Dimensional Analysis Reinforcement (2.3) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Chem 322 – O’Dette Period \_\_\_\_\_\_

Use conversion factors to convert the following quantities or answer the following questions.

1. 567 cg to grams
2. 17.3 cm3 to liters
3. Five beans have a mass of 2.1 g. How many beans are in 0.454 kg of beans?
4. How many seconds are in exactly a 40.0 hour work week?
5. A block of lead has dimensions of 2.0 cm x 8.0 cm x 3.5 cm. Calculate the volume of lead in cm3.
6. 32.7 mm = \_\_\_\_\_\_ feet (3.281 ft = 1 m)
7. 0.25 kg = \_\_\_\_\_\_ tons (2.205 lb = 1 kg ; 1 ton = 2000 lb)
8. A Hawaiian coffee company produces a coffee 2.0 oz/hr. How many grams per minute are produced? (1 kg = 35.274 oz)

Answers:

1) 5.67 g 2) 0.0173 L 3) 1081 beans 4) 1.4x105 s 5) 560 cm3 6) 0.107 ft

7) 2.8x10-4 tons 8) 0.94 g/min