

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

11.5.20

11.5.20

LO: I can measure capacity



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**.

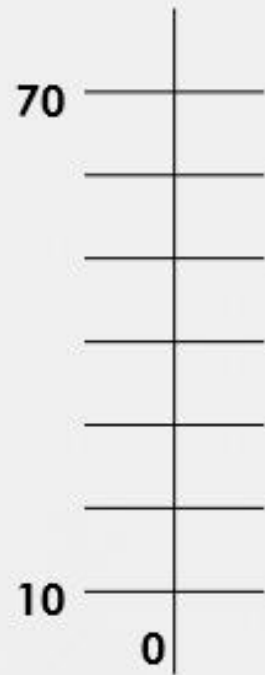
Fill the jug with 250ml of water. This is the **volume**.

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

There are 1000ml in 1l

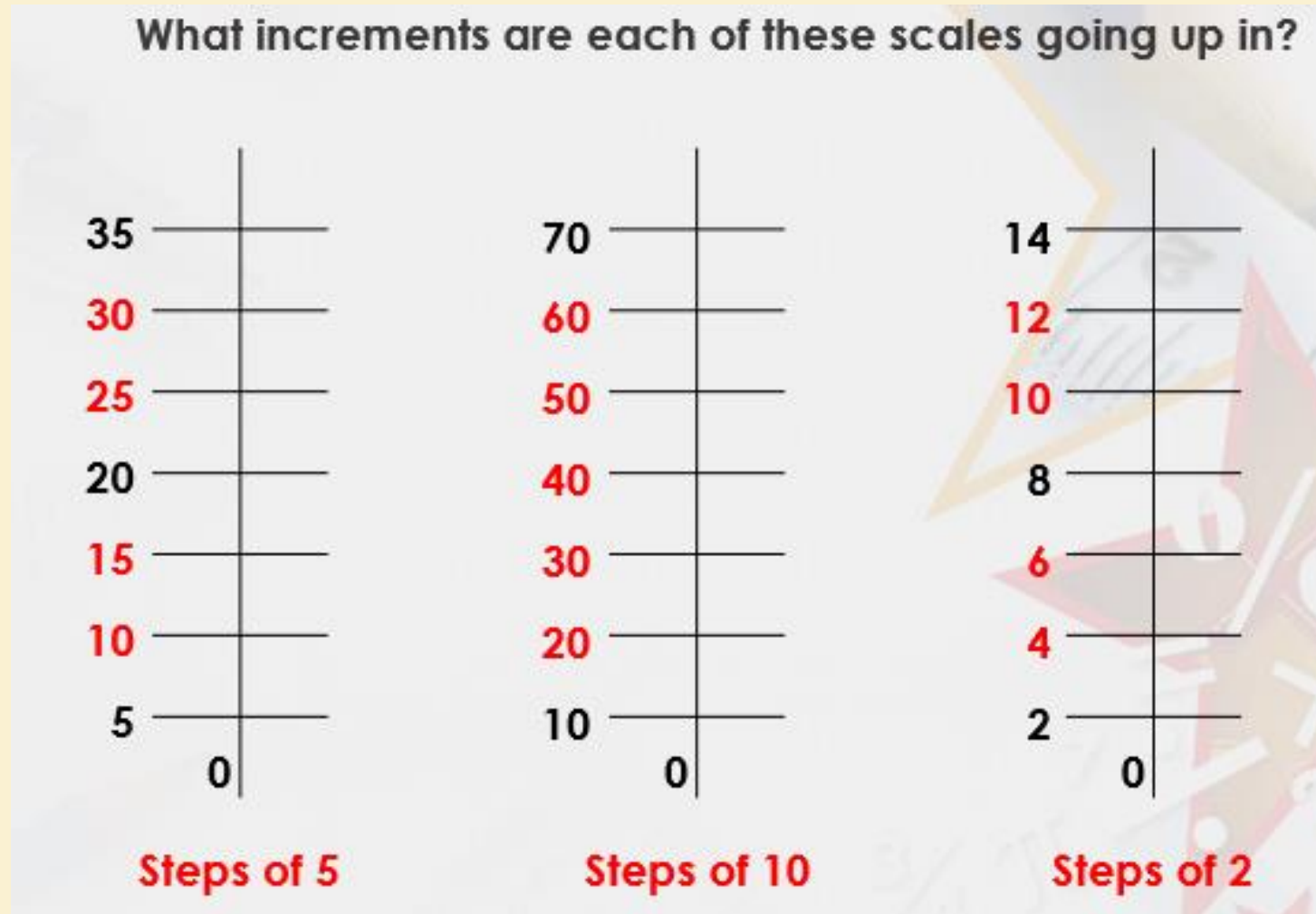
Starter

What increments are each of these scales going up in?



