



# Maths

## Measurement

# Need a coherently planned sequence of lessons to complement this resource?

**Lesson Breakdown**

Below is our suggestion for the most coherent and progressive sequence to teach this area of Plant Maths steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which the resources are presented.

**Understanding Length and Height (1): Height Comparison**  
This lesson teaches children to compare the heights of familiar objects. It includes height such as tall, short, taller, shorter, tallest and shortest. The lesson also includes presentation, activity sheets and our fantastic Diving in Mastery Cards this is a great resource for the classroom.

**NC Statement:** Compare, describe and solve practical problems for lengths and heights.  
**Lesson Aim:** To compare the heights of objects.

**Measuring Length and Height (1): Measure Height Using Non-Standard Units**  
Allow children to explore measuring the height of objects using non-standard units. The presentation demonstrates how to accurately measure objects and gives children the opportunity to be encouraged to record the height of various objects within their classroom. This pack also includes our Diving into Mastery Cards that give opportunities for children to apply their learning.

**NC Statement:** Measure and begin to record lengths and heights.  
**Lesson Aim:** To measure height using non-standard units.

**Understanding Length and Height (2): Length Comparisons**  
This lesson teaches children to compare the length of various toys. They are encouraged to use longer than, longer, longest, shorter, shortest and shortest. The lesson includes presentation, activity sheets and our fantastic Diving in Mastery cards that give opportunities for children to apply their learning.

**NC Statement:** Compare, describe and solve practical problems for lengths and heights.  
**Lesson Aim:** To compare the length of objects.

**Introduction**

This unit will introduce children to the concept of measurement in different areas, such as length and height, capacity, weight, money and time. Children learn the vocabulary they will need to compare and describe measurement and develop their reasoning skills through solving practical problems. The children explore both non-standard and standard units of measure and apply their skills of measuring and recording in a wide range of real-life contexts. They also learn to sequence events in chronological order, use language related to dates and begin to tell the time on an analogue clock.

**Assessment Statements**

By the end of this unit, children working towards the expected level will be able to:

- describe and compare lengths, heights, capacities, weights and times using simple vocabulary;
- measure length, heights, capacities, weights and using non-standard units;
- recognise some coins and notes;
- put two or three simple events in chronological order;
- recognise and use the names of the days of the week and know some months of the year;
- tell the time to the hour on an analogue clock and draw the hands;
- reason about measurements to solve simple practical problems.

Children working at the expected level will be able to:

- describe and compare lengths, heights, capacities and times using mathematical vocabulary;
- measure length, heights, capacities, weights and times using standard and non-standard units;
- know the value of coins and notes;
- sequence familiar events in chronological order;
- order the days of the week and months of the year;
- tell the time to the hour and half past the hour on an analogue clock;
- draw the hands on an analogue clock face to the hour and half past the hour;
- understand fully-numbered scales, such as measuring jugs;
- reason about measurements to solve practical problems.

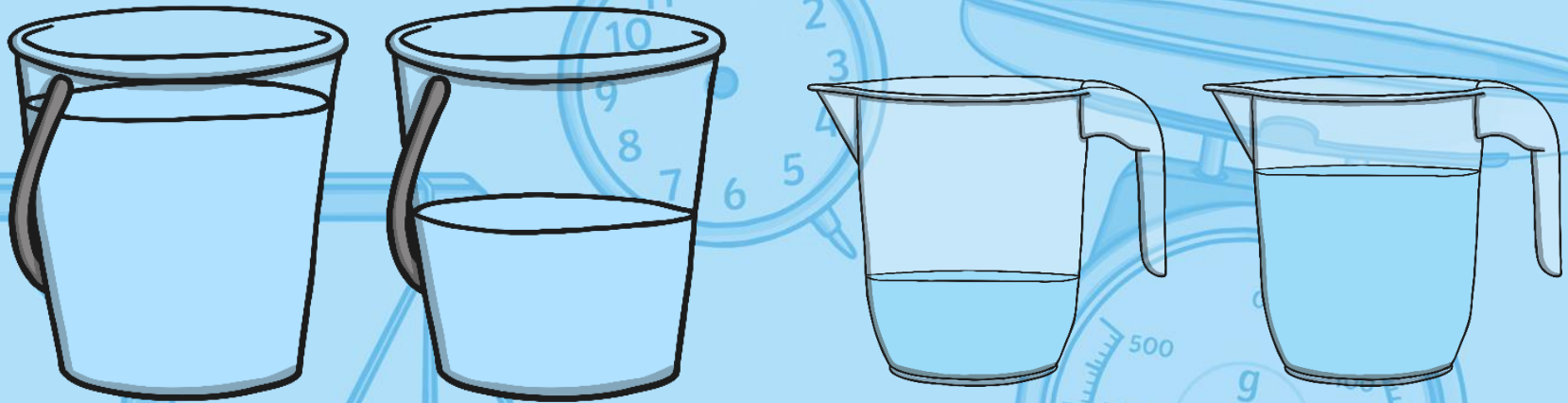
**Measurement**  
Maths | Year 1 | Steps to Progression Overview

