

Monday

## Measure Capacity

We measure the volume of liquid in:



litres (l)



millilitres (ml)

$$1000\text{ml} = 1\text{l}$$

What do volume and capacity mean?

**Capacity:** The total amount of liquid a container can hold

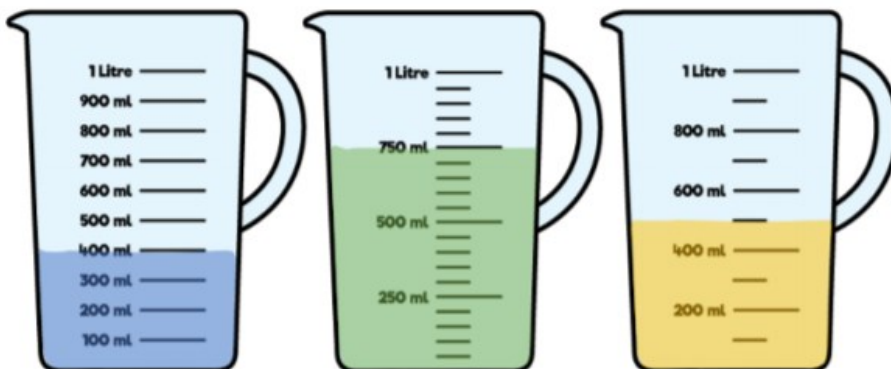
**Volume:** A measure of how much space is taken up by a liquid.

### Task 1

Use the sentence stems to describe the **capacity** and **volume** of each container.

The capacity of the container is\_\_\_\_\_.

The volume of liquid is\_\_\_\_\_.

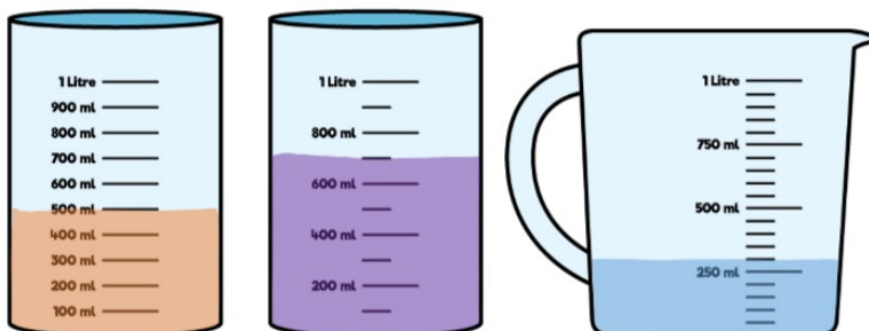


### Task 2

Identify what the scale is going up in to find the volume of each container. Use the stem sentence.

The increments go up in \_\_\_\_\_.

The volume of liquid is\_\_\_\_\_.



## Monday continued

### Task 3

Choose to either:

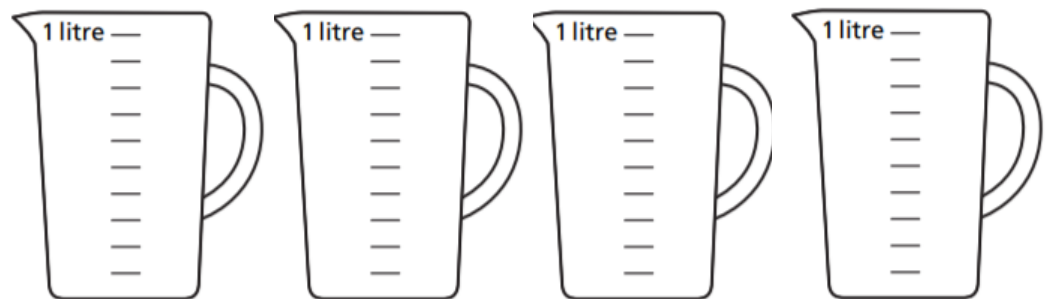
- a) Practise reading different volumes of liquid in your kitchen by filling different sized containers with liquid and then using a measuring jug (ask your parents to help!).
- b) Or, follow the link below and practise reading different volumes of liquid interactively

<http://www.ictgames.com/mobilePage/capacity/index.html>

### Task 4

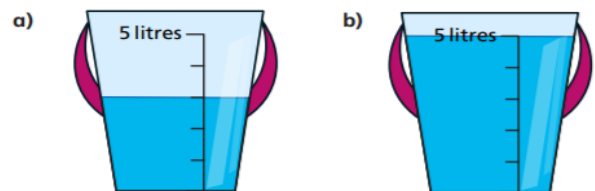
If you have a printer, shade the jug to show where the juice will reach.