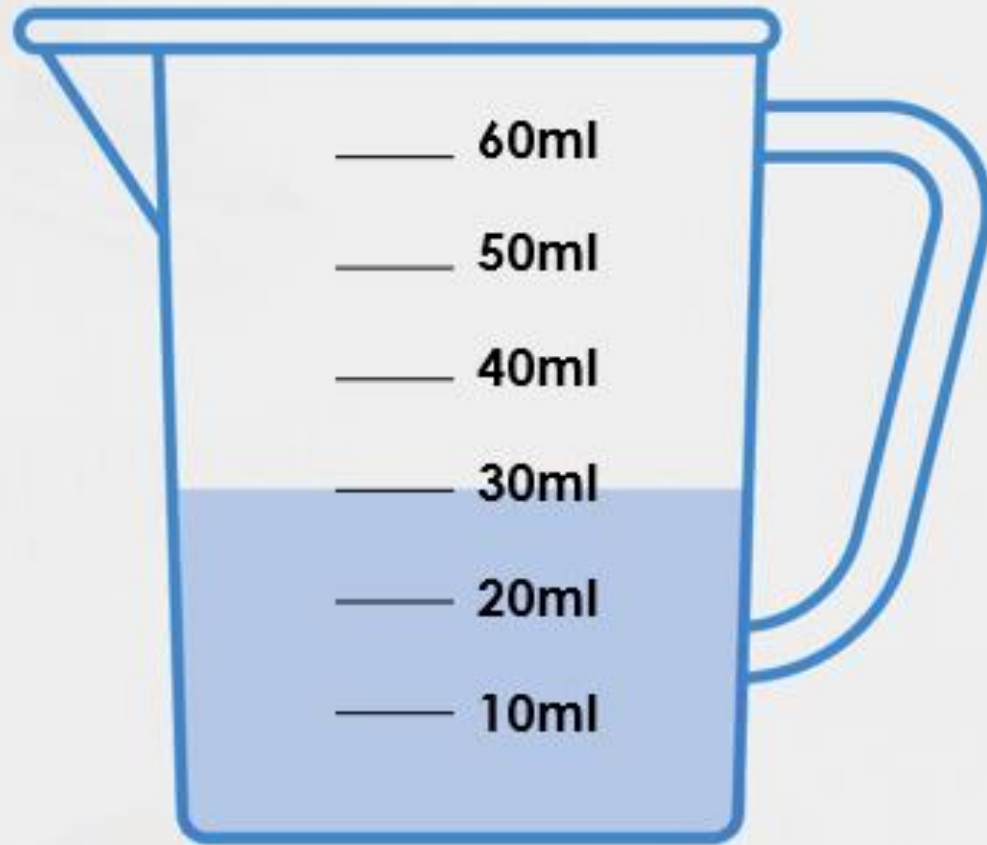
The scale is missing some numbers. Work out what measurement will go with each line to answer the question.

Starter - answer



Descriptive Teaching

What is the volume and capacity of this container?

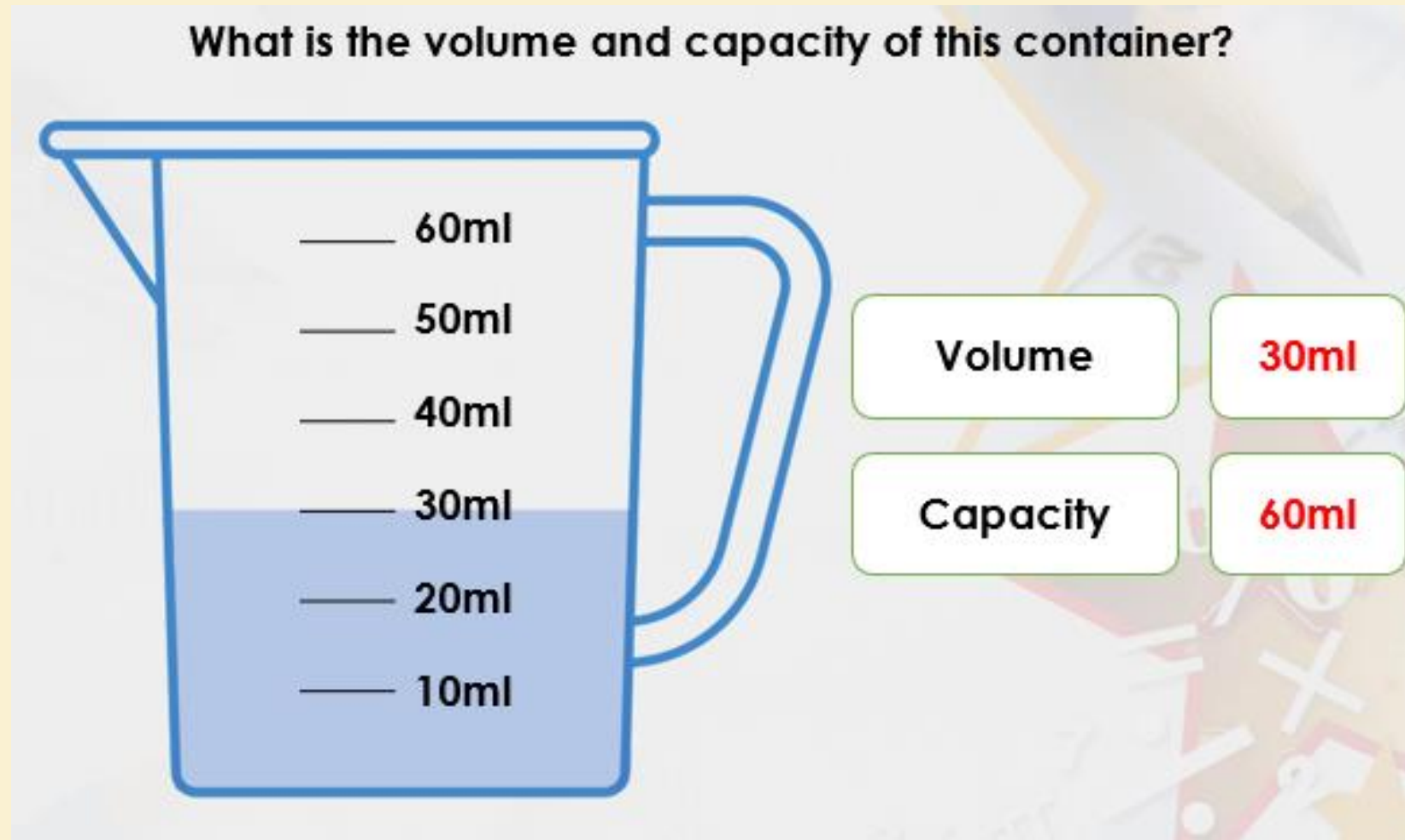


Volume

Capacity

Remember, the volume is the amount of liquid. Capacity is the total amount the jug can hold.

