

Year 2 – Summer Block 4 – Mass, Capacity and Temperature – Litres

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 2: (2M1) [Compare and order lengths, mass, volume/capacity and record the results using \$>\$, \$<\$ and \$=\$](#)

Mathematics Year 2: (2M2) [Choose and use appropriate standard units to estimate and measure length/height in any direction \(m/cm\); mass \(kg/g\); temperature \(\$^{\circ}\text{C}\$ \); capacity \(litres/ml\) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels](#)

More [Year 2 Mass Capacity and Temperature](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Step 6: Litres

Introduction

A bottle holds 1l. A bucket holds 2 litres.

A paddling pool holds 25 litres.

How many bottles or buckets will it take to fill up a paddling pool? Which would you choose?



Introduction

A bottle holds 1l. A bucket holds 2 litres.

A paddling pool holds 25 litres.

It will take 25 bottles or 12 and a half buckets to fill the pool.
The bucket will fill the pool faster.



Varied Fluency 1

Circle the containers which should use litres to measure their volume.



Varied Fluency 1

Circle the containers which should use litres to measure their volume.



Varied Fluency 2

Match the volume to the correct container.



5l

15l

Varied Fluency 2

Match the volume to the correct container.



5l

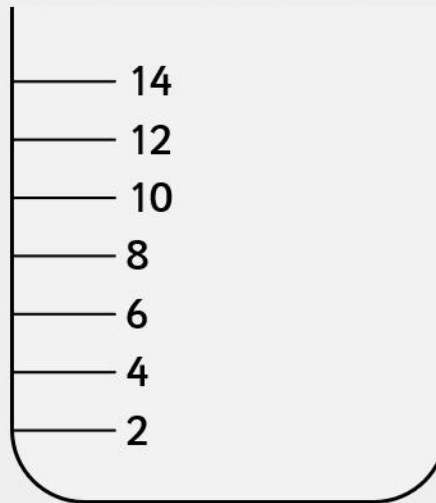
15l

Varied Fluency 3

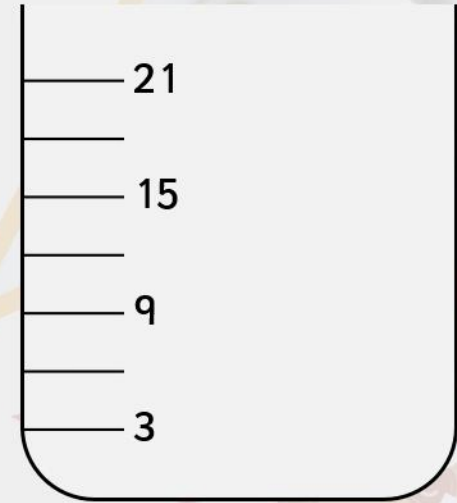
Colour the container to show the litres in the labels below.



6l



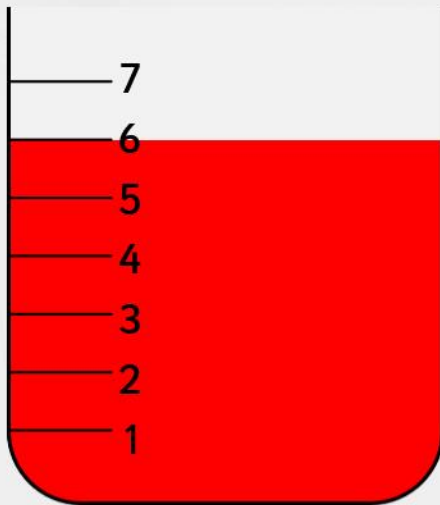
6l



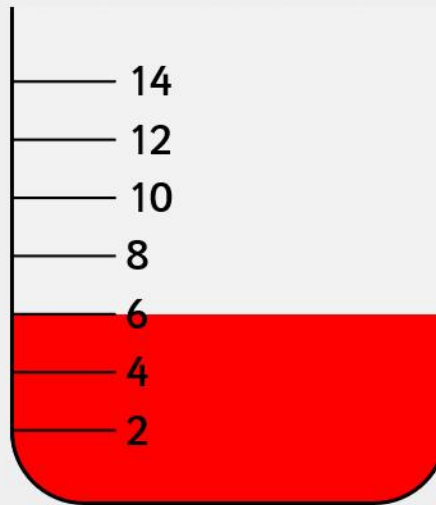
6l

Varied Fluency 3

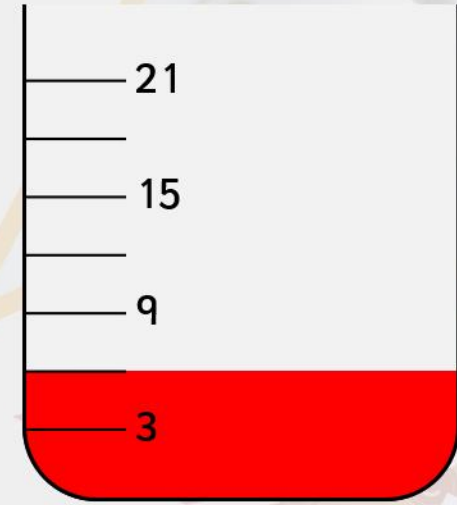
Colour the container to show the litres in the labels below.