The aim of this overview is to support teachers using Plant Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within Plant Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

**Yearly Overview**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Autumn</b>	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)			Geometry: Shape		Number: Place Value (within 20)		Consolidation		
<b>Spring</b>	Number: Addition and Subtraction (within 20)			Number: Place Value (within 50) (Multiples of 2, 5 and 10 to be included)			Measurement: Length and Height		Measurement: Weight and Volume			
<b>Summer</b>	Number: Multiplication and Division (Multiples of 2, 5 and 10 to be included)		Number: Fractions		Geometry: Position and Direction	Number: Place Value (within 100)		Measurement: Money	Time		Consolidation	

# Understanding Capacity and Volume



# Aim

- To understand capacity and volume.

# Success Criteria

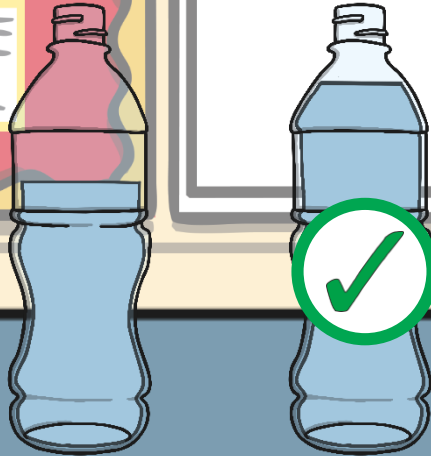
- I can compare the capacity of different containers.
- I can describe the capacity of different containers.
- I can compare the volume in different containers.
- I can describe the volume in different containers.

# Remember It



Which bottle contains **more** liquid?

How can you tell?



★  
Our Class  
Rules

# Remember It



Which glass contains **less** liquid?

How do you know?

★  
Our Class  
Rules

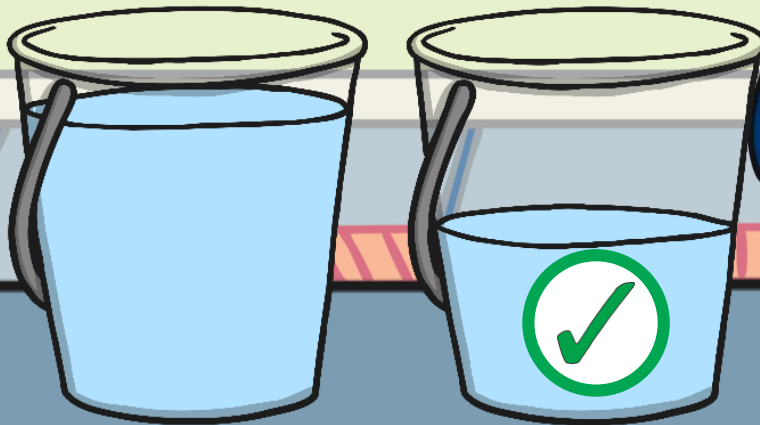


# Remember It



Which bucket contains **less** liquid?

Can you explain why?