- a) 700ml of juice
- b) 250ml of juice
- c) 450ml of juice
- d) 1000ml of juice



### Task 5

What is the same and what is different about the buckets of water in the picture?



### Go deeper

Use the clues to work out who has which container



Annie

I have exactly half a litre



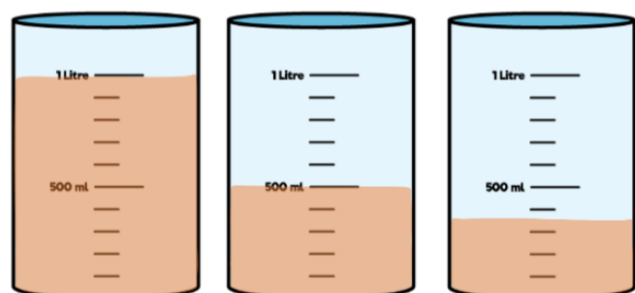
Amir

I have 1,000 ml



Eva

I have more than 300 ml but less than 400 ml



A

B

C

Tuesday

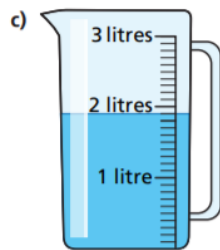
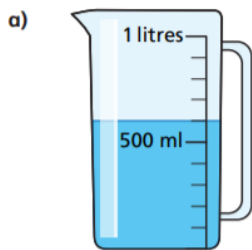
Measure Capacity

Task 1

Fill in the missing information

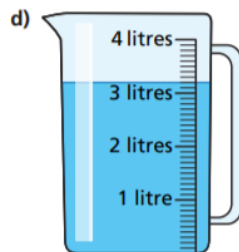
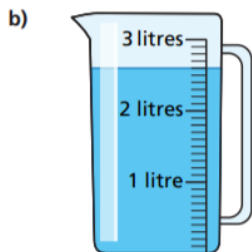
millilitres (ml)	=	litres (l)
1000ml	=	1l
	=	2l
3000ml		
1,200ml		1l and 200ml
4,300ml		
1,500ml		1l and 500ml
		4l and 400ml
3,400ml		

Task 2



How much water is there in each jug?

\_\_\_\_\_ l and \_\_\_\_\_ ml



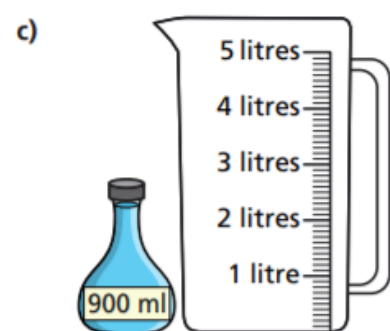
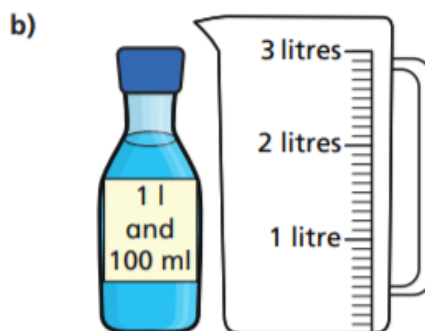
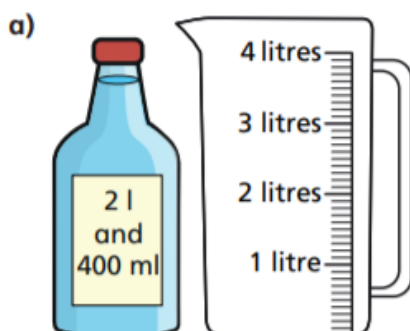
Task 3

The capacity of each bottle is shown on the label.

Each bottle is full of liquid. The bottles are emptied into jugs.

Draw a line on each jug to show where the liquid will reach.