Descriptive Teaching - Answer



Descriptive Doing

Colour the container to show a 20ml volume of liquid.



Draw the container in your book. Label or colour where 20ml of liquid would go.

Descriptive Doing - Answer

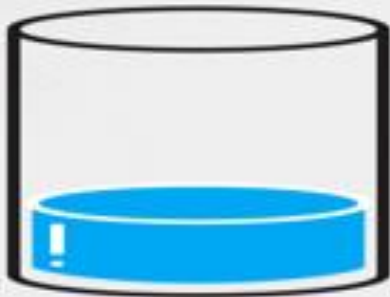
Colour the container to show a 20ml volume of liquid.



Reflective Teaching

Which of these contains the most volume of liquid?

A



80ml

B



70ml

C

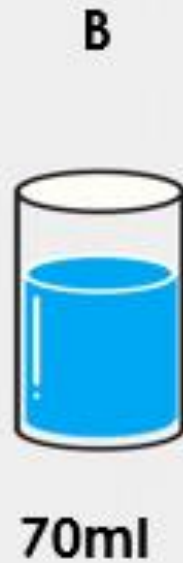
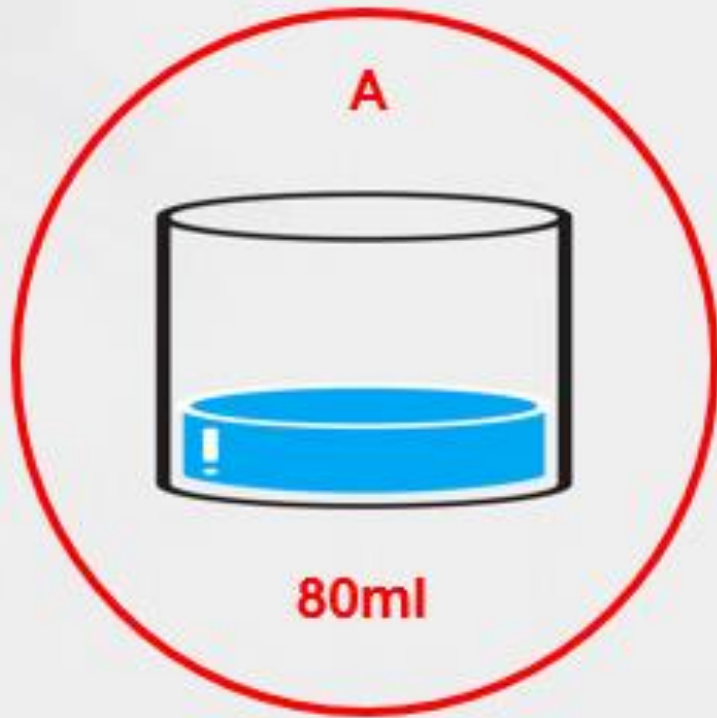


25ml

Write the answer in your book.

Reflective Teaching - Answers

Which of these contains the most volume of liquid?



Even though it looks like container C hold the most, it is container A. This is because the containers are different shapes and sizes.

Reflective Doing

How much more liquid would be needed to fill this container?



We need to fill the jug to its full capacity. The volume of liquid so far in the jug is at 20ml. How much more liquid does the jug need?

Reflective Doing - Answers

How much more liquid would be needed to fill this container?



40ml is needed because $60\text{ml} - 20\text{ml} = 40\text{ml}$

Independent work

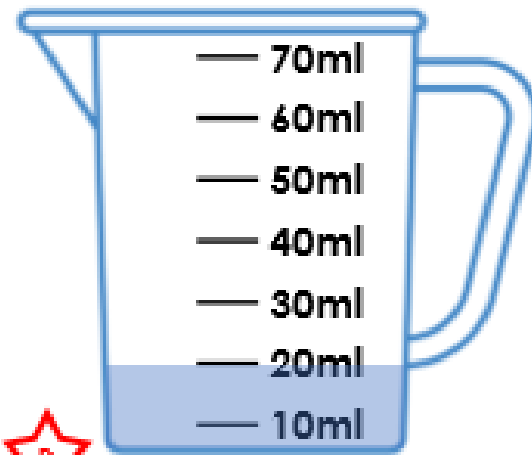
The following slides are questions for you to work through independently.

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. What is the volume and the capacity of this container?

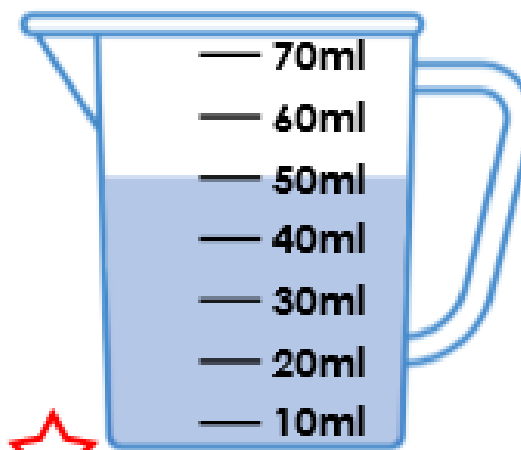


Volume

Capacity

2 VF

1b. What is the volume and the capacity of this container?



