





Date	
Subject/s	<u>Maths</u>
Learning Objective 	To convert units of capacity

		SA 	TA 
Success Criteria 	I know there are 1000ml in 1l I can multiply and divide by 1000 using or visualising a place value grid		
Support	Independent      Adult Support (   )      Group Work		

Pre-task:

Convert these units:

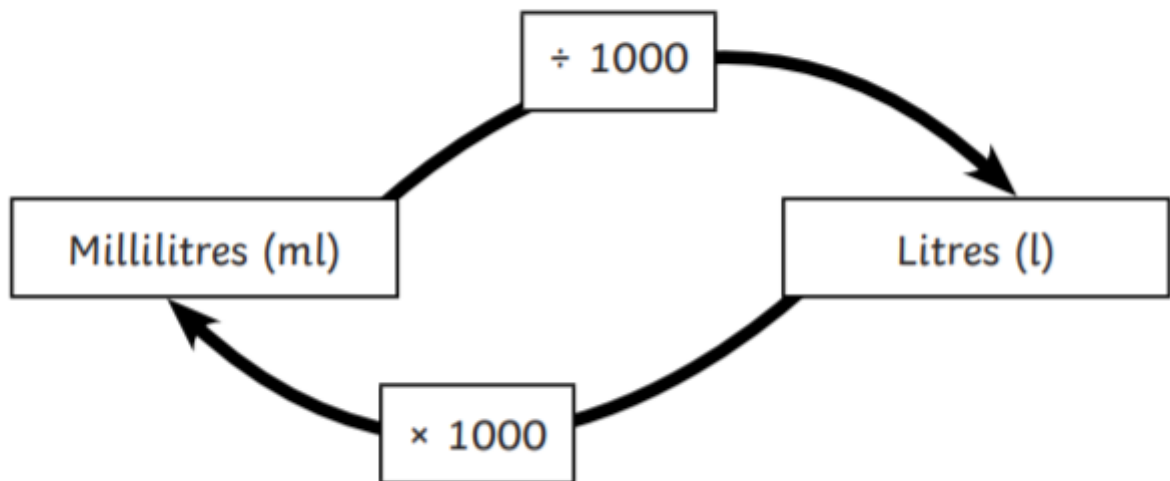
15l = \_\_\_\_\_ ml

1.9l = \_\_\_\_\_ ml

2.08l = \_\_\_\_\_ ml

\_\_\_\_\_ l = 75ml

## Capacity



## Decimal Place Value Chart

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	●	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths
M	HTh	TTh	Th	H	T	O	●	t	h	th	tth	hth	m
							●						
							●						

Fluency

1.	Litres	Millilitres	2.	Litres	Millilitres	3.	Litres	Millilitres	4.	Litres	Millilitres	5.	Litres	Millilitres	6.	Litres	Millilitres
	0.252			1.929				175			7055			216			1054
	0.633			1.308				57			4059			128		5.447	
	0.191			7.717				292			3096		0.23			9.277	
	0.721			2.59				462			8684		0.158				5915
	0.725			2.031				366			8219			764			7347
	0.71			8.53				334			7139		0.163			7.729	
	0.583			4.103				517			2607		0.765				9685
	0.595			6.924				689			2010			999		6.604	
	0.625			4.531				212			3400			454		9.449	
	0.244			5.007				185			6311		0.841				4554

## Answers

1.	Litres	Millilitres	2.	Litres	Millilitres	3.	Litres	Millilitres	4.	Litres	Millilitres	5.	Litres	Millilitres	6.	Litres	Millilitres
	0.252	252		1.929	1929		0.175	175		7.055	7055		0.216	216		1.054	1054
	0.633	633		1.308	1308		0.057	57		4.059	4059		0.128	128		5.447	5447
	0.191	191		7.717	7717		0.292	292		3.096	3096		0.23	230		9.277	9277
	0.721	721		2.59	2590		0.462	462		8.684	8684		0.158	158		5.915	5915
	0.725	725		2.031	2031		0.366	366		8.219	8219		0.764	764		7.347	7347
	0.71	710		8.53	8530		0.334	334		7.139	7139		0.163	163		7.729	7729
	0.583	583		4.103	4103		0.517	517		2.607	2607		0.765	765		9.685	9685
	0.595	595		6.924	6924		0.689	689		2.01	2010		0.999	999		6.604	6604
	0.625	625		4.531	4531		0.212	212		3.4	3400		0.454	454		9.449	9449
	0.244	244		5.007	5007		0.185	185		6.311	6311		0.841	841		4.554	4554

# Problem Solving and Reasoning

Use it!



Explain it!