If you don't have a printer, explain where the line would go to an adult.



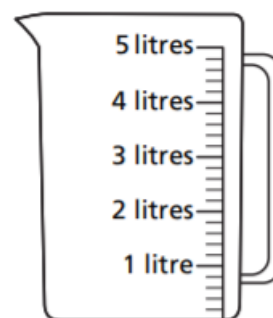
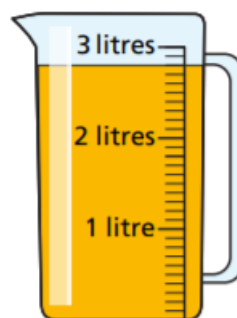
## Tuesday continued

### Task 4

Mo has some orange juice in a jug which he pours into another jug.

Draw a line on the jug to show where the orange juice will reach.

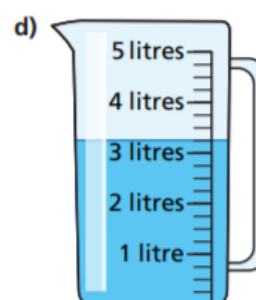
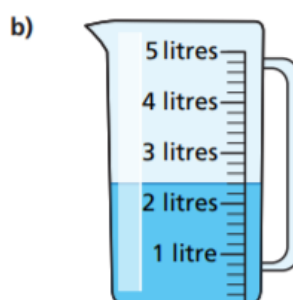
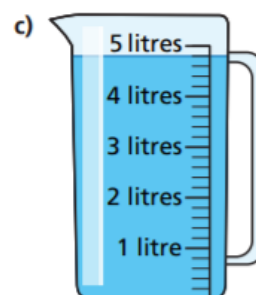
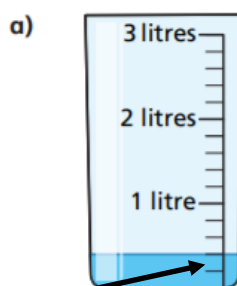
What do you notice?



### Go deeper 1

How much water is there in each container?

*You will need to work out what the scale is going up in for each measuring jug.*



### Go deeper 2



Different bottles hold different amounts of liquids.

Who has more liquid?

Dexter



Eva



Wednesday

## Compare Capacity

Remember:  
1000ml = 1 litre

To measure the volume of a liquid, you need to look carefully at the scale of the measuring jug.

### Task 1



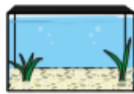
kettle



bath



swimming pool



fish tank



tablespoon



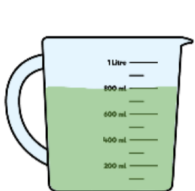
mug

a) Put the pictures in ascending order (smallest to largest) based on the total capacity of water you estimate they can hold.

b) Decide which you would measure using millilitres and which you would measure using litres. Why?

### Task 2

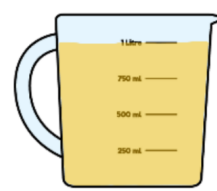
Use <, > or = to compare the volume of liquid in each pair of containers.



800 ml ○ 1 l



\_\_ l and \_\_ ml ○ 750 ml



### Task 3

Here is the capacity of four different containers. Put the containers in order of capacity. Start with the smallest capacity.

A	B	C	D
400ml	99ml	3 litres 400ml	2 litres

## Wednesday continued

### Task 4

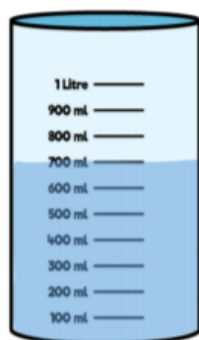


Eva

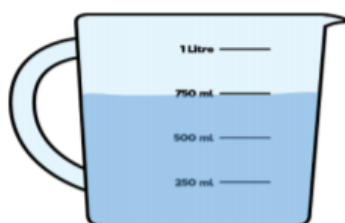
I know container 1 has more than container 2 in it because the water goes further up the side.

Is Eva correct?

**Explain** your answer.



Container 1



Container 2

### Task 5

300 ml is greater than 1 litre because 300 is greater than 1



Do you agree with Alex?

**Explain** your answer.

### Go deeper



Rosie has a litre bottle of water

She pours a drink for herself and two friends.