Volume

Capacity

2 VF

Independent work

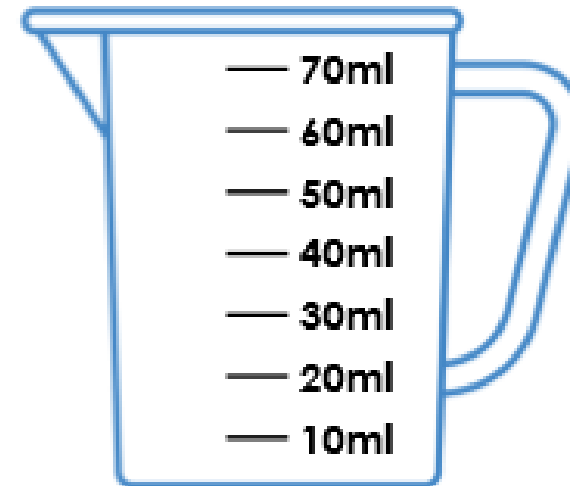


2a. Colour the container to show a 30ml volume of liquid.



2 VF

2b. Colour the container to show a 60ml volume of liquid.

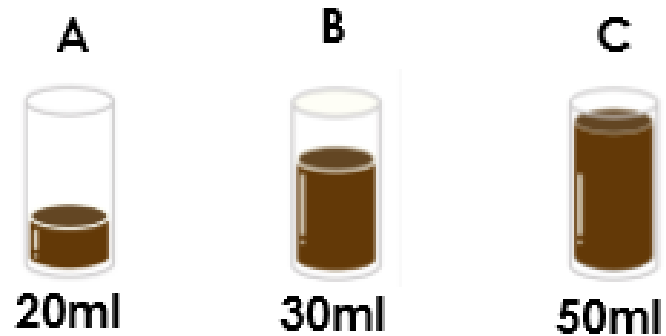


2 VF

Independent work

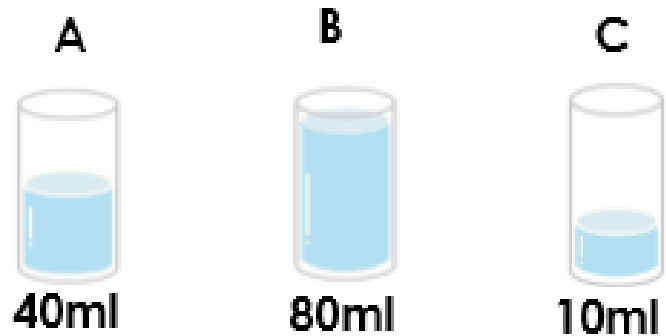


3a. Which of these contains the most volume of liquid?



2 VF

3b. Which of these contains the most volume of liquid?

