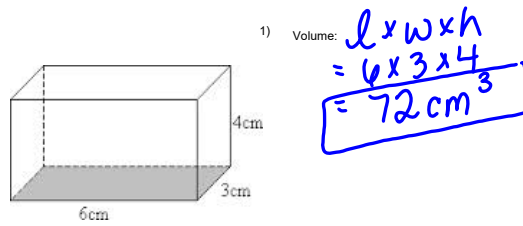


With Capacity you must

1) Volume first

2) and then use your conversion chart to calculate capacity



2) How many milliliters will the figure hold?

$$72 \text{ cm}^3 \times \frac{1 \text{ mL}}{1 \text{ cm}^3} = 72 \text{ mL}$$

a) $523.6 \text{ in}^3 \rightarrow \text{cm}^3 \rightarrow \text{mL}$
 8580.3 mL

b) $64 \text{ km}^3 \rightarrow \text{m}^3 \rightarrow \text{L}$
 $6.4 \times 10^{13} \text{ L}$
 $6.4 \times 10^{10} \text{ KL}$

c) $628.3 \text{ yd}^3 \rightarrow \text{m}^3 \rightarrow \text{L} \rightarrow \text{KL}$
 480.4 KL

d) $83.8 \text{ cm}^3 \rightarrow \text{mL}$
 83.8 mL

e) $0.128 \text{ mi}^3 \rightarrow \text{yd}^3 \rightarrow \text{m}^3$
 $533\ 483\ 514.4 \text{ KL} \rightarrow \text{L}$

$$f) 80 \text{ mm}^3 \rightarrow \text{cm}^3 \rightarrow \text{mL}$$
$$0.08 \text{ mL}$$

$$h) 29.2 \text{ ft}^3 \rightarrow \text{m}^3 \rightarrow \text{L}$$
$$825.9 \text{ L}$$



$$V = l \times w \times h$$

$$= 4 \times 4 \times 4$$

$$= 64 \text{ km}^3$$

$$64 \text{ km}^3 \times \left[\frac{1000 \text{ m}}{1 \text{ km}} \right]^3 \times \frac{1000 \text{ L}}{1 \text{ m}^3}$$

$$= 6.4 \times 10^{13} \text{ L}$$

$$= 6.4 \times 10^{10} \text{ KL}$$

EXAMPLES: Fill in the blanks...

- a) $\underline{16}$ cups = 4 liters
 $4 \cancel{L} \times \frac{1000 \cancel{mL}}{1 \cancel{L}} \times \frac{1 \text{ cups}}{250 \cancel{mL}}$
- b) 8 tablespoons = _____ milliliters
 $8 \text{ tbs} \times \frac{15 \text{ mL}}{1 \text{ tbs}} = 120 \text{ mL}$
- c) 6 US quarts = _____ liters
 $6 \text{ qts} \times \frac{0.946 \text{ L}}{1 \text{ qt}} = 5.676 \text{ L}$
- d) 16 tsp = _____ tbs
 $16 \text{ tsp} \times \frac{1 \text{ tbs}}{3 \text{ tsp}} = 5.3 \text{ tbs}$
- e) _____ cups = 12 US pints
 $12 \text{ pt} \times \frac{473.176 \text{ mL}}{1 \text{ pt}} \times \frac{1 \text{ cups}}{240 \text{ mL}} = 236 \text{ cups}$
- f) 10 fl oz = _____ cup
- Use US side.*
one thing missing

$$10 \text{ fl oz} = \underline{\hspace{2cm}} \text{ cups}$$

$$10 \text{ fl oz} \times \frac{29.5735 \text{ mL}}{1 \text{ fl oz}} \times \frac{1 \text{ cups}}{240 \text{ mL}}$$

$$1.2 \text{ cups.}$$

Name : _____ Score : _____
Teacher : _____ Date : _____

Converting English and Metric

- 1) _____ teaspoons = 6 milliliters
- 2) 1 gallons = _____ liters
- 3) _____ cubic feet = 14 cubic meters
- 4) _____ quarts = 11 liters
- 5) _____ cubic yards = 21 cubic meters
- 6) 5 quarts = _____ liters
- 7) 15.5 cups = _____ liters
- 8) _____ cubic inches = 8 milliliters
- 9) _____ cubic yards = 1.5 cubic meters
- 10) 12.5 cubic feet = _____ cubic meters
- 11) _____ cubic feet = 20.5 cubic meters
- 12) _____ cups = 15 liters
- 13) _____ cubic inches = 11.5 milliliters
- 14) 3 teaspoons = _____ milliliters
- 15) _____ quarts = 4 liters
- 16) 7.5 cups = _____ liters
- 17) 19.5 cubic inches = _____ milliliters
- 18) 3.5 cubic yards = _____ cubic meters
- 19) 17 tablespoons = _____ milliliters
- 20) 25 gallons = _____ liters