# Remember It



Which jug contains **more** liquid?

Can you explain why?

kn



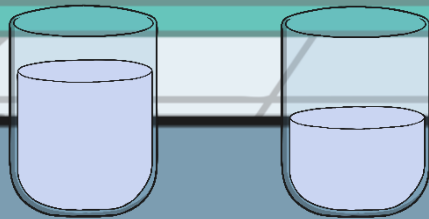


# Remember It



Which beaker contains **more** liquid?

Explain how you can tell.



# Capacity



Capacity is a measure of how much something can hold.

When something holds as much as it can, we say it is **at full capacity**.



What equipment can we use to hold and measure liquid?

# Capacity



Which container has the **greatest** capacity? How can you tell?

If they were full,  
which would hold the most?



Our Class  
Rules



# Capacity



Which container has the **greatest** capacity? How can you tell?

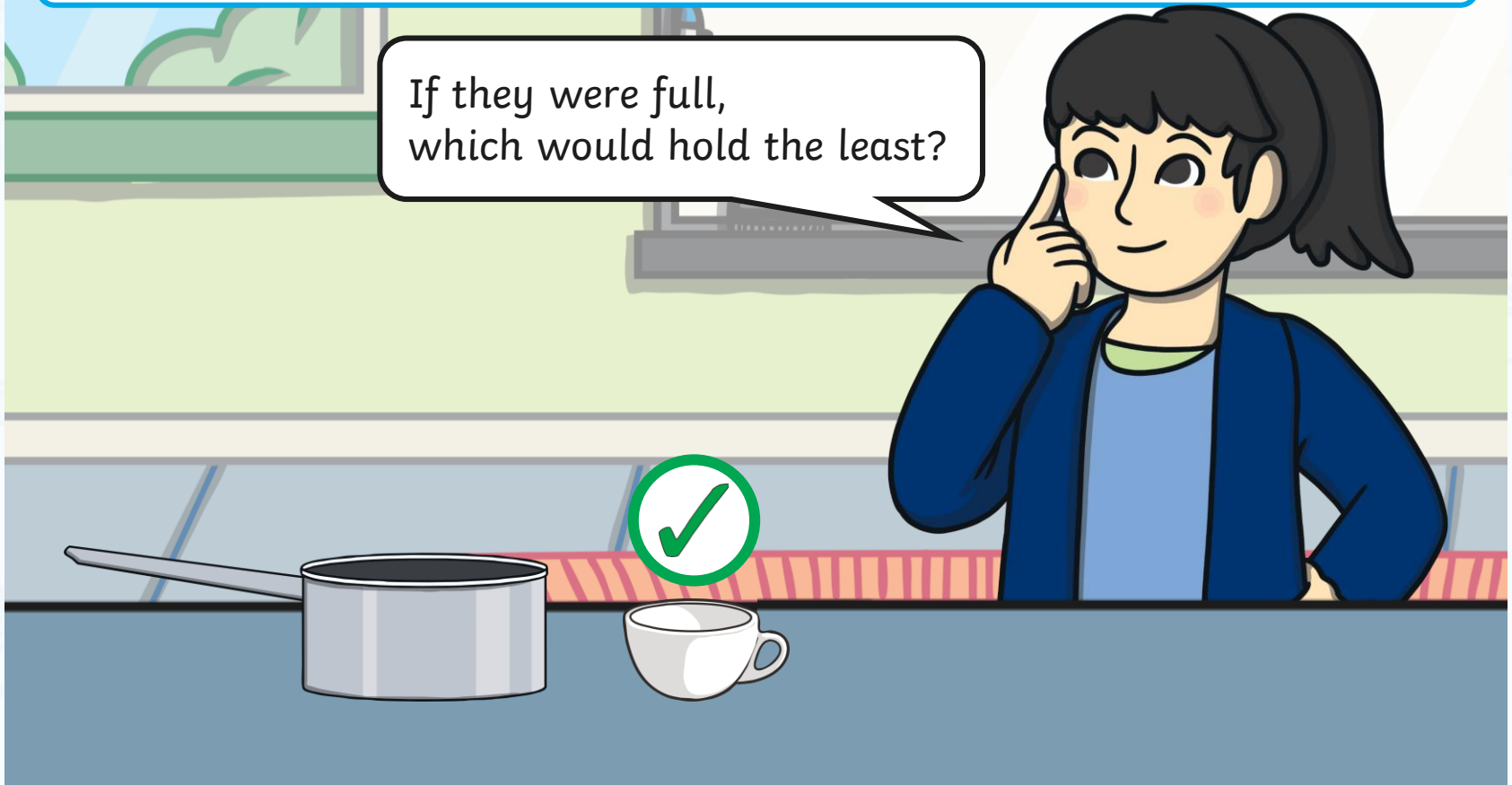


# Capacity



Which container has the **smallest** capacity? How can you tell?

If they were full,  
which would hold the least?

