

Dear Parents/Carers,  
This powerpoint takes the children through the learning sequence. If possible please talk through the slides with your child and check their understanding. The slides start at a basic level to re-cap previous learning.

# Mass, Capacity and Temperature

2.6.20

2.6.20

LO: I can add and subtract capacities



# Mathematical Vocabulary

**Capacity** is the amount something can hold.

**Volume** is the amount of something in the container.

Try this out at home -

Get a jug. How many **millilitres (ml)** does the jug hold? This is the **capacity**.

Fill the jug with 250ml of water. This is the **volume**.

We measure liquid in **millilitres (ml)** and **litres (l)**.

There are 1000ml in 1l

# Starter

Match pairs of measurements to make 1L.

750ml

650ml

400ml

150ml

450ml

900ml

350ml

550ml

850ml

250ml

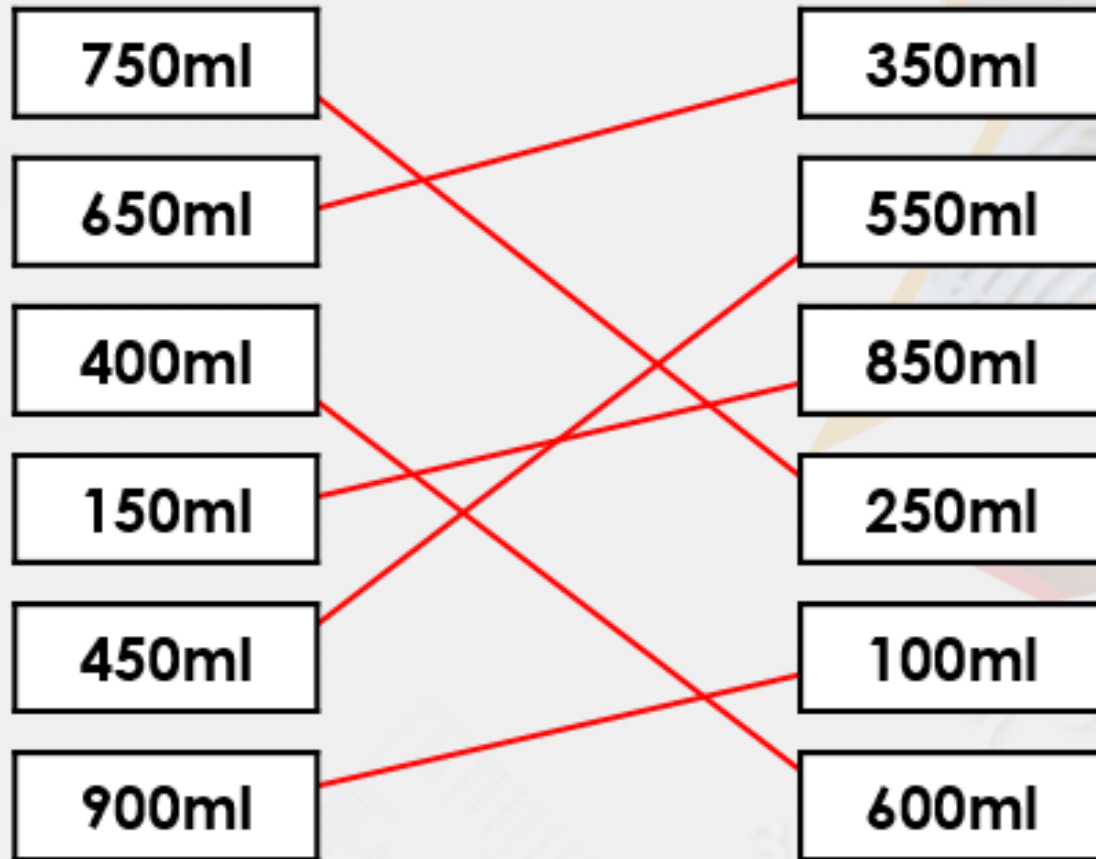
100ml

600ml

Write the answers  
in your book.  
Remember, 1000ml  
= 1L.

# Starter - answer

Match pairs of measurements to make 1L.



# Descriptive Teaching

Draw lines between the boxes to make these calculations correct.

Start
2L and 300ml
3L and 750ml
1L and 750ml





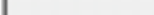

+ or -
- 2L and 250ml
+1L and 500ml
+1L and 750ml

Equals
1L and 500ml
3L and 500ml
3L and 800ml

Write the sums in your book. One has been done for you.