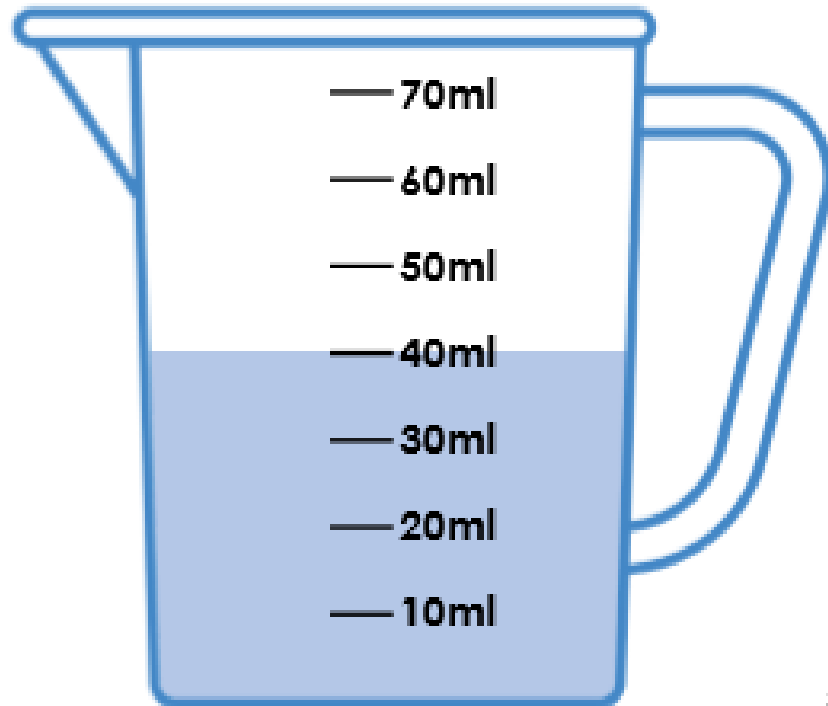


2 VF

Independent work

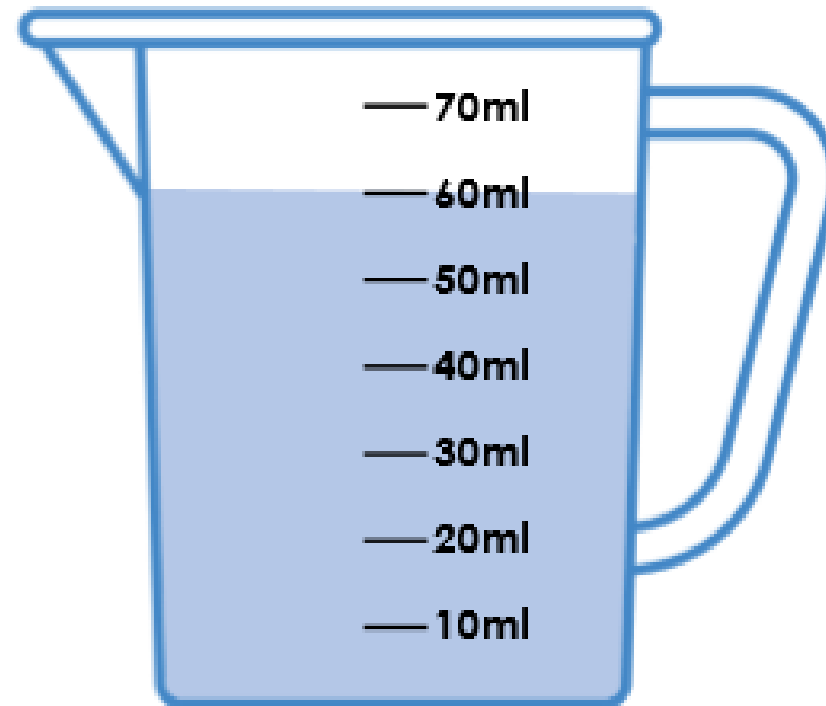


4a. How much more liquid would be needed to fill this container to full capacity?



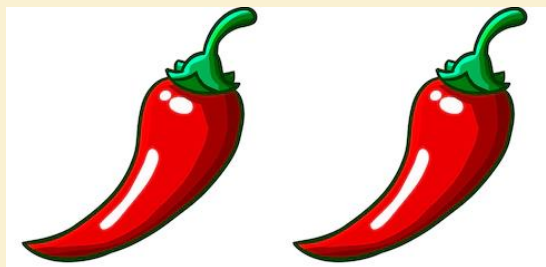
2 VF

4b. How much more liquid would be needed to fill this container to full capacity?



2 VF

Independent work



5a. What is the volume and the capacity of this container?



Volume

Capacity



2 VF

5b. What is the volume and the capacity of this container?



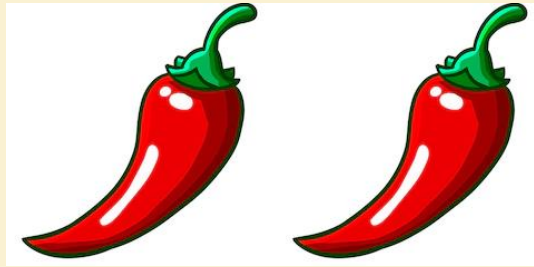
Volume

Capacity



2 VF

Independent work

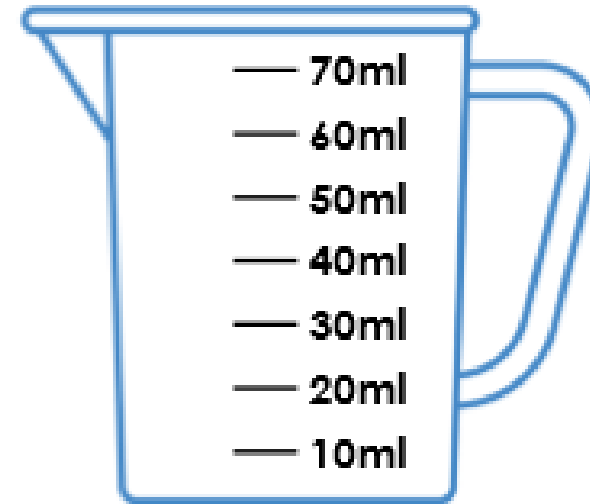


6a. Colour the container to show a 15ml volume of liquid.



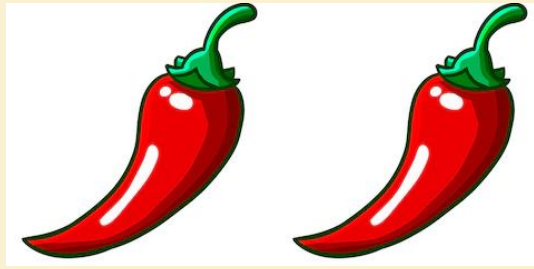
2 VF

6b. Colour the container to show a 40ml volume of liquid.