Their glasses can hold up to 250ml each.



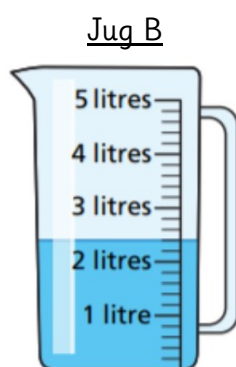
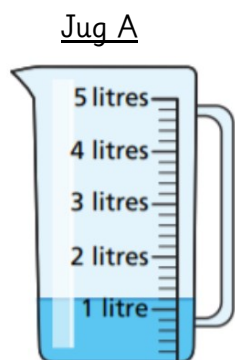
- Teddy has more than Amir.
- Rosie has the most.
- How much could each child have in their glass?
- How much would be left in the bottle?

<u>Rosie</u>	<u>Teddy</u>	<u>Amir</u>	<u>Left in the bottle</u>

Remember:  
1000ml = 1 litre

When you are adding and subtracting capacity, you must decide whether it is easier to do it in your head or to use the column method.

If the measurements are multiples of 10 or 100, often it is easier to work out mentally instead of using the column method.



Jug A has 1l and 200ml

Jug B has 2l and 400ml

Add the litres and  
millilitres separately!

$$1\text{l and }200\text{ml} + 2\text{l and }400\text{ml} = 2\text{l and }600\text{ml}$$

### Task 1

Complete the number sentences:

a) 1l and 400ml + 3l and 150ml =

b) 7l and 800ml + 2l and 110ml =

c) 5l and 357ml + 3l and 224ml =

d) 4l and 212ml + 4l and 439ml =

e) 8l and 400ml - 3l and 200ml =

f) 20l and 300ml - 5l and 100ml =

g) 16l and 432ml - 4l and 127ml =

h) 9l and 235ml - 3l and 77ml =

### Task 2

Rosie keeps a record of how much milk she has in her café.

Work out how much milk is used for each order.

You need to find the  
difference between the  
two amounts!

Amount of milk to start	Amount of milk used	Amount of milk left
1l and 430ml		1l and 100ml
1l and 100ml		900ml
900ml		545ml

## Thursday continued

### Task 3

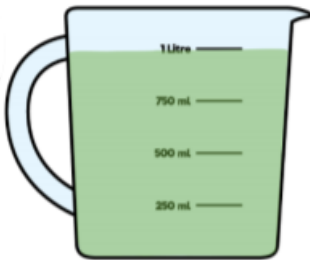
To make Summer Punch for 2 people:



- 300 ml of pineapple juice
- 250 ml of orange juice
- 500 ml of lemonade

- How much liquid is used in total to make Summer Punch for 2 people?
- How much orange juice would be need to make enough for 4 people?
- Would a 1litre bottle of lemonade be enough to make drinks for 6 people?

### Go deeper 1



Tommy is pouring drinks from this jug.

He pours three 125ml drinks.

How much is left in his jug?

### Go deeper 2

Here are some measuring cylinders.

The total liquid in all three cylinders is 400 ml.

Cylinder A has half of the total amount in it.

Cylinder B has 67 ml less than Cylinder A.

How much liquid does each cylinder contain?





## Monday answers

### Task 1

- a) The capacity of the container is 1l.  
The volume of liquid is 400ml.
- b) The capacity of the container is 1l.  
The volume of liquid is 750ml
- c) The capacity of the container is 1l.  
The volume of liquid is 450ml.

### Task 2

- a) The increments go up in 100ml.  
The volume of liquid is 500ml.
- b) The increments go up in 100ml.  
The volume of liquid is 700ml.
- c) The increments go up in 50ml.  
The volume of liquid is 300ml.

### Task 4



### Task 5

Both buckets of water have a **capacity** of 5 litres.

Bucket **A** has a volume of 250ml but bucket **B** has a volume of 5 litres.