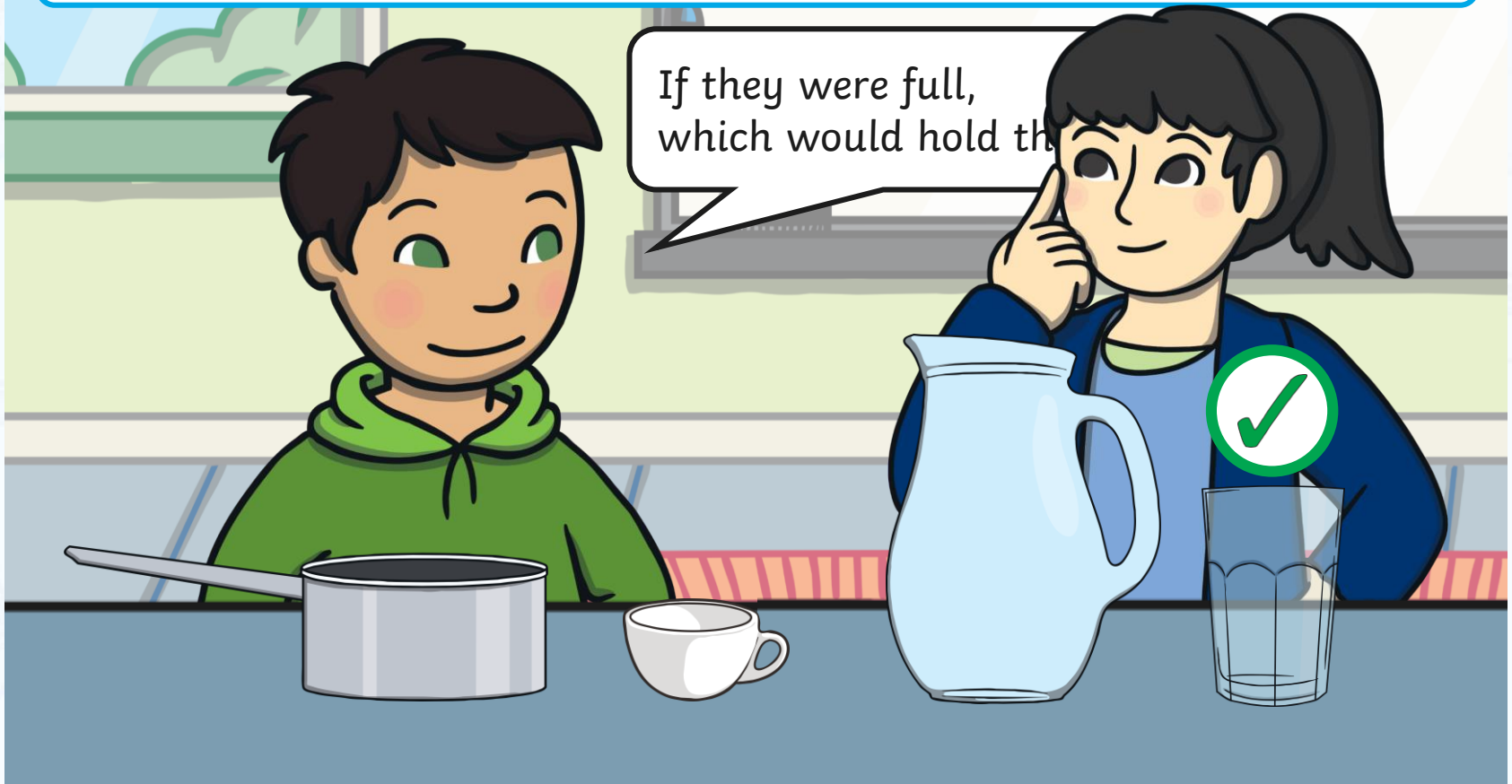


# Capacity



Which container has the **smallest** capacity? How can you tell?

If they were full,  
which would hold the most?



# Volume



Volume tells us how much the container is holding.

How full is the bottle?

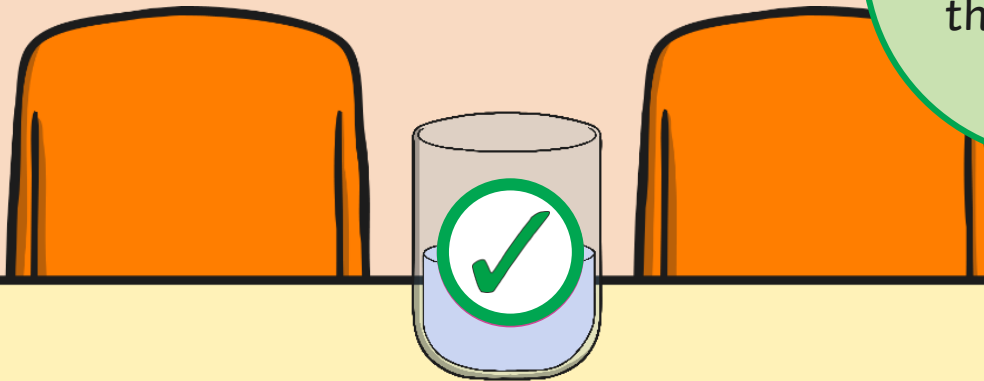


# Volume



This beaker is...

Click the label  
to reveal  
the answer.



empty