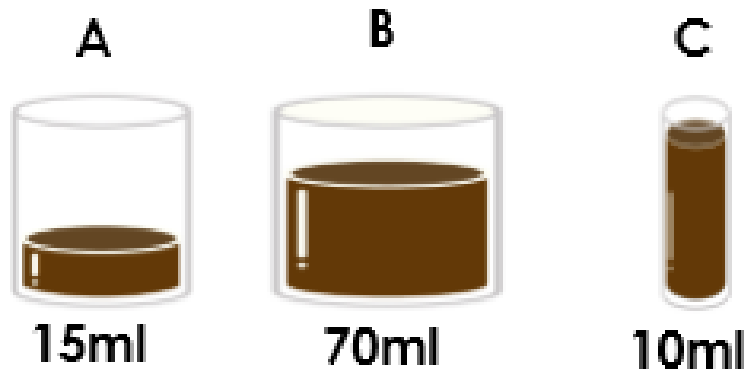


2 VF

Independent work

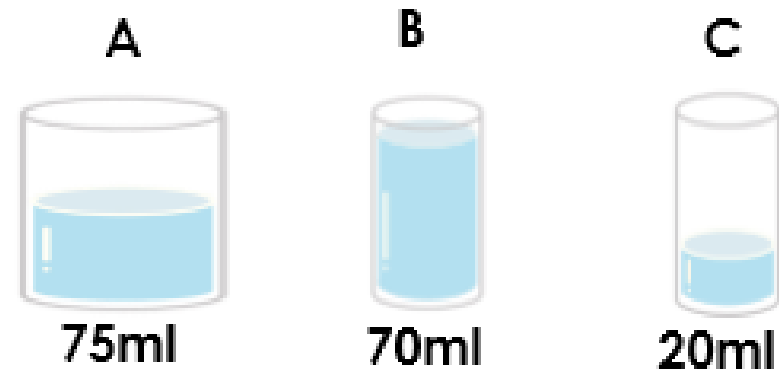


7a. Which of these contains the most volume of liquid?



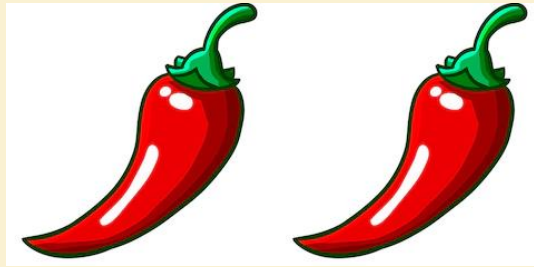
2 VF

7b. Which of these contains the least volume of liquid?

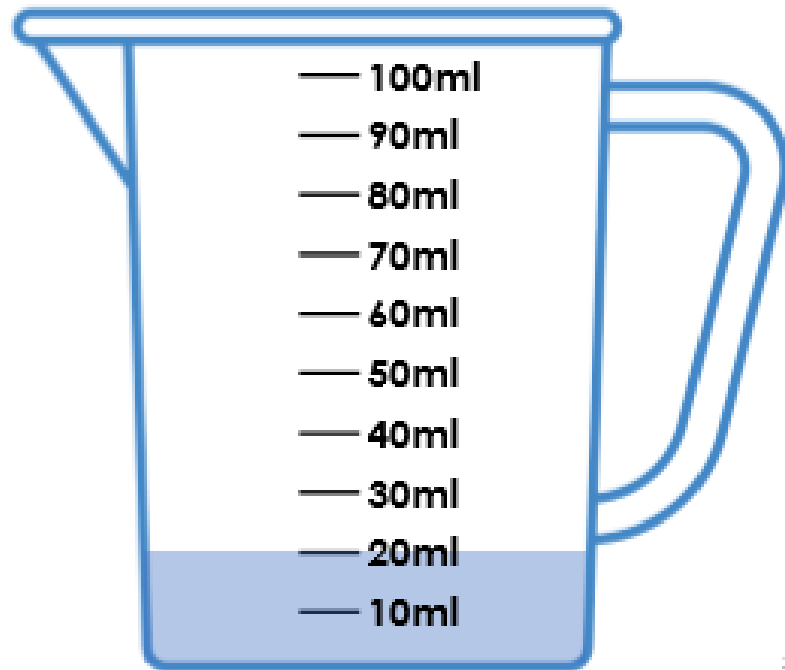


2 VF

Independent work

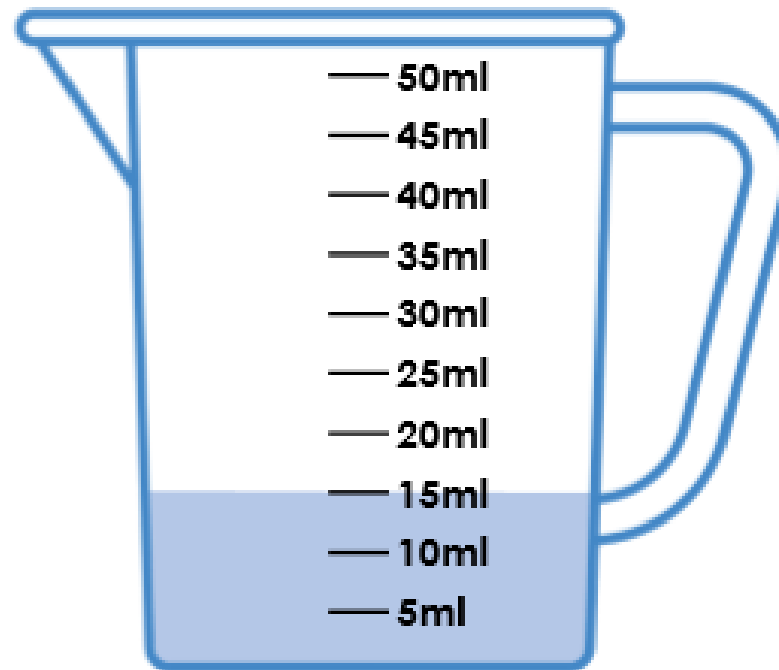


8a. How much more liquid would be needed to fill this container to full capacity?



2 VF

8b. How much more liquid would be needed to fill this container to full capacity?