### Go deeper

- Annie has container B
- Ron has container A
- Eva has container C

## Tuesday answers

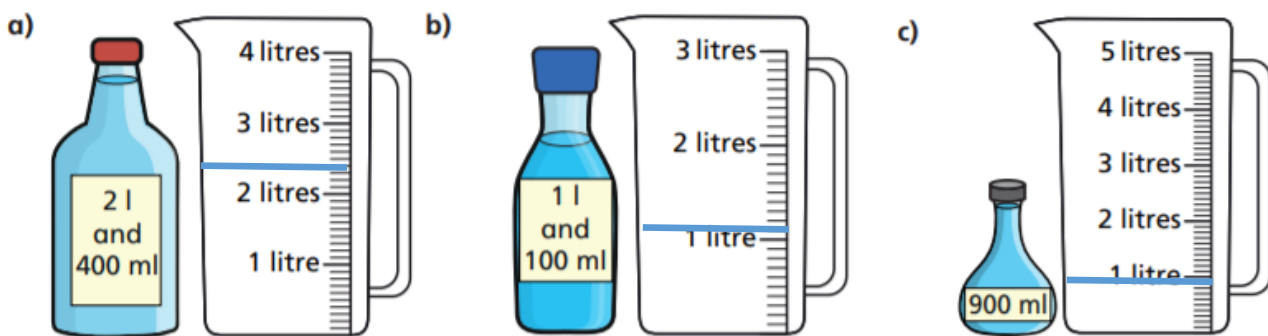
### Task 1

millilitres (ml)	=	litres (l)
1000ml	=	1l
2000ml	=	2l
3000ml		3l
1,200ml		1l and 200ml
4,300ml		4l and 300ml
1,500ml		1l and 500ml
4,500ml		4l and 400ml
3,400ml		3l and 400ml

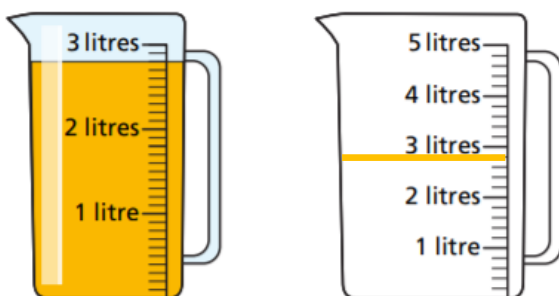
### Task 2

- a) 600ml
- b) 2l and 600ml
- c) 1l 900ml
- d) 3l and 200ml

### Task 3



### Task 4



The orange juice fills less of the second container because it has a larger capacity.

### Go deeper 1

- a) 400ml
- b) 4l and 800ml
- c) 2l and 400ml
- d) 3l and 250ml

### Go deeper 2

Dexter and Eva both have the same.

They both have 1l and 750ml (or 1,750ml).

## Wednesday answers

### Task 1

- Tablespoon
- Mug
- Kettle
- Fish Tank
- Bath
- Swimming pool

### Task 2



### Task 3

B 99ml	A 400ml	D 2 litres	C 3 litres 400ml
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### Task 4

**Eva is not correct.** The measurements show that container 1 has 700ml in it whereas container 2 has 750ml in. Container 2 is wider than container 1 which is why it looks like it has less in it.





### Task 5

**Alex is incorrect.** 300ml is less than 1litre.

### Go deeper

There are a range of possible answers the children could find. Rosie should have the most and Amir should have the least. The total should not exceed 750ml.

**Possible answer:**

<u>Rosie</u> 250ml 	<u>Teddy</u> 200ml 	<u>Amir</u> 150ml 	<u>Left in the bottle</u> 400ml 
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## Thursday answers

### Task 1

- a) 4l and 550ml
- b) 9l and 910ml
- c) 8l and 581ml
- d) 8l and 651ml
- e) 5l and 200ml
- f) 15l and 200ml
- g) 12l and 305ml
- h) 6l and 158ml

### Task 2

Amount of milk to start	Amount of milk used	Amount of milk left
1l and 430ml	330ml	1l and 100ml
1l and 100ml	200ml	900ml
900ml	355ml	545ml

### Task 3

- 1 litre and 50ml
- 500ml
- No. You would need 1litre and 500 ml (or 1,500ml)

### Go deeper 1

$$125\text{ml} + 125\text{ml} + 125\text{ml} = 375\text{ml}$$

$$1000\text{ml} - 375\text{ml} = 625\text{ml}$$

There is 625ml left in the jug.

### Go deeper 2

A: 200 ml

B: 133 ml

C: 67 ml