**ASSIGNMENT 14A**

1) Convert the following weights. SHOW YOUR WORK!

a) 2.8 kg x 1000= 2800 g b) 125 g/1000 = 0.125 kg = 0.13kg

c) 3.6 t x 1000 = 3600 kg d) 654 kg/1000 = 0.654 t = 0.65t

2) Irene needs 1.6 kg of tomatoes. She has baskets of tomatoes that weigh 256 g, 452 g, 158 g, and 320 g. How many more grams of tomatoes does she need?

Add all measurements together: 256 + 452 + 158 + 320 = 1186 g

Since 1.6 kg = 1600 g = 1600 – 1186 = 414 g

414 g is how much more grams of tomatoes Irene needs.

3) A truck weigh 2.6 tonnes. It is loaded with 15 boxes that weigh 210 kg each. What is the total weight of the truck and its contents, in tonnes?

Multiply 15 by 210 and add total weight: 210 x 15 = 3150 kg

Since 3150 kg = 3.15 tonnes, 3.15 t + 2.6 t = 5.75 tons.

The total weight of the truck with its contents weigh 5.75 tons.

4) Karen is making a pot of potato soup. She needs 8 potatoes and each potato weighs about 375 g. How many kg of potatoes does she need?

Since 1 potato weigh 375 g, 375 x 8 = 3000 g = 3 kg

Karen needs 30 kg to make the potato soup.

**ASSIGNMENT 14 B**

1) Calculate the following conversions. Show your work below each question.

a) 54 oz. = 3 lb. and 6 oz. = 16 ounces = 1 pound, so 16 x 3 + 6 = 54 ounces

b) 15 lb.: Since 16 ounces = 1 pound, 16 x 15 = 240 oz.

c) 648 oz: Since 16 ounces = 1 pounds: 648/16 = 40.5 pounds, so = 40 lb., and 8 oz.

2) Lucy gave birth to twins weighing 6 lb. 5 oz. and 5 lb. 14 oz. What was their total weight?

Adding the two measurements: 6 pounds + 5 ounces + 5 pounds + 14 ounces = 11 pounds and 19 ounces but, 19 – 16 = 3, so 12 pounds and 3 ounces.

3) The weight of water is approximately 2 pounds 3 ounces per liter. How much would 8 L of water weigh? Give your answer in pounds and ounces.

Convert pounds into ounces: 2 pounds and 3 ounces = 35 ounces x 8 = 280 ounces

Since there is 280 ounces, 280/16 = 17.5 pounds, so 17 pounds and 5 ounces.

4) A basket of raspberries weighs 12 ounces. You need 4 lb. to make jam. How many whole baskets do you need to pick?

Convert pounds into ounces: 64 ounces/12 ounces = 5 1/3 baskets, so you will need 5 whole baskets.

**ASSIGNMENT 14 C**

1) Calculate the following conversions. SHOW YOUR WORK!

a) 6790 lb./2000 from lb. to kg to tn = 3.4 tn. b) 5.45 tn. x 2000 from tn. to kg to lb. = 10,900 lb.

The next 2 questions are 2 step conversions. Show both steps below the question.

c) 6 tn. x 35200 from tn. to kg. to lb. to oz. = 211,200 oz. d) 67 200 oz./35200 from oz. to lb. to kg. to tn. = 1.91 tn.

2) An elevator can carry a maximum load of 1.5 tons. Two constructions workers weighing 195 lb. and 210 lb. need to load 65 boxes each weighing 42 lb. in the elevator with them. Will the elevator safely hold all this weight?

Calculating all measurements: 65 x 42 = 2730 lb. + 195 lb. + 210 lb. = 3135 lb.

From lb. to kg. to tn. = 3135/2000 = 1.5675 = 1.57 tons

No, the elevator will not be able to hold all this weight.

3) A small truck weighs 1300 lb. It is loaded with cement pieces that weigh 150 lb. each. The maximum combined weight of the truck and its load is 2.75 tons. How many pieces of cement can be loaded in the truck?

Since 1 ton = 2000 pounds, 2000 x 2.75 = 5500/150 = 36.67 = 36 pieces of cement can be loaded inside the truck at the most.

4) A contractor poured 2.8 tons of concrete in the foundations of 6 houses. What is this amount in pounds, and then in ounces? Show the 2 conversions.

Convert tons into pounds and ounces: 2.8 x 2000 = 5600 x 6 pounds (Since 2000 pounds = 1 ton) = 33600 pounds, 0 ounces

5) A moving truck can carry a maximum load of 1.1 tons. If you have 80 boxes to move and each box weighs 120 lb., how many trips will be required to move your boxes?

Convert pounds into tons: 80 x 120 = 9600 lb./2000 = 4.8 tonnes.

4.8/1.1 tonnes = 4.36 trips = 4 trips will have to be made to move your boxes.

6) A commercial bakery uses 435 lb. of flour every day to produce its loaves of bread. How much flour, in tons, will they use during a 5-day work week?

Convert pounds into tonnes: 435 x 5 = 2175 lb./2000 = 1.0875 = 1.09 tons is how much the workers will use in a 5-day working week.

**ASSIGNMENT 14D**

1) Convert the following weights. SHOW YOUR WORK!

a) 67.5 kg x 2.2 = 148.5 lb. b) 125 lb./2.2 = 56.82 kg

The next two questions are two-step conversions. Show both steps!

c) 3.6 t x 2200 = 7920 lb. d) 30 000 lb./2200 = 15 t

2) Chen weighs 68 kg. How much does he weigh in pounds?

Convert kg into pounds: 68 x 2.2 = 149.6 pounds is how much Chen weigh.

3) A baby weighs 7 pounds 12 ounces at birth. How much did it weigh in grams?

Since 1 pound = 16 ounces, 7 x 16 = 112 + 12 = 124 ounces

Since 1 pound = 28 grams = 124 x 28 = 3472 grams is how much the baby weigh.

4) The smallest bag at the store is 600 g. How much is this in ounces?

Since 28 grams = 1 ounce, 600/28 g = 21.43 ounces

5) Which is the better buy: 200 g of coffee beans at $3.85 or 1 pound for $9.60?

Since 28 grams = 1 pound, 200/28 = 7.14 ounces

Do 28 x 16 = 448 grams = 1 pound = 16 ounces

From 16/7.14 = 2.24 = 3.85 x 2.24 = $8.62

Therefore, 200 g of coffee of coffee beans for $3.85 is the better buy.