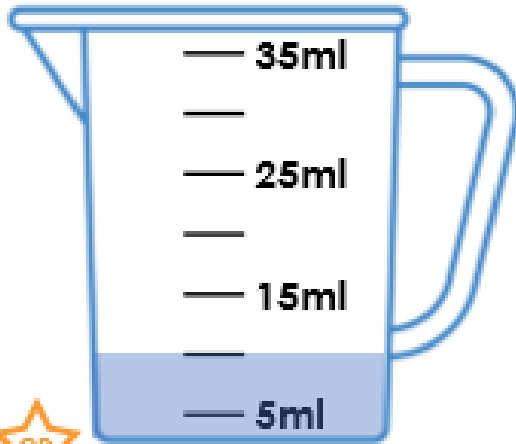


2 VF

Independent work



9a. What is the volume and the capacity of this container?

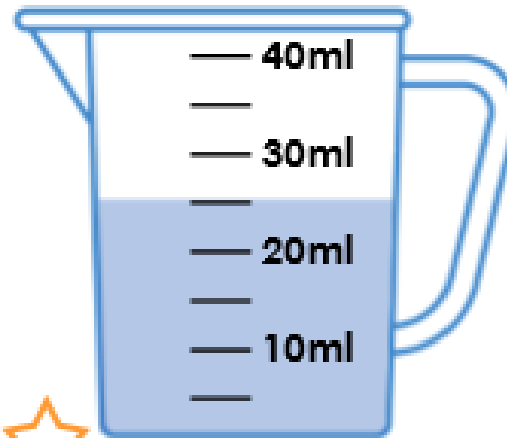


Volume

Capacity

2 VF

9b. What is the volume and the capacity of this container?

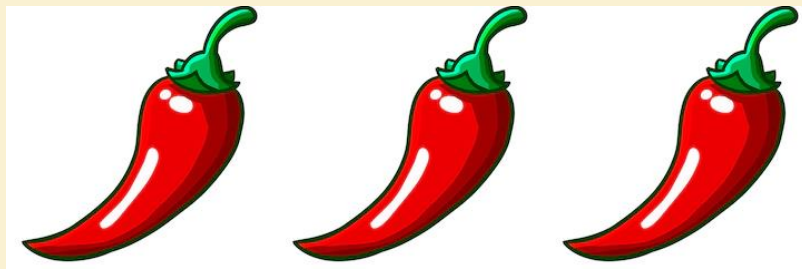


Volume

Capacity

2 VF

Independent work



10a. Colour the container to show a 30ml volume of liquid.



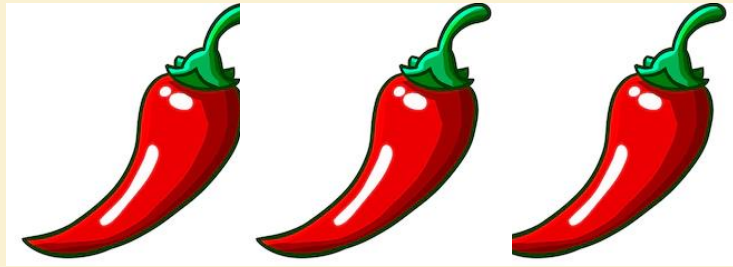
2 VF

10b. Colour the container to show a 10ml volume of liquid.

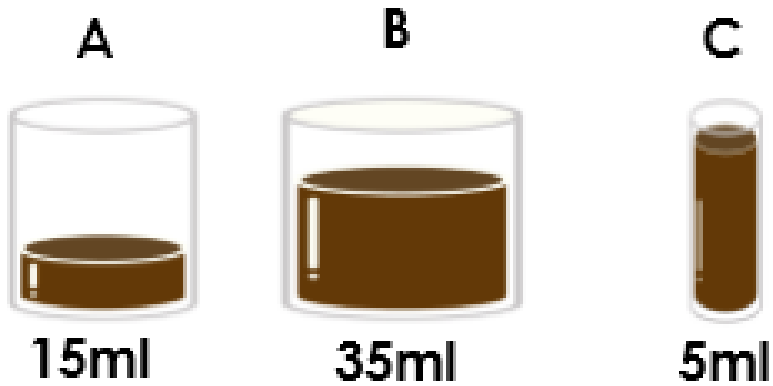


2 VF

Independent work

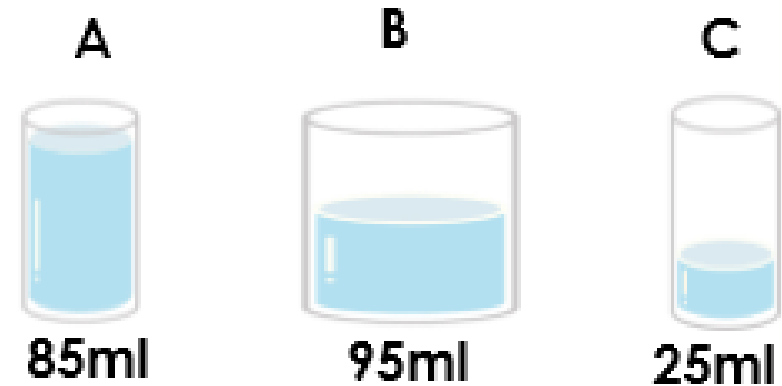


11a. Order these liquids from smallest to greatest volumes.



2 VF

11b. Order these liquids from greatest to smallest volume.