# Descriptive Teaching - Answer

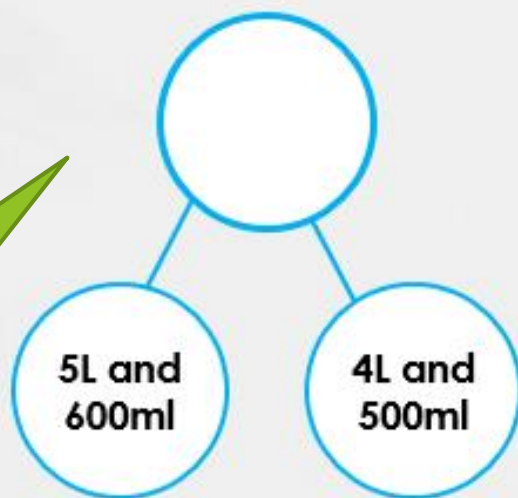
Draw lines between the boxes to make these calculations correct.

Start		+ or -		Equals
2L and 300ml		- 2L and 250ml		1L and 500ml
3L and 750ml		+1L and 500ml		3L and 500ml
1L and 750ml		+1L and 750ml		3L and 800ml

# Descriptive Doing

$$9\text{ l } 100\text{ ml} - 2\text{ l } 200\text{ ml} =$$

Complete the part whole models.



$$5\text{ l } 600\text{ ml} + 4\text{ l } 500\text{ ml} =$$



$$9\text{ L and } 100\text{ ml}$$

$$2\text{ L and } 200\text{ ml}$$



# Descriptive Doing - Answer

Complete the part whole models.



# Reflective Teaching

**Find the difference between the containers:**

**A and C**

**B and C**

Container	Capacity
<b>A</b>	<b>3L and 400ml</b>
<b>B</b>	<b>5L and 650ml</b>
<b>C</b>	<b>1L and 750ml</b>

To find the difference  
what operation  
do you need to  
use?

# Reflective Teaching - Answers

Find the difference between the containers:

**A and C**

**B and C**

Container	Capacity
A	3L and 400ml
B	5L and 650ml
C	1L and 750ml

**A and C = 3L and 400ml – 1L and 750ml = 1L and 650ml**

**B and C = 5L and 650ml – 1L and 750ml = 3L and 900ml**

# Reflective Doing

Which three of these containers would you need to have a total of  $6\frac{1}{4}$  L?




$1\frac{1}{2}$ L	$4\frac{1}{2}$ L	$\frac{1}{4}$ L	$5\frac{1}{2}$ L
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How many ml in  $\frac{1}{4}$  l?

# Reflective Doing - Answers

Which three of these containers would you need to have a total of  $6\frac{1}{4}$  L?



$1\frac{1}{2}$ L	$4\frac{1}{2}$ L	$\frac{1}{4}$ L	$5\frac{1}{2}$ L
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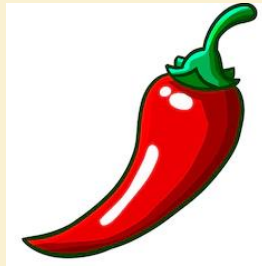
A, B and C

# Independent work

The following slides are questions for you to work through independently.

There are 3 sets of work - 1 chili (the easiest), 2 chilies, 3 chilies (the hardest). Choose one set you feel most comfortable with.

# Independent work



1a. Draw lines between these boxes to make the calculations correct.

Start	+ or -	Equals
1L and 300ml	+ 400ml	1L and 200ml
2L and 800ml	+ 2L and 300ml	2L and 800ml
500ml	- 1L and 600ml	1L and 700ml



S VF

1b. Draw lines between these boxes to make the calculations correct.