nearly empty

full

half full

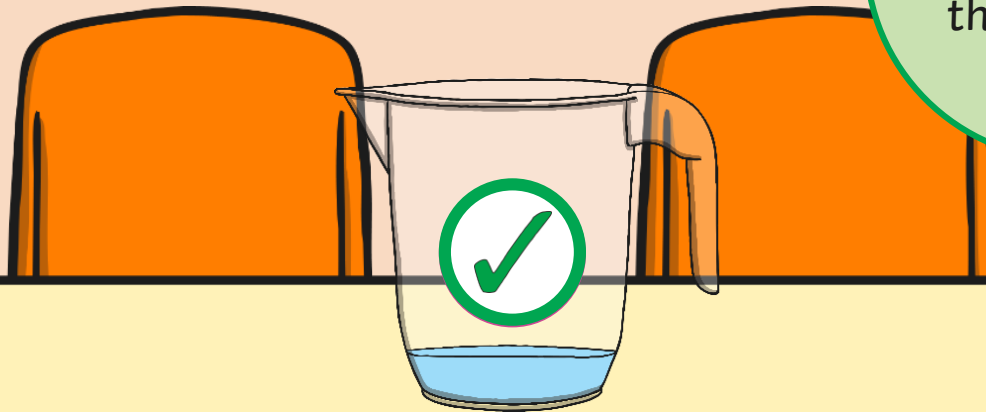


# Volume



This jug is...

Click the label  
to reveal  
the answer.



empty

**nearly empty**

full

half full

# Volume



This bucket is...

Click the label  
to reveal  
the answer.



empty

nearly empty

**full**

half full

# Volume



This bottle is...

Click the label  
to reveal  
the answer.