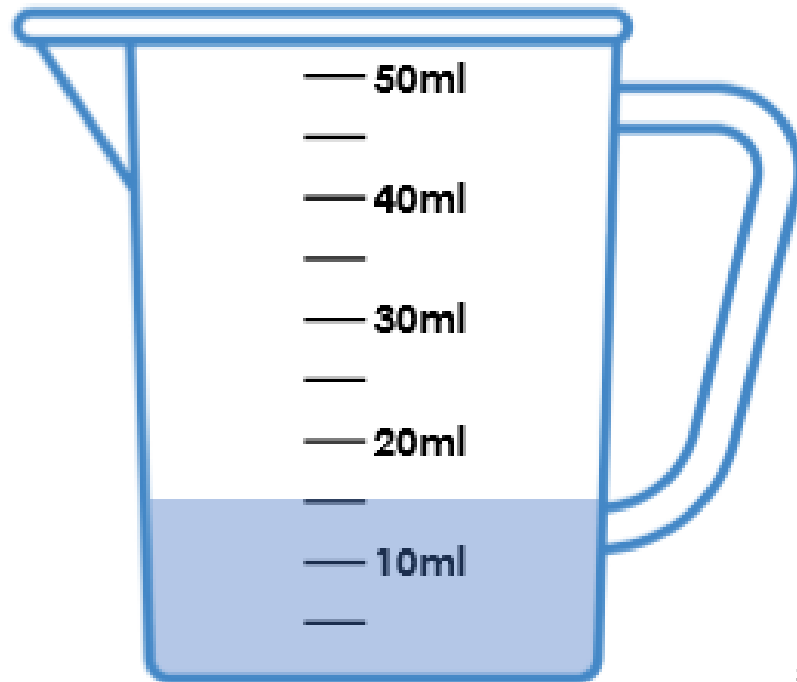


2 VF

Independent work

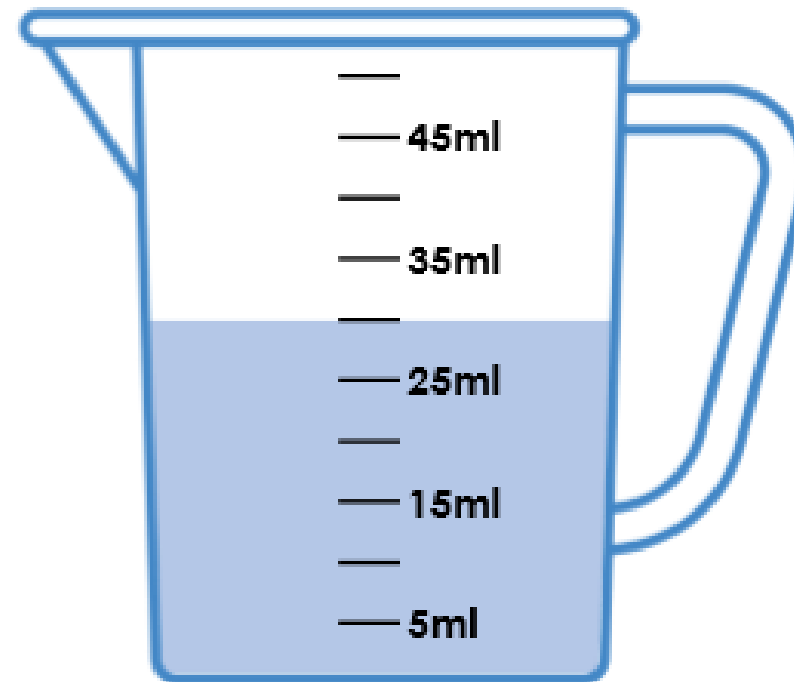


12a. How much more liquid would be needed to fill this container to full capacity?



2 VF

12b. How much more liquid would be needed to fill this container to full capacity?



2 VF

Answers

Developing

- 1a. **Volume: 20ml; Capacity: 70ml**
- 2a. **Line coloured to 30ml**
- 3a. **C**
- 4a. **30ml**

Expected

- 5a. **Volume: 30ml; Capacity: 70ml**
- 6a. **Line coloured up to 15ml**
- 7a. **B**
- 8a. **80ml**

Greater Depth

- 9a. **Volume: 10ml; Capacity: 35ml**
- 10a. **Line coloured up to 30ml**
- 11a. **C, A, B**
- 12a. **35ml**

Developing

- 1b. **Volume: 50ml; Capacity: 70ml**
- 2b. **Line coloured up to 60ml**
- 3b. **B**
- 4b. **10ml**

Expected

- 5b. **Volume: 25ml; Capacity: 35ml**
- 6b. **Line coloured up to 40ml**
- 7b. **C**
- 8b. **35ml**

Greater Depth

- 9b. **Volume: 25ml; Capacity: 40ml**
- 10b. **Line coloured up to 10ml**
- 11b. **B, A, C**
- 12b. **20ml**

Reflection Time



The bottle contains 95ml. Could all of the liquid be poured into vessels A and B?



A



B

Convince me!

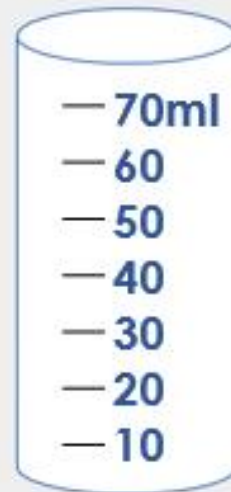
Take time
to reflect



Reflection Time - Answers



The bottle contains 95ml. Could all of the liquid be poured into vessels A and B?



A



B

Convince me!

Yes because the total capacity of both vessels is 100ml which is more than 95ml.

Take time
to reflect

