 ft = 12 in | 1 lb = 16 oz | 264.2 gal = 1 m3 |
| 1 hr = 60 minutes | 1 in = 2.54 cm | 1 kg = 2.2 lbs | 1 gal = 128 fluid oz |
| 1 min = 60 sec | 3 ft = 1 yd | 946 mL = 1 qt | 4 qt = 1 gal |

1. In the past month, Cobb County has had 0.6 yards of rain. Express this amount in centimeters.
2. How many fluid ounces are in a 2 Liter Coca-Cola?
3. Diego is working on the following problem in class. What conversion factor should go in the missing fraction?

**A student can run 100 yards in 15 seconds. Convert this speed to miles per hour.**

****

1. 
2. 
3. 
4. 

**Match the unit to the correct abbreviation.**

\_\_\_\_ 4. Kilometer

\_\_\_\_ 5. Decigram

\_\_\_\_ 6. Miles

\_\_\_\_ 7. Milliliter

\_\_\_\_ 8. Centimeter

\_\_\_\_ 9. Dekagram

\_\_\_\_ 10. Meter

\_\_\_\_ 11. Pound

\_\_\_\_ 12. Kilogram

\_\_\_\_ 13. Feet

1. cm
2. dg
3. dkg
4. ft
5. kg
6. km
7. lb
8. m
9. mi
10. mL

14. Which of these are metric units?

15. Which of these measure length?

15. The symbols for units of length in order from **smallest to largest** are

A. m, cm, mm, km

B. mm, m, cm, km

C. km, mm, cm, m

D. mm, cm, m, km

**Convert each of the following.**

1. 5 L = \_\_\_\_\_\_\_ mL
2. 16 cg = \_\_\_\_\_\_\_ mg
3. 104 km = \_\_\_\_\_\_\_ m
4. 198 dkg = \_\_\_\_\_\_\_ kg