Name

Date Pd

# UNIT 1.1 WORKSHEET #3: Conversions

1) Estimate the length of this classroom in meters.

\_\_\_\_\_\_\_\_\_\_

2) What metric unit would you use to estimate the actual distance between Baton Rouge and New Orleans?

\_\_\_\_\_\_\_\_\_\_

3) What metric unit would you use to estimate the distance on a map between Baton Rouge and New Orleans?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) **Show your work.**

a. How many centimeters are there in 27.3 millimeters? \_\_\_\_\_\_\_\_\_\_

(10 mm = 1cm)

b. How many meters are there in 1234 centimeters? \_\_\_\_\_\_\_\_\_\_

c. A car traveled 456 km, how far did it go in meters? \_\_\_\_\_\_\_\_\_\_

(1km = 1000 m)

d. There are 1000m (micrometers) in 1.0 mm; how many micrometers are there in 3.75 cm?

10 mm = 1cm

\_\_\_\_\_\_\_\_\_\_

5) State the following measured quantities in the units indicated:

a. 5.2 cm of magnesium ribbon in millimeters

b. 0.049 kilograms (kg) of sulfur in grams (1kg = 1000 grams)

c. 1.60 milliliters (mL) of ethanol in microliters ( 1000 microliters = 1 mL)

d. 0.0025 g of vitamin A in micrograms (1,000,000 micrograms = 1 gram)

e. 0.020 kg of tin in milligrams (convert kg to g, then convert g to milligrams, 1g = 1000mg)

f. 3 kL of saline solution in liters ( 1000 L = 1 kL)

6) State the following measured quantities in the units indicated:

a. 150 mg of aspirin in grams

b. 2500 mL of hydrochloric acid in liters (1000 mL = 1 Liter)

c. 0.5 g of sodium in kilograms

d. 55 L of carbon dioxide gas in kiloliters

e. 35 mm in centimeters (10mm = 1cm)