Start	+ or -	Equals
800ml	- 1L and 500ml	1L and 900ml
3L and 400ml	- 1L and 100ml	1L and 200ml
2L and 700ml	+ 1L and 100ml	2L and 300ml

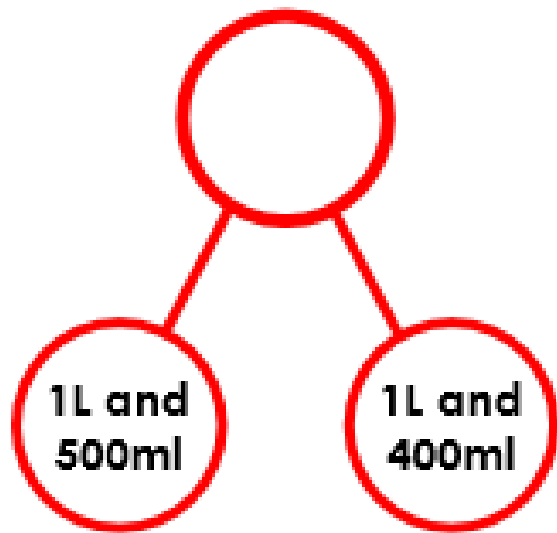


S VF

# Independent work

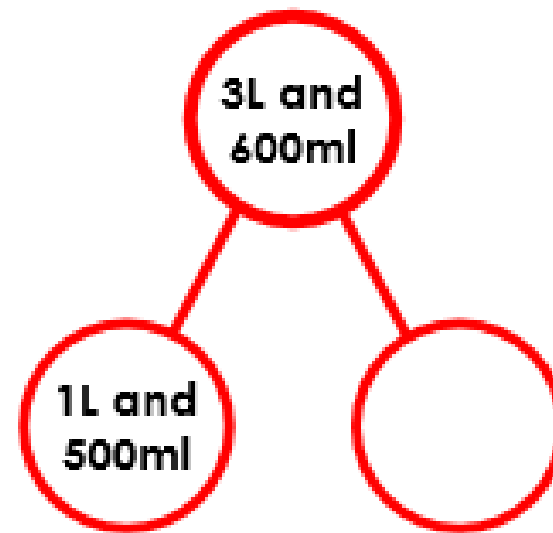


2a. Complete the part whole model.



S VF

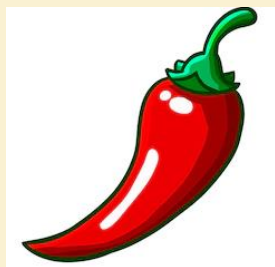
2b. Complete the part whole model.



S VF



# Independent work



3a. Find the difference between the containers:

A and C  
B and C

Container	Capacity
A	1L and 500ml
B	1L and 900ml
C	1L and 400ml



3 VF

3b. Find the difference between the containers:

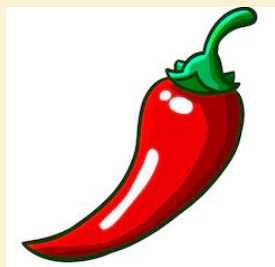
A and B  
A and C

Container	Capacity
A	2L and 600ml
B	1L and 500ml
C	2L and 300ml



3 VF

# Independent work



4a. Which two of these containers would you need to have a total of 3L and 700ml?



1L and  
300ml

1L and  
200ml

2L and  
400ml



S VF

4b. Which two of these containers would you need to have a total of 3L and 600ml?



2L and  
300ml

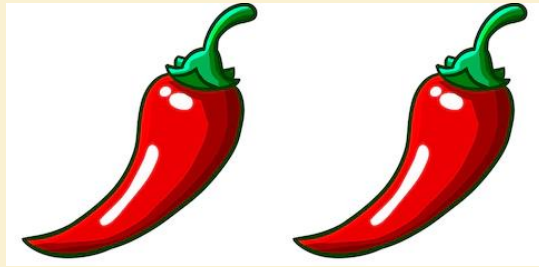
200ml

3L and  
400ml



S VF

# Independent work



5a. Draw lines between these boxes to make the calculations correct.

Start	+ or –	Equals
3L and 400ml	+ 2L and 700ml	6L and 400ml
8L and 900ml	– 2L and 250ml	6L and 100ml
4L and 400ml	– 2L and 500ml	2L and 150ml



S VF

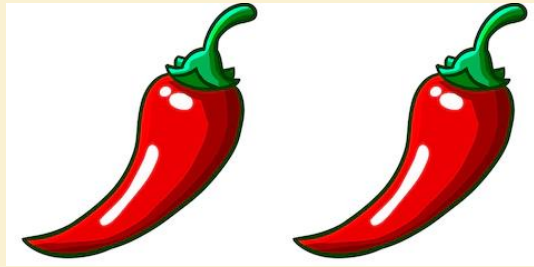
5b. Draw lines between these boxes to make the calculations correct.