6l



6l



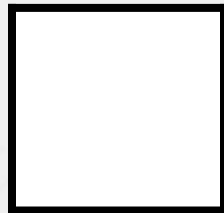
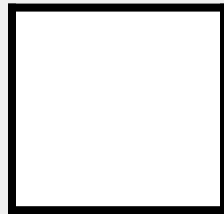
6l

Varied Fluency 4

Choose a symbol to fill each box.



bin



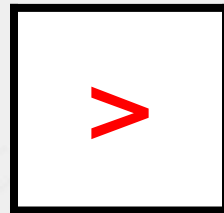
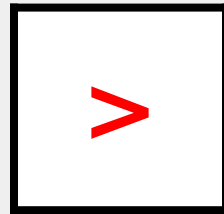
spoon

Varied Fluency 4

Choose a symbol to fill each box.



bin



spoon

Problem Solving 1

Sam has 12 litres of compost to share between the bins below.

- A  $< 4\text{l}$
- B  $> 6\text{l}$
- C  $= 3\text{l}$

How much could each container hold?

Problem Solving 1

Sam has 12 litres of compost to share between the bins below.

- A  $< 4\text{l}$
- B  $> 6\text{l}$
- C  $= 3\text{l}$

How much could each container hold?

C equals 3 so must have 3 litres.

This leaves 9 litres to share between the blue and grey bin within the limits given:

**Two possible answers: $A = 2, B = 7, C = 3\text{l}$
 $A = 1, B = 8, C = 3\text{l}$**

Reasoning 1

Fraser has three containers. They all have the same capacity. Their total capacity is 6l.



Each one holds
12 litres.

Is Fraser correct? Explain your answer.

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Is Fraser correct? Explain your answer.
Fraser is incorrect because...

Reasoning 1

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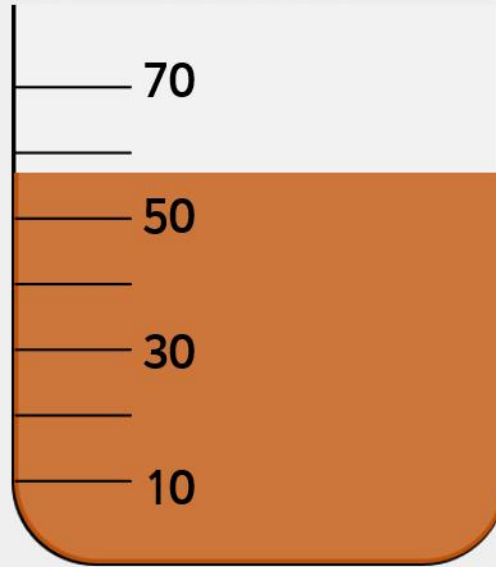
Is Fraser correct? Explain your answer.

Fraser is incorrect because if their total capacity is 6l, each container cannot hold 12l as 12l is more than 6l.

Each container holds 2l, as $2\text{l} \times 3 = 6\text{l}$.

Reasoning 2

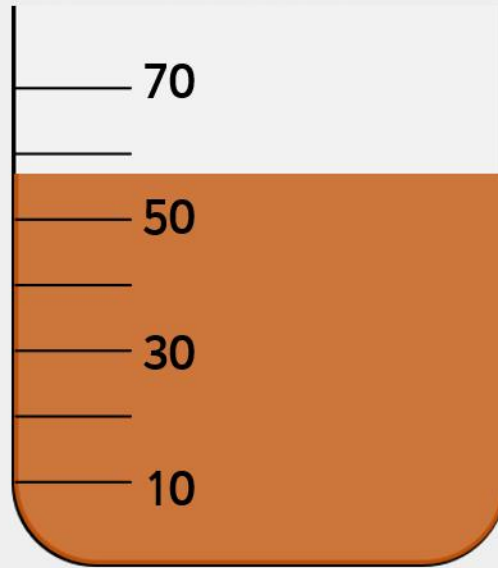
The mud doesn't reach an exact line.



What is a good approximation of the volume?
Explain your answer.

Reasoning 2

The mud doesn't reach an exact line.



What is a good approximation of the volume?
Explain your answer.

Any answer of between 56l – 59l would be a good approximation. We can see the mud is higher than half way between 50ml and 60ml, so must be more than 55ml. It is not up to 60ml, so must be below that.