

Y3 M5f. Can compare and order capacity using ml and l

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Teachers' Notes

- ❑ The PiXL therapies can be taught to a whole class or a target group. Year 3-5 therapies are designed to take approximately 30-40 minutes. However, this is flexible: it may be that only part of the therapy is taught or it could, of course, be adapted or extended.
- ❑ Each therapy begins with a LORIC activity to develop relevant learning behaviours.
- ❑ This is followed by a vocabulary task, which uses the PiXL 5-phase approach to teach key mathematical vocabulary. Further resources to develop vocabulary can be found in the Whole School area.
- ❑ Each therapy adopts the 'Teach, model and apply' process with opportunities for pupils to demonstrate the taught skill independently.
- ❑ Problem solving and reasoning activities are an integral part of each therapy.

Progress across amber – the 4-stage model

The three therapy tests which accompany this resource can be used to revisit the taught skill to check that the pupil is able to perform it independently and consistently.

A

A child has successfully completed a therapy test independently, following a set of therapy sessions.

A

A child has successfully completed a therapy test independently, a period after the relevant therapy sessions – we would advise about 2 weeks.

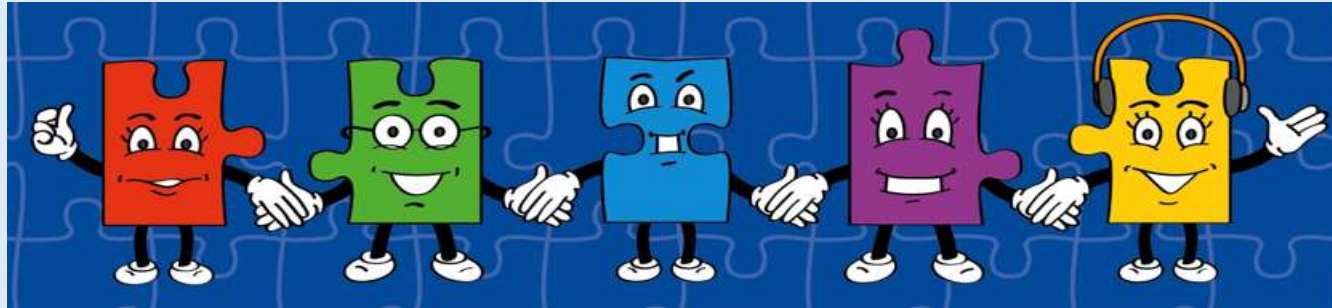
DA

A child has successfully applied their knowledge or skill in an unfamiliar context. This may be application across the curriculum or in a problem.

G

A pupil has successfully re-visited the skills at a later point, and applies these in an unfamiliar context or problem, or across the curriculum.

LORIC task



Our Primary Edge attributes help us to become better learners and today is no exception. Before you start this activity, here are some ideas for how you will need your Charlie Communication skills today:

- Speak clearly
- Listen carefully to others
- Explain your answer

LORIC task

Look carefully at the small selection of containers of different shapes and sizes.

First, **without touching them**, estimate the capacity of each container and place them in order from smallest to largest.

Then, fill the containers with water and empty each one into a cup (the cups are all the same size). **Explain** whether you are still happy with your choice. If you would like to swap any containers around, you must **justify** why!



Vocabulary activity

compare

order

capacity

<p>The word is:</p>	<p>Meaning:</p> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Image/graphic:</p>	<p>In context:</p> <hr/> <hr/> <hr/> <hr/> <hr/>

Teach

Capacity tells us how much liquid can be held in a container.

Volume tells us how much space the liquid occupies.



Teach

Which units do
we use to
measure **capacity**
and **volume**?

Teach



Look at the measuring jug. There are **1,000 millilitres (ml)** in **1 litre (L)**.

Model

Millilitres (ml) are used for measuring a small capacity or volume.



Medicine



A bottle of water

Model

Litres (L) are used for measuring a large capacity or volume.



Petrol



Bucket

Model

When we are counting in millilitres, we call 1,000 millilitres 1 litre.

997ml

998ml

999ml

1L

Model

After this, we can measure in a mixture of litres and millilitres. Here is an example where we can see an increase of 100ml each time.

1L

1L 100ml

1L 200ml

1L 300ml

Can you continue?

Model

We can show this on a number line or counting stick.
Here is a counting stick which **increases** by 200ml each time.

200ml	400ml	600ml	800ml	1L	1L 200ml	1L 400ml	1L 600ml	1L 800ml	2L
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What would come next?

Model

Which is larger?

20 litres

20
millilitres

Model

20 litres is larger, because litres are 1,000 times larger than millilitres.

20 litres

20
millilitres

Apply

Which is larger?

100 litres

100
millilitres

Apply: How did you do?

100 litres is larger.

100 litres

100
millilitres

Apply

Which is larger?

1 litre

1 litre 200
millilitres

Apply: How did you do?

1 litre 200 millilitres is larger.

1 litre

1 litre 200
millilitres

Apply

Which is larger?

100 litres

100
millilitres

Apply: How did you do?

100 litres is larger.

100 litres

100
millilitres

Apply

Which is larger?

500
millilitres

5 litres

Apply: How did you do?

5 litres is larger.

500
millilitres

5 litres

Apply

Put these measurements into
ascending order.

100 ml

10 L

1 L

Apply: How did you do?

Here are the capacities in
ascending order.

100 ml

1 L

10 L

Apply

Put these measurements into
ascending order.

1 litre 900
millilitres

2 litres

1 litre 100
millilitres

Apply: How did you do?

Here are the capacities in
ascending order.

1 litre 100
millilitres

1 litre 900
millilitres

2 litres

Apply

Which container has the largest capacity?

Container	Capacity
A	10 millilitres
B	10 litres
C	100 millilitres
D	1 litre

Apply: How did you do?

Container B has the largest capacity.

Container	Capacity
A	10 millilitres
B	10 litres
C	100 millilitres
D	1 litre

Apply

Rachael has painted a room in her house. She started with the same amount of white and yellow paint. She now has 4 litres 300 millilitres of white and 8 litres of yellow left over.

Which colour did she use more of?
Explain your answer.



Apply: How did you do?

Rachael has painted a room in her house. She started with the same amount of white and yellow paint. She now has 4 litres 300 millilitres of white and 8 litres of yellow left over.

Which colour did she use more of?
Explain your answer.



She must have used more white, as she has less of it left over. 4L 300ml is less than 8L.

Apply

Here is a list of ingredients for watermelon lemonade.

Ingredient	Volume
Sparkling water	1 litre
Watermelon juice	300 millilitres
Lemon juice	100 millilitres
Honey	20 millilitres

What is the main ingredient?
Explain your answer.



Apply: How did you do?

Here is a list of ingredients for watermelon lemonade.

Ingredient	Volume
Sparkling water	1 litre
Watermelon juice	300 millilitres
Lemon juice	100 millilitres
Honey	20 millilitres

Sparkling water is the main ingredient because 1L is the largest volume.



Reflect/ Remember

Which is larger, millilitres or litres?

How many millilitres are in a litre?