**UNIT 4 – MEASUREMENT – PART 2 - ANSWERS**

**ASSIGNMENT 1 – VOLUME**

1a) 12 960 in3

 b) 7.5 ft3

2) original box = 72 in3

 cube = 64 in3

No, paper clips won’t fit in cube shaped box

3) 4.796 ft3 🡪 5 ft3

4a) 0.11 yd3

4b) 3.52 yd3

**ASSIGNMENT 2 – CAPACITY**

1a) 40 fl oz (US)

 b) 16 pt

 c) 25.8 L

 d) 3.18 qt (US)

 e) 3.4 gal (UK)

 f) 64 gal

2) 11.7 gal (US)

3) 9.75 gal (UK)

4) 30 mL = 2 tablespoons

 625 mL = 2.5 cups

 250 mL = 8 fl oz or

 8.5 fl oz, depending on which conversion used

**ASSIGNMENT 3 – MASS/WEIGHT, IMPERIAL SYSTEM (oz & lb)**

1a) 3 lb 6 oz

 b) 240 oz

 c) 40 lb 8 oz

 d) 136 oz

2) 12 lb 3 oz

3) 17 lb 8 oz

4) 5.3 🡪 6 baskets

**ASSIGNMENT 4 – MASS/WEIGHT, IMPERIAL SYSTEM (lb & tn)**

1) a) 6790 lb = 3.395 tn

 b) 5.45 tn = 10 900 lb

2) 14.4 tn

3) Total weight is 3135 lb or 1.5675 tn, so it is too heavy

4) 28 pieces

**ASSIGNMENT 5 – WEIGHT & COST, IMPERIAL**

1a) $1.67/lb

 b) $0.10/oz

 c)$1.25/12oz

2) 2.5lb jar @ $0.15/oz

3) $1.29/oz

4) $1.92/bag or $0.08/lb

5) $2.20/lb

**ASSIGNMENT 6 – MASS/WEIGHT, METRIC SYSTEM**

1a) 2800 g

 b) 0.125 kg

c) 3600 kg

d) 0.654 t

2) 414 g

3) 5.75 t

4) 3 kg

**ASSIGNMENT 7– WEIGHT CONVERSIONS BETWEEN MEASURING SYSTEMS**

1a) 148.5 lb

 b) 56.8 kg

 c) 7920 lb

 d) 13.6 t

2) 149.6 lb

3) 3515.4g if convert oz to g

 3518.5g if convert lb to g

 3523g if convert lb to kg to g

4) 21.16 oz

5) $4.43/lb

6) 200 g is better buy at

 $19.25/kg. (1lb = $21.10/kg)

7) $16.60/kg

**ASSIGNMENT 8 – CONVERSIONS BETWEEN MEASUREMENTS, VOL & WEIGHT**

1) 2461.85bu

2) 22.86t

3) $5.33/bu

4a) 0.60937 t

 b) 609.37 kg

 c) 1340.61 lb

**ASSIGNMENT 9 – WORKING WITH TEMPERATURE**

1a) 950F

 b) 17.60F

 c) 332.60F

 d) 69.80F

 e) -400F

 f) 395.6 0F

2a) -28.90C

 b) 26.70C

 c) 190.60C

 d) -16.70C

 e) -17.80C

 f) -18.90C

3) 176.70C

4) 1040F, above normal

5) 48.20F, it is safe.

6) -2.20F; 71.60F

7) 13000C = 23720F

 18300F = 998.90C

 The blow torch is hotter