Start	+ or –	Equals
1L and 900ml	+ 1L and 600ml	2L and 900ml
5L and 450ml	– 2L and 550ml	3L and 500ml
2L and 850ml	+ 2L and 100ml	4L and 950ml

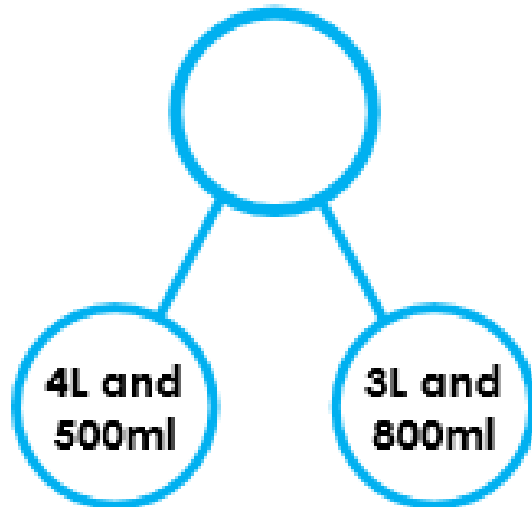


S VF

# Independent work

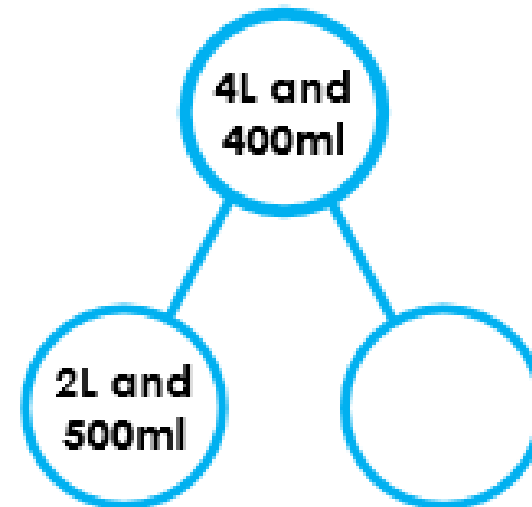


6a. Complete the part whole model.



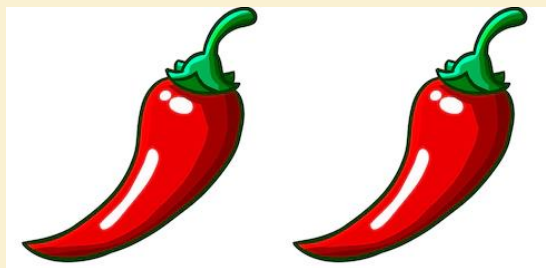
3 VF

6b. Complete the part whole model.



3 VF

# Independent work



7a. Find the difference between the containers:

A and C  
B and C

Container	Capacity
A	4L and 500ml
B	5L and 700ml
C	2L and 950ml



S VF

7b. Find the difference between the containers:

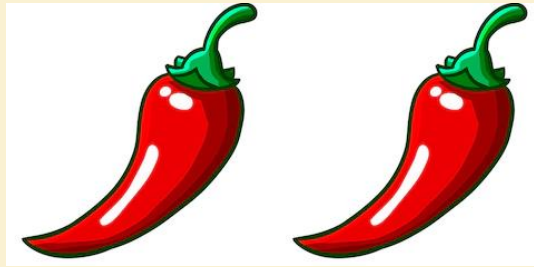
A and B  
B and C

Container	Capacity
A	7L and 600ml
B	3L and 500ml
C	2L and 700ml



S VF

# Independent work



8a. Which three of these containers would you need to have a total of  $9\frac{1}{2}$  L?



$2\frac{1}{2}$  L

$3\frac{1}{2}$  L

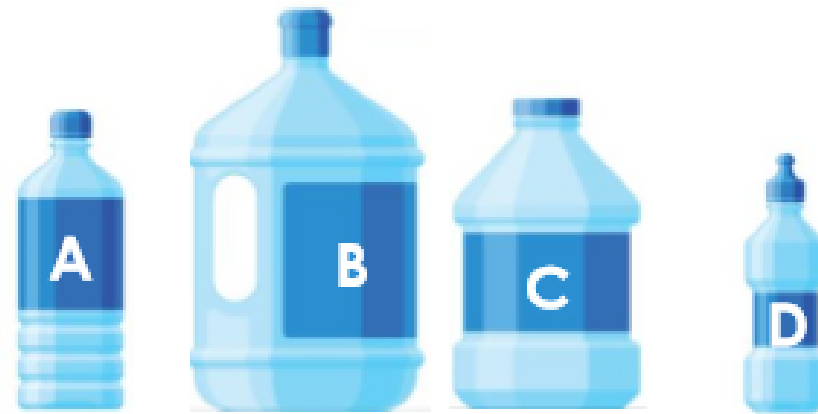
$\frac{3}{4}$  L

$6\frac{1}{4}$  L



S VF

8b. Which three of these containers would you need to have a total of  $8\frac{1}{2}$  L?



