





Steps to Success

Date	24.02.21
Subject/s	Maths
Learning Objective 	To convert between metric and imperial measures

		SA 	TA 
Success Criteria 	I know which measurements are imperial and which are metric		
	I know 1 inch ~ 2.5cm 1 foot ~ 30cm 1 yard ~ 90cm 1 ounce ~ 30g 1kg ~ 2.2lbs 1 mile ~ 1.6km 8km ~ 5miles 1 pint ~ 0.6l 1 gallon ~ 4.5l		
	I know use my knowledge of multiples to work out conversions		
Support	Independent Adult Support () Group Work		

Lockdown learning: DC	
Pre-task:	<p>If one gallon is equivalent to 8 pints,</p> <ul style="list-style-type: none"> • How many gallons are equivalent to 64 pints? = 8 • How many pints are equivalent to 15 gallons? = 1.875 • How many gallons are equivalent to 2 pints? = 0.25
Teacher led	Fluency

≈ approximately

Capacity:

1 l = 1.75 pints

l x 1.75 = pints

pints divided by 1.75 = litres.

1.75 3.5 5.25 7 8.75 10.5 12.25 14 15.75 **17.5 19.25**

Litres	Pints
2	3.5
4	7
6	10.5
11	19.25
7	12.25

1 litre = 0.22 gallons

litres x 0.22 = gallons.

Gallons divided by 0.22 = litres.

0.22 0.44 0.66 0.88 1.1 1.32 1.54 1.76 1.98 2.2 2.42 2.64 2.86 3.08
3.3 3.52 3.74 3.96 4.18 4.4 4.62 2.84 5.06 5.28 5.5 5.72 5.94 6.16

Litres	Gallons
7	1.54
5	1.1
3	0.66
15	3.3
18	3.96

Weight and Mass

1 pound = 0.45 kg

pounds x 0.45 = kg.

0.45 0.9 1.35 1.8 2.25 2.7 3.15 3.6 4.05 4.5 4.95 5.4

Pounds	KG
4	1.8
5	2.25
9	4.05
12	5.4
12	5.4

Distance and length:

1 inch = 2.5 cm

inch x 2.5 = cm.

2.5 5 7.5 10 12.5 15 17.5 20 22.5 25 27.5 30 32.5 35

Inch	Centimetres (cm)
3	7.5
8	20
9	22.5
5	12.5
12	30

1 foot = 12 inches.

foot x 12 = inches.

12 24 36 48 60 72 84 96 108 120 132 144 156 168

Foot	Inches
2	24
14	168
11	132
9	108
6	72

Fluency:

Capacity:

1 l = 1.75 pints

l x 1.75 = pints

pints divided by 1.75 = litres.

1.75 3.5 5.25 7 8.75 10.5 12.25 14 15.75

Litres	Pints
4	
	3.5
7	
10	
	15.75

1 litre = 0.22 gallons

litres x 0.22 = gallons.

Gallons divided by 0.22 = litres.

0.22 0.44 0.66 0.88 1.1 1.32 1.54 1.76 1.98 2.2 2.42 2.64 2.86 3.08

3.3 3.52 3.74 3.96 4.18 4.4 4.62 2.84 5.06 5.28 5.5 5.72 5.94 6.16

Litres	Gallons
2	
	3.3
9	
5	
	6.16

Weight and Mass

1 pound = 0.45 kg

pounds \times 0.45 = kg.

0.45 0.9 1.35 1.8 2.25 2.7 3.15 3.6 4.05 4.5 4.95 5.4

Pounds	KG
	2.7
2	
3	
	45
	5.85

Distance and length:

1 inch = 2.5 cm

inch \times 2.5 = cm.

2.5 5 7.5 10 12.5 15 17.5 20 22.5 25 27.5 30 32.5 35

Inch	Centimetres (cm)
4	
	17.5
8	
	35
10	

1 foot = 12 inches.

foot \times 12 = inches.

12 24 36 48 60 72 84 96 108 120 132 144 156 168

Foot	Inches
4	
	96
	48
14	
9	

Problem Solving and Reasoning

Explain it!



Alice wants to convert 10 cm into inches. She says that she needs to times it by 2.5. Is she correct? Explain.

Use it!



3 foot x _____ = 36 _____

3 gallon x _____ = _____ pints.

_____ inches x 2.5 = 12.5 cm

Use it!



True or false?

120 gallons is the same as 968 pints.

Answers

No Alice is incorrect. She needs to divide by 2.5 because one inch is the same as 2.5 cm.

$$3 \text{ foot} \times 12 = 36 \text{ inches}$$

$$3 \text{ gallon} \times 8 = 24 \text{ pints}$$

$$5 \text{ inches} \times 2.5 = 12.5$$

False