

CHEMISTRY  
WORKSHEET 1d.

Name: \_\_\_\_\_

1 in = 2.54 cm

1 mile = 5280 ft = 1609.344 m

1 lb. = 454 g

1 gal. = 4 qt. = 3.7854 L

**1. Along the highway, a sign says, "New York, 110 km"**

a. If you drive at 65 mi/hr, how long will it take to reach New York?

b. If your car gets 28 mi per gallon of gas, how many liters will you use to reach New York?

**2. While studying abroad, you and your spouse have a baby 51.3 cm long weighing 3.91 kg**

a. Find the baby's weight in pounds and ounces (1 lb. = 16 oz.)

b. Find the baby's length in inches, to the nearest quarter of an inch.

**3.** If the density of lead is  $11.34 \text{ g/cm}^3$ , find the volume of 1.33 kg of lead.

**4.** If the density of mercury is  $13.59 \text{ g/cm}^3$ , find the mass of  $35.0 \text{ cm}^3$  of mercury.

**5.** If a  $255 \text{ cm}^3$  bar of cadmium has a mass of 2.206 kg, find the density of cadmium.

**6.** Human body temperature is  $98.6^\circ \text{ F}$ . Convert this into Celsius and also into Kelvins.

**7.** The boiling point of ethanol is  $78^\circ \text{ C}$ . Convert this into Kelvins and also into Fahrenheit.