$2\frac{1}{2}$  L

$4\frac{1}{2}$  L

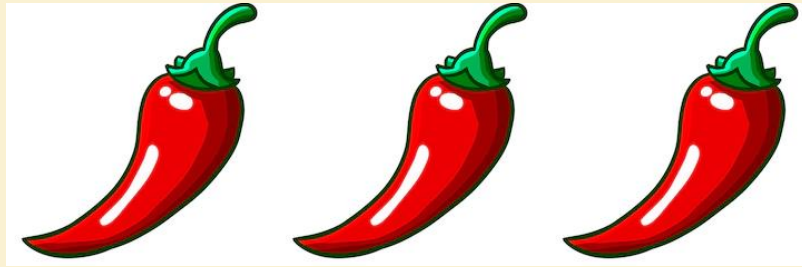
$3\frac{1}{2}$  L

$1\frac{1}{2}$  L



S VF

# Independent work



9a. Draw lines between these boxes to make the calculations correct.

Start	+ or -	Equals
5L and 150ml	- 4L and 350ml	7L and 495ml
6L and 350ml	+ 2L and 345ml	7L and 000ml
4L and 475ml	+ 2L and 525ml	4L and 500ml
6L and 875ml	- 1L and 850ml	2L and 525ml



3 VF

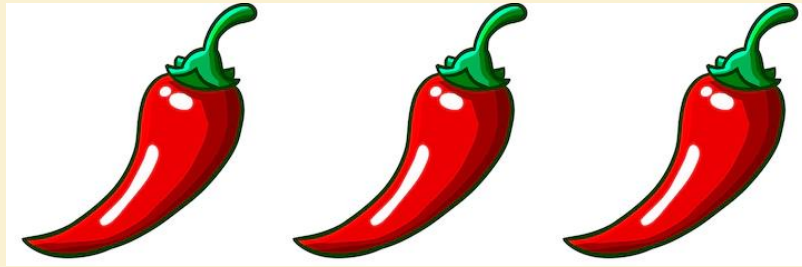
9b. Draw lines between these boxes to make the calculations correct.

Start	+ or -	Equals
5L and 500ml	- 2L and 350ml	7L and 970ml
6L and 250ml	+ 2L and 500ml	7L and 75ml
4L and 575ml	- 5L and 450ml	4L and 450ml
9L and 900ml	+ 1L and 720ml	3L and 150ml