British

US

Geometry, Measurement & Finance 10

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Name : _____ Score : _____
Teacher : _____ Date : _____

Liquid Measure Quiz

- 1) 12 tsp = _____ tbsp
- 2) 8 cups = _____ fl oz
- 3) 4 pints = _____ gallon
- 4) _____ quart = 1/4 gallon
- 5) 4 cups = _____ quart
- 6) _____ tbsp = 1/2 cup
- 7) 1 gallon = _____ fl oz
- 8) _____ cups = 1 gallon
- 9) 3 tsp = _____ tbsp
- 10) _____ cups = 8 pints
- 11) _____ cups = 1 pint
- 12) 2 pints = _____ quarts
- 13) _____ pint = 8 fl oz
- 14) 2 cups = _____ fl oz
- 15) _____ cups = 2 pints
- 16) 1/2 quart = _____ fl oz
- 17) _____ tsp = 1/2 fl oz
- 18) _____ cup = 8 fl oz
- 19) _____ cup = 2 fl oz
- 20) 8 pints = _____ gallon

British

US

Geometry, Measurement & Finance 10

Math-Aids.Com

HW SOLUTIONS...

Worksheet - Converting Volumes Imp_Metric.docx

Name : _____ Score : _____

Teacher : _____ Date : _____

Converting English and Metric

- 1) 1.22 teaspoons = 6 milliliters
- 2) 1 gallons = 3.79 liters
- 3) 494.41 cubic feet = 14 cubic meters
- 4) 11.62 quarts = 11 liters
- 5) 27.47 cubic yards = 21 cubic meters
- 6) 5 quarts = 4.73 liters
- 7) 15.5 cups = 3.67 liters
- 8) 0.49 cubic inches = 8 milliliters
- 9) 1.96 cubic yards = 1.5 cubic meters
- 10) 12.5 cubic feet = 0.35 cubic meters
- 11) 723.95 cubic feet = 20.5 cubic meters
- 12) 63.4 cups = 15 liters
- 13) 0.7 cubic inches = 11.5 milliliters
- 14) 3 teaspoons = 14.79 milliliters
- 15) 4.23 quarts = 4 liters
- 16) 7.5 cups = 1.77 liters
- 17) 19.5 cubic inches = 319.55 milliliters
- 18) 3.5 cubic yards = 2.68 cubic meters
- 19) 17 tablespoons = 251.38 milliliters
- 20) 25 gallons = 94.64 liters

Geometry, Measurement & Finance 10

Math-Aids

SOLUTIONS...

Worksheet - Converting Capacity in Imp.docx

Name : _____ Score : _____

Teacher : _____ Date : _____

Liquid Measure Quiz

- 1) 12 tsp = 4 tbsp
- 2) 8 cups = 64 fl oz
- 3) 4 pints = 1/2 gallon
- 4) 1 quart = 1/4 gallon
- 5) 4 cups = 1 quart
- 6) 8 tbsp = 1/2 cup
- 7) 1 gallon = 128 fl oz
- 8) 16 cups = 1 gallon
- 9) 3 tsp = 1 tbsp
- 10) 16 cups = 8 pints
- 11) 2 cups = 1 pint
- 12) 2 pints = 1 quarts
- 13) 1/2 pint = 8 fl oz
- 14) 2 cups = 16 fl oz
- 15) 4 cups = 2 pints
- 16) 1/2 quart = 16 fl oz
- 17) 3 tsp = 1/2 fl oz
- 18) 1 cup = 8 fl oz
- 19) 1/4 cup = 2 fl oz
- 20) 8 pints = 4 gallon

Geometry, Measurement & Finance 10

Math

CONVERTING US IMPERIAL TO SI UNITS	
<i>US Imperial</i>	<i>SI</i>
1 fl oz	mL
1 pt = 16 fl oz	L
1 qt = 2 pt	mL
1 gal = 4 qt	L



Check out
your
Conversion
Chart.

Attachments

GMF_10_-_Chp._4_Tables_and_Formulas.docx

Worksheet - Converting Capacity in Imp.docx

Worksheet - Converting Volumes Imp_Metric.docx