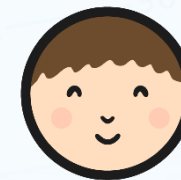
empty

nearly empty

full

half full

# Capacity Activity

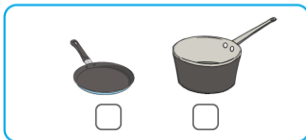
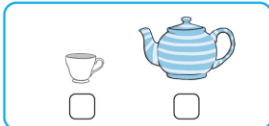
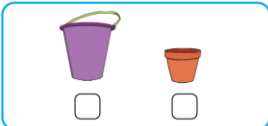


## Capacity

I can describe and compare capacity.

Look at the pairs of containers

Tick the containers with the **greatest** capacity.



Find and draw 2 containers.

Tick the one with the greatest capacity.

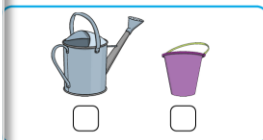
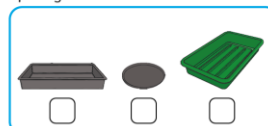


## Capacity

I can describe and compare capacity.

Look at the

containers. Tick the one with the **greatest** capacity.



Look at the

containers. Tick the one with the greatest capacity.




## Capacity

I can describe and compare capacity.

Do they have the same capacity?  
Do they have the same shape?



Do they have the same capacity?  
What can you do to check?

Which word would you choose to finish the sentence?

sometimes

never

Do they have the same shape?  have the same capacity.



These must have the same capacity because they are the same height.

Do you agree?

Find containers of the same height.  
Do they all have the same capacity?  
What can you do to check?

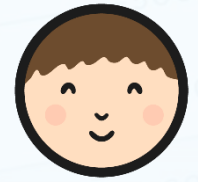
Which word would you choose to finish the sentence?

sometimes

never

Do they have the same height?  have the same capacity.

# Volume Activity



## Volume

To understand capacity and volume.

Cut out the containers and decide if they are empty, half full or full. Then sort them into the table.

Empty	Half Full	Full

## Volume

To understand capacity and volume.

Match the bottle to the volume.



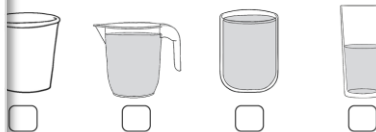
empty      nearly empty      half full

Match the pictures with the correct volume.



empty      half full      nearly full      empty

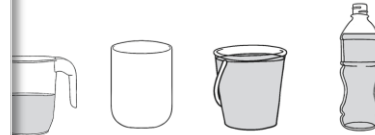
What is half full.



## Volume

To understand capacity and volume.

Match the pictures with the correct volume.



empty      half full      nearly full      empty

Describe the volume. The first one is done for you.

The first bottle is **empty**.

The second bottle is \_\_\_\_\_

The first bottle is \_\_\_\_\_

The second bottle is \_\_\_\_\_

## Diving into Mastery

Dive in by completing your own activity!



**Understanding Capacity and Volume**

More or less?

A B C D

less  
more

A has \_\_\_\_\_ than B. D has \_\_\_\_\_ than C.

1 2 3

Put them in order from empty to full.

empty full

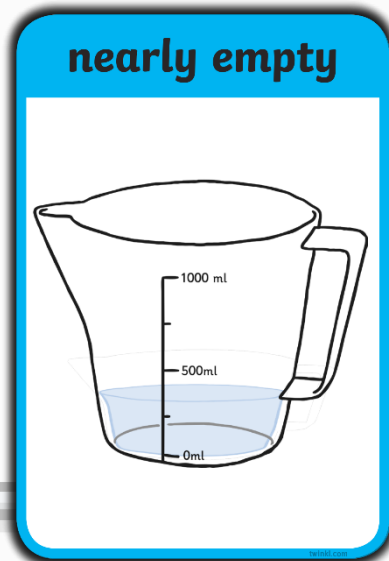
Pour water to show each volume.

empty nearly empty nearly full full

# Show Me



Come to the front of the class and show me...



# Aim



- To understand capacity and volume.

# Success Criteria

- I can compare the capacity of different containers.
- I can describe the capacity of different containers.
- I can compare the volume in different containers.
- I can describe the volume in different containers.