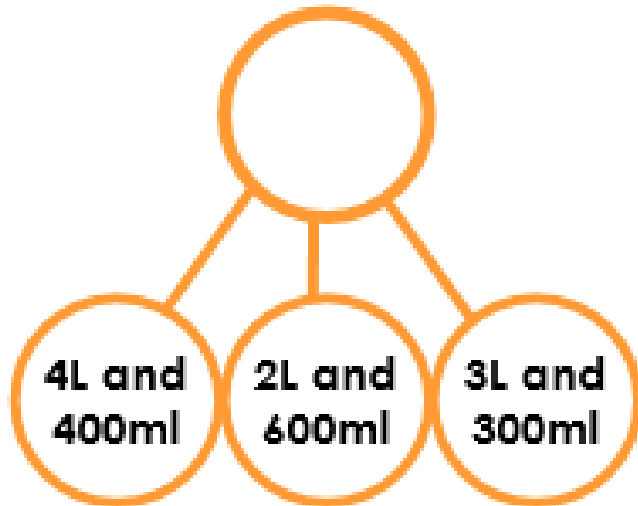


3 VF

# Independent work

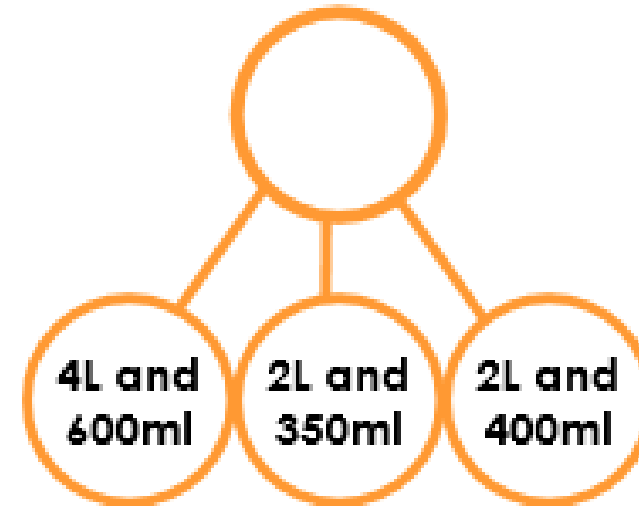


10a. Complete the part whole model.



S VF

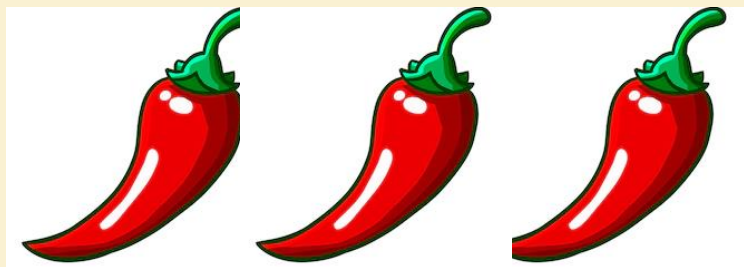
10b. Complete the part whole model.



S VF



# Independent work



11a. Find the difference between the containers:

A and C  
B and C

Container	Capacity
A	2L and 350ml
B	6L and 950ml
C	3L and 200ml



S VF

11b. Find the difference between the containers:

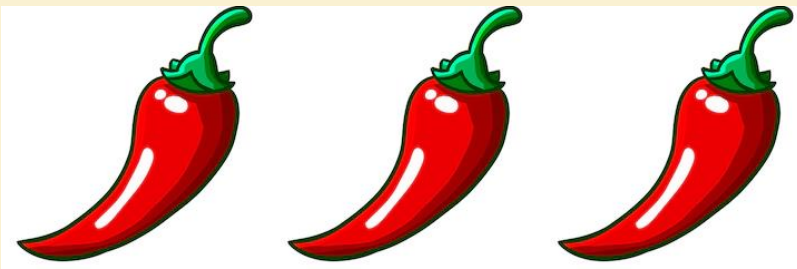
A and B  
B and C

Container	Capacity
A	7L and 900ml
B	3L and 50ml
C	2L and 800ml



S VF

# Independent work



12a. Which three of these containers would you need to have a total of 11L?



$3 \frac{1}{2}$  L

$2 \frac{1}{4}$  L

$1 \frac{3}{4}$  L

$5 \frac{3}{4}$  L



S VF

12b. Which three of these containers would you need to have a total of 14L?



$2 \frac{3}{4}$  L

$4 \frac{1}{2}$  L

$3 \frac{1}{4}$  L

$6 \frac{3}{4}$  L



S VF

# Answers

## Developing

1a.  $1\text{L and } 300\text{ml} + 400\text{ml} = 1\text{L and } 700\text{ml};$   
 $2\text{L and } 800\text{ml} - 1\text{L and } 600\text{ml} = 1\text{L and } 200\text{ml};$   
 $500\text{ml} + 2\text{L and } 300\text{ml} = 2\text{L and } 800\text{ml}$

2a.  $2\text{L and } 900\text{ml}$

3a.  $A \text{ and } C = 100\text{ml}, B \text{ and } C = 500\text{ml}$

4a.  $A \text{ and } C$

## Expected

5a.  $3\text{L and } 400\text{ml} + 2\text{L and } 700\text{ml} = 6\text{L and } 100\text{ml}$

$8\text{L and } 900\text{ml} - 2\text{L and } 500\text{ml} = 6\text{L and } 400\text{ml}$

$4\text{L and } 400\text{ml} - 2\text{L and } 250\text{ml} = 2\text{L and } 150\text{ml}$

6a.  $A = 8\text{L and } 300\text{ml}$

7a.  $A \text{ and } C = 1\text{L and } 550\text{ml}, B \text{ and } C = 2\text{L and } 750\text{ml}$

