



Lesson 2 – 23.06.2020
LO: To compare capacity

Success Criteria:

- | |
|--|
| 1. Watch the short video showing the two glasses of water. https://nrich.maths.org/13664 |
| 2. Tell someone at home what you predict (think) will happen next. |
| 3. Watch the second video to find out what happens. Is it what you predicted? Or were you surprised? |
| 4. Use the words from the word bank to try and explain why you think this happened. |

Model:

1. Maya has two glasses of water.

Watch this short clip to see what she starts to do:



<https://nrich.maths.org/13664>

2. What do you think will happen next?

Make a prediction and tell someone at home what you think will happen.



3. Watch the second video (click 'Show' underneath the first clip)



Is it what you predicted? Or were you surprised?

4. Use the words from the word bank to try and explain why you think this happened:

tall/taller short/shorter wide/wider narrow/narrower volume capacity

Canonbury Home Learning
Year 2/3 Maths

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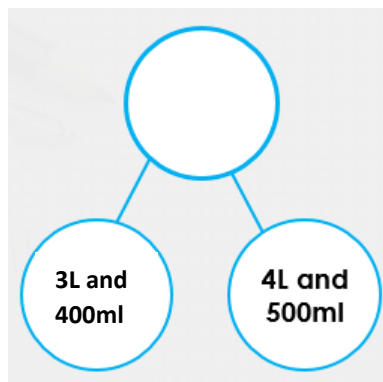
LO: To add and subtract volumes and capacities

Success Criteria:

- Task 1:** Find the missing part from the part-whole model. **If the whole is missing: add the parts.** **If a part is missing: subtract the other part from the whole.**
- Task 2:** Choose the correct containers to find the total volume of liquid.
- You can use any working out you have practiced in school e.g. drawing base ten jottings, partitioning, number line, column addition/subtraction

Model:

1. You are using part-whole models to add and subtract capacities and volumes:

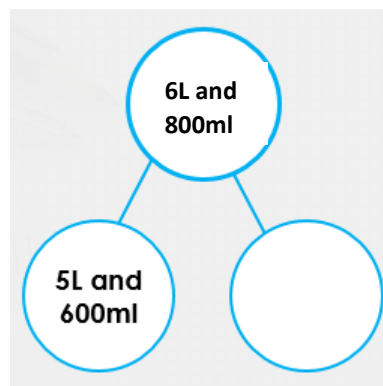


Whole missing: add

$$3L + 4L = 7L$$

$$400ml + 500ml = 900ml$$

$$7L + 500ml = \mathbf{7L \text{ and } 500ml}$$



Part missing: subtract

$$6L - 5L = 1L$$

$$800ml - 600ml = 200ml$$

$$1L + 200ml = \mathbf{1L \text{ and } 200ml}$$

2. You are finding the total of volumes of liquid:

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



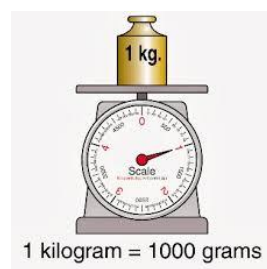
$$3L = 1L + 2L \text{ (so C plus A or B)}$$

$$700ml = 400ml + 300ml \text{ (so C plus A)}$$

The containers you need are C and A.

3. Remember to show your workings out!

This helps to spot mistakes and check answers. You might use base 10 jottings (lines and dots), addition/subtraction on a number line, partitioning, and if you are Y3, column addition and subtraction.

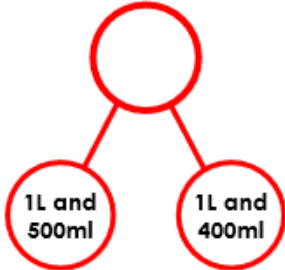


Task 1

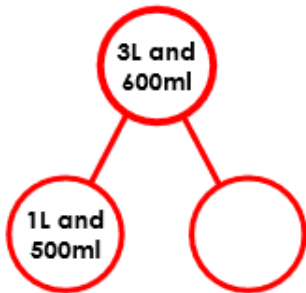
Practice

Complete the part whole models:

1.



2.



3.



4.



5. 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

Task 2

Practice

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



2L and 300ml	200ml	3L and 400ml
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2. Which three of these containers would you need to have a total of 9 ½ L?



2 ½ L	3 ½ L	¾ L	6 ¼ L
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3. Which three of these containers would you need to have a total of 8 ½ L?



2 ½ L	4 ½ L	3 ½ L	1 ½ L
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4. Which three of these containers would you need to have a total of 6 ¼ L?



1 ½ L	4 ½ L	¼ L	5 ½ L
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Task 3

Reasoning

Explain your answers.

3a. Jon says, 'The jug has a capacity large enough to make 1 serving of milkshake.'

Milkshake Recipe

500ml milk
400ml strawberry juice



800ml

Is he correct? Prove it.
What is the difference between the capacity of the jug and the volume of liquid?



5

3b. Millie says, 'The jug has a capacity large enough to make 1 serving of juice.'

Juice Recipe

400ml water
300ml fresh orange



900ml

Is she correct? Prove it.
What is the difference between the capacity of the jug and the volume of liquid?



6a. Lu says, 'The jug has a capacity large enough to make 2 lots of slime.'

Slime Recipe

1L and 100ml glue
1L and 600ml washing liquid



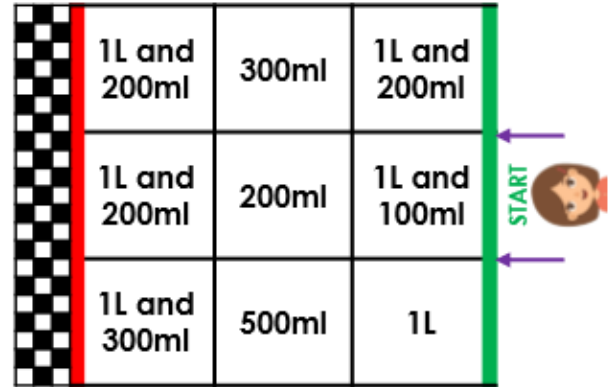
4L and 900ml

Is he correct? Prove it.
What is the difference between the capacity of the jug and the volume of liquid?

Task 4

Problem solving

2a. Find a way through the maze.

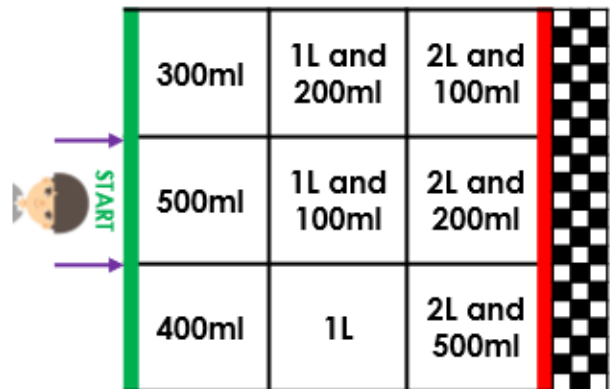


She drinks 2L and 500ml in total.



PS

2b. Find a way through the maze.



He drinks 2L and 900ml in total.



PI

5a. Find a way through the maze.



She drinks 4L and 600ml in total.



PS

Challenge

1. You have been given a mission to remove sugary drinks from the supermarket. How many ways can you find to collect the bottles so your checkout total is 4L and 400ml?

 1L and 450ml	 800ml	 250ml	1L and 300ml 
900ml 	 350ml	 1L and 100ml	 150ml
 450ml	900ml 	 150ml	 450ml
 700ml	 250ml	 650ml	CHECKOUT TOTAL 4L and 400ml