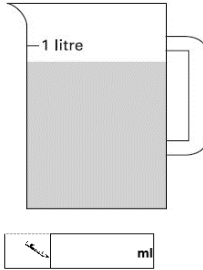
A shop sells litre bottles of water for 99 p each.

300 ml bottles of water are on offer for 8 for £2



If Jess wants to buy 12 L of water for the cheapest amount, which should she buy and why?

**Q6.** Sophie poured some water out of a litre jug.  
Look how much is left in the jug.  
**Estimate** how many millilitres of water are left.



1 mark

Use it!



Katie's glass holds a quarter of a litre when it is full.



She nearly fills it to the top with juice.

Tick (✓) the approximate amount of juice she puts in the glass.



4 millilitres

20 millilitres

120 millilitres

220 millilitres

420 millilitres

Use it!



A bottle holds 1 litre of lemonade.

Rachel fills 5 glasses with lemonade.

She puts 150 millilitres in each glass.

How much lemonade is left in the bottle?

Use it!

Megan wants to fill a bucket with water.



A bucket holds 6 litres.

A jug holds 500 millilitres.

How many jugs of water does Megan need to fill an empty bucket?

Use it!

Here is a recipe for raspberry ice cream.



raspberry ice cream for 8 people
$\frac{1}{2}$ litre of cream
1kg raspberries
250g sugar



This recipe is for 8 people.

Josie makes enough raspberry ice cream for 12 people.

How much cream does she use?

litre

## Answers

£11.88 to buy 12  
one litre bottles

£10 to buy 5 lots  
of the offer.

Jess should buy 40  
bottles of 300 ml  
(5 lots of the offer)

900ml or 0.9l

1l – 1000ml

Estimate 100ml poured out.

$1000 - 100 = 900\text{ml}$

220millilitres

$\frac{1}{4}$  of 1l – 250ml

250ml is left

$150 \times 5 = 750\text{ml}$

1l = 1000ml

$1000 - 750 = 250$

12jugs

6l = 6000ml

6000ml divided by 500 = 12

750ml

$\frac{1}{2}$  l = 500ml

500 divided by 2 = 250

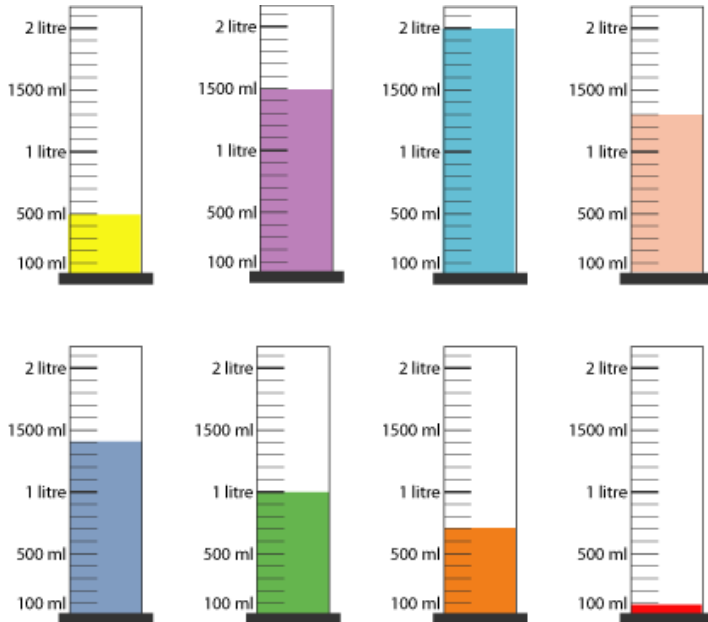
$500 + 250 = 750\text{ml}$

## Further Challenge

A group of eight children in Class 6 were measuring water using measuring cylinders. They coloured the water to make reading the scales easier.

They lined up the cylinders in two neat rows, each labelled with a child's name and the amount they had measured out.

Then Harry opened the window and the wind blew most of the labels onto the floor! "Oh! Harry!" they all wailed. Can you relabel the cylinders for them?



Ahmed had measured out just a thousand millilitres and Belinda twice as much as Ahmed.

Grace had measured out three-quarters of the amount that Belinda had done and Freddie had half the amount that Ahmed had measured out.

Which were their cylinders?

Callum had coloured his water blue. How much did he measure out?

Ellie had coloured her water pink and Dan coloured his orange. How much did they measure out?

"Don't drink that!" Harry had laughed, pointing at Dan's cylinder, "It's not orange juice!" As his hand stretched out he knocked over his red liquid. "Oh! Harry!" they all wailed again.

How much was left in Harry's cylinder after the accident?