8a.  $A, C \text{ and } D$

## Greater Depth

9a.  $5\text{L and } 150\text{ml} + 2\text{L and } 345\text{ml} = 7\text{L and } 495\text{ml}$

$6\text{L and } 350\text{ml} - 1\text{L and } 850\text{ml} = 4\text{L and } 500\text{ml}$

$4\text{L and } 475\text{ml} + 2\text{L and } 525\text{ml} = 7\text{L and } 000\text{ml}$

$6\text{L and } 875\text{ml} - 4\text{L and } 350\text{ml} = 2\text{L and } 525\text{ml}$

10a.  $10\text{L and } 300\text{ml}$

11a.  $A \text{ and } C = 850\text{ml}, B \text{ and } C = 3\text{L and } 750\text{ml}$

12a.  $A, C \text{ and } D$

## Developing

1b.  $800\text{ml} + 1\text{L and } 100\text{ml} = 1\text{L and } 900\text{ml}$   
 $3\text{L and } 400\text{ml} - 1\text{L and } 100\text{ml} = 2\text{L and } 300\text{ml};$   
 $2\text{L } 700\text{ml} - 1\text{L and } 500\text{ml} = 1\text{L and } 200\text{ml}$

2b.  $2\text{L and } 100\text{ml}$

3b.  $A \text{ and } B = 1\text{L and } 100\text{ml}, A \text{ and } C = 300\text{ml}$

4b.  $B \text{ and } C$

## Expected

5b.  $1\text{L and } 900\text{ml} + 1\text{L and } 600\text{ml} = 3\text{L and } 500\text{ml}$

$5\text{L and } 450\text{ml} - 2\text{L and } 550\text{ml} = 2\text{L and } 900\text{ml}$

$2\text{L and } 850\text{ml} + 2\text{L and } 100\text{ml} = 4\text{L and } 950\text{ml}$

6b.  $A = 1\text{L and } 900\text{ml}$

7b.  $7b. A \text{ and } B = 4\text{L and } 100\text{ml}, B \text{ and } C = 800\text{ml}$

8b.  $A, B \text{ and } D$

## Greater Depth

9b.  $5\text{L and } 500\text{ml} - 2\text{L and } 350\text{ml} = 3\text{L and } 150\text{ml}$

$6\text{L and } 250\text{ml} + 1\text{L and } 720\text{ml} = 7\text{L and } 970\text{ml}$

$4\text{L and } 575\text{ml} + 2\text{L and } 500\text{ml} = 7\text{L and } 75\text{ml}$

$9\text{L and } 900\text{ml} - 5\text{L and } 450\text{ml} = 4\text{L and } 450\text{ml}$

10b.  $9\text{L and } 350\text{ml}$

11b.  $A \text{ and } B = 4\text{L and } 850\text{ml}, B \text{ and } C = 250\text{ml}$

12b.  $A, B \text{ and } D$

# Reflection Time



Andy the alchemist is sorting through his oil lamps.

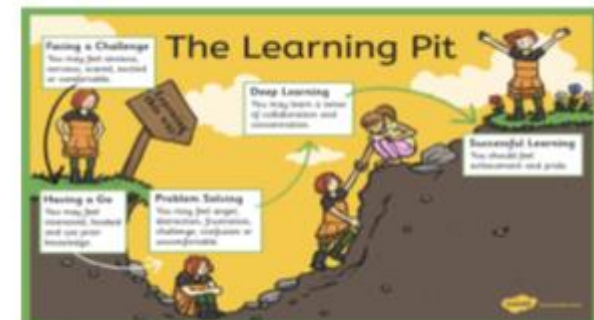
Oil lamp A holds 1L and 350ml more than oil lamp C. Oil lamp C's capacity is double Oil lamp B's capacity.



Oil lamp B's capacity =  
300ml

What are the capacities of  
Oil lamp A and C?

Take time  
to reflect



# Reflection Time - Answers



Andy the alchemist is sorting through his oil lamps.

Oil lamp A holds 1L and 350ml more than oil lamp C. Oil lamp C's capacity is double Oil lamp B's capacity.



Oil lamp B's capacity =  
300ml

**A = 1L and 350ml + 600ml = 1L and 950ml**

**C = 300ml x 2 = 600ml**

What are the capacities of  
Oil lamp A and C?

Take time  
to reflect

