



# Headlands Primary School

**Welcome to our maths workshop.**

**Please find a seat anywhere in the room and a chromebook for your child to sign into.**

**Hopefully this workshop will give you a snapshot of some of the maths that our wonderful Y6 children take part in everyday and signpost you to some useful resources.**



# Headlands Primary School

Firstly, here are a few places to look for help:

Mymaths:

[https://app.mymaths.co.uk/myportal/library/11?login\\_modal=true](https://app.mymaths.co.uk/myportal/library/11?login_modal=true)

School Website link to White Rose Maths home learning videos: <https://www.headlandsprimary.org.uk/>



# Headlands Primary School

For the next activity, you will need to work in family teams or join up with another family if you're on your own.

Please raise your hand if you haven't got a team and we'll pair you up.



Headlands Primary School

## MATHS BUZZ

This is a resource that our children really love and it helps them to think!



## 14 Capacity

### Calculations with capacity; reading scales

Children need to read scales correctly and examine the relationships between the capacities of the containers. A useful strategy is to jot down the capacities, either in litres and millilitres, or convert to litres and use decimal notation.

Trial and improvement is another important strategy. For example, with challenge B, there are no defining clues to help children place the first

cylinder. But they can try placing any two cylinders which fit this clue: 'In the bottom row, the second measuring cylinder contains 900 millilitres less than the first cylinder.' They need to work out if the other clues fit, in which case their choice was correct, or if they don't fit, they try another pair of cylinders in those positions.

### Key vocabulary

Capacity A	Capacity B	Capacity C
measuring cylinder, litre, millilitre, least, less/more than, half/twice/three times as much as	equal, amount, difference	centilitre, the sum of

14 Capacity Clue cards A There are seven measuring cylinders with orange juice in them. All contain less than 2 litres.	14 Capacity Clue cards A The measuring cylinders are in a row. Find out where each goes in the row.
14 Capacity Clue cards A The seventh measuring cylinder contains the least orange juice.	14 Capacity Clue cards A The measuring cylinder in the middle of the row contains 200 millilitres less than the first one.
14 Capacity Clue cards A The fourth measuring cylinder contains half as much as the sixth one.	14 Capacity Clue cards A The second and third measuring cylinders both contain more than 1 litre.
14 Capacity Clue cards A The fifth measuring cylinder contains three times as much as the fourth one.	14 Capacity Clue cards A The third measuring cylinder contains twice as much as the first one.
14 Capacity Clue cards A If you tipped the contents of the fourth measuring cylinder into the fifth one, it would contain 2 litres.	14 Capacity Clue cards A If you tipped the contents of the first measuring cylinder into the second one, it would contain 2 litres.

14 Capacity Clue cards B There are eight measuring cylinders arranged in two rows one above the other. Find out where each one goes.	14 Capacity Clue cards B In the top row, the first measuring cylinder contains twice as much as the fourth measuring cylinder.
14 Capacity Clue cards B In the bottom row, the fourth measuring cylinder contains half as much as the first measuring cylinder.	14 Capacity Clue cards B The second measuring cylinder in one row contains three times as much as the second one in the other row.
14 Capacity Clue cards B Add the contents of the first and third cylinders in the top row to equal the contents of the third cylinder in the bottom row.	14 Capacity Clue cards B Add the contents of the second cylinders in each row to equal the amount in the first cylinder in the top row.
14 Capacity Clue cards B In the bottom row, the second measuring cylinder contains 900 millilitres less than the first cylinder.	14 Capacity Clue cards B There is a 300-millilitre difference between the contents of the fourth cylinders in each row.
14 Capacity Clue cards B In the bottom row, the third measuring cylinder contains three times as much as the fourth one.	14 Capacity Clue cards B In the top row, the sum of the contents of all the measuring cylinders totals 4 litres 600 millilitres.

14 Capacity Clue cards C There are nine measuring cylinders in three rows one above the other.	14 Capacity Clue cards C Find out where each measuring cylinder goes.
14 Capacity Clue cards C In the third row, the middle measuring cylinder contains 10 centilitres.	14 Capacity Clue cards C The contents of the first cylinder in the top row is equal to the sum of the contents of the second and third cylinders in the third row.
14 Capacity Clue cards C In the top row, the second measuring cylinder contains 10 centilitres less than the third one.	14 Capacity Clue cards C The third cylinder in the top row contains 200 millilitres more than the first cylinder in the middle row.
14 Capacity Clue cards C The third measuring cylinder in the second row contains half as much as the second cylinder in the top row.	14 Capacity Clue cards C The first cylinder in the bottom row contains half a litre less than the third cylinder in the top row.
14 Capacity Clue cards C The second cylinder in the middle row contains half the amount of one of the cylinders in the bottom row.	14 Capacity Clue cards C In the top row, the sum of the contents of the three cylinders totals 5 litres.



