

**Chapter 3 – Extra Practice Problems**

$1 \text{ cm}^3 = 1 \text{ mL}$

$1 \text{ mile} = 1.61 \text{ km}$

$1 \text{ inch} = 2.54 \text{ cm}$

$1 \text{ lb} = 454 \text{ g}$

$1 \text{ gal} = 4 \text{ qt} = 3.7854 \text{ L}$

$16 \text{ dry oz} = 1 \text{ lb}$

1. Convert  $7.8 \times 10^3$  mm into cm.

780 cm

2. How many 250 mg tablets can be made from 3.75 kg of powdered aspirin?

15000 tablets or  $1.5 \times 10^4$  tablets

3. Perform the following metric-English conversions:

a. 800.0 m to yards      874.9 yds

b. 1250 cL to gallons      3.30 gal

c.  $1.52 \times 10^3$  ds to hrs      0.0422 hrs

4. A U.S. Patriot missile has a velocity of 1032 m/s. What is the velocity of the missile in miles per hour?

2308 mph

5. Table salt melts at  $801^\circ\text{C}$ . What is the melting point on the Fahrenheit scale ( $^\circ\text{F}$ )?

$1474^\circ\text{F}$

6. A rectangular block of copper has a mass of 143.584 g and measures 5.05 cm by 2.55cm by 1.25 cm. Find the density of the copper block.

$8.92 \text{ g/cm}^3$

7. Convert  $5.01 \text{ lb/ft}^3$  into g/mL

0.0803 g/mL

**\*\*Hard Problem**

8. Nutritional tables give the potassium content of a standard apple (there are approximately 3 apples in 1 lb) as 159 mg. How many grams of potassium are in 3.75 kg of apples?

3.94 g potassium