# Headlands Primary School

## 14 Capacity

42

### Calculations with capacity; reading scales

Children need to read scales correctly and examine the relationships between the capacities of the containers. A useful strategy is to jot down the capacities, either in litres and millilitres, or convert to litres and use decimal notation.

Trial and improvement is another important strategy. For example, with challenge B, there are no defining clues to help children place the first

cylinder. But they can try placing any two cylinders which fit this clue: 'In the bottom row, the second measuring cylinder contains 900 millilitres less than the first cylinder.' They need to work out if the other clues fit, in which case their choice was correct, or if they don't fit, they try another pair of cylinders in those positions.

### Key vocabulary

Capacity A	Capacity B	Capacity C
measuring cylinder, litre, millilitre, least, less/more than, half/twice/three times as much as	equal, amount, difference	centilitre, the sum of

# Let's have a go!

The image shows a collection of clue cards for the '14 Capacity' challenge, arranged in a grid. Each card contains a specific clue about the capacities of cylinders in different rows.

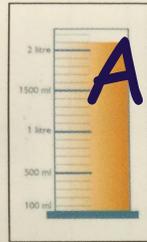
- Clue cards A (Red header):**
  - The fifth measuring cylinder contains three times as much as the fourth one.
  - The third measuring cylinder contains twice as much as the first one.
  - If you tipped the contents of the fourth measuring cylinder into the fifth one, it would contain 2 litres.
  - If you tipped the contents of the first measuring cylinder into the second one, it would contain 2 litres.
- Clue cards B (Green header):**
  - In the bottom row, the second measuring cylinder contains 900 millilitres less than the first cylinder.
  - In the bottom row, the third measuring cylinder contains three times as much as the fourth one.
  - In the top row, the sum of the contents of all the measuring cylinders totals 4 litres 600 millilitres.
- Clue cards C (Purple header):**
  - The third measuring cylinder in the second row contains half as much as the second cylinder in the top row.
  - The first cylinder in the bottom row contains half a litre less than the third cylinder in the top row.
  - In the top row, the sum of the contents of the three cylinders totals 5 litres.



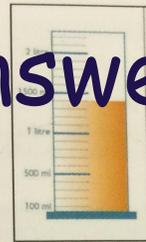
# Headlands Primary School

## Answers Set C

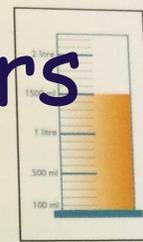
Answers



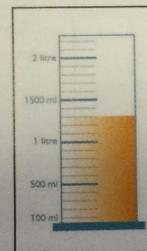
2.1 litres



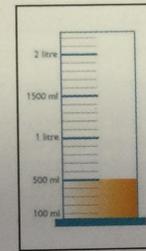
1.4 litres



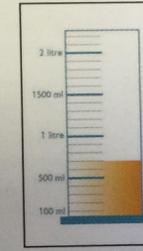
1.5 litres



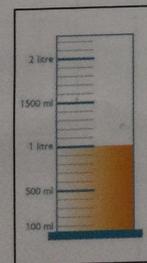
1.3 litres



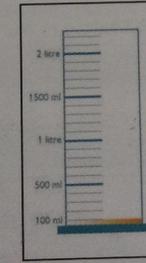
500 ml



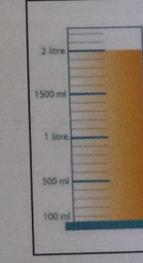
700 ml



1 litre



100 ml



2 litres

And finally...



We're often asked what's the one thing that will help to support my child in maths at school. So here it is....

Be positive.

We can *ALL* do maths!

# TOP TIPS

## EYFS

Y1 learn by heart number bonds, upto and including 10

Y2 learn to tell the time to a quarter of an hour on an analogue clock

Y3 practise telling the time on an analogue clock

Y4 learn times tables up to 12s (including division facts)

Y5 practise times tables for instant recall

Y6 use revision books, mymaths and the WRM videos for the tricky areas of maths



There is plenty of useful information on our school website.  
Just go to the curriculum section and maths:  
<https://www.headlandsprimary.org.uk/page/?title=Maths&pid=74>

## Related

---

Maths videos (select the year group first)

HOME → KEY INFORMATION → CURRICULUM → MATHS

# Maths

Intent

Thank you for coming today.  
I hope that you found it  
useful.

