



Year 3  
Maths Answers

Week 13- Additional answers/feedback to support with learning in Maths

Day 1

Starter:

We use metres to measure length.

There are 100 centimetres in a metre.

$$100 \text{ cm} = 1 \text{ m}$$

1 Convert these metres to centimetres:

a  $6 \text{ m} =$    $\text{ cm}$

b  $3 \text{ m} =$    $\text{ cm}$

c  $9 \text{ m} =$    $\text{ cm}$

Main Activity

The answers are given at the end of the video provided.

<https://classroom.thenationalacademy/lessons/solve-problems-involving-mass>



Amir and Alex work out the capacity of the pot by filling it with water, then pouring the water into the measuring cylinders.



Amir: The capacity of the pot is 302 ml

Alex: The capacity of the pot is 2 l and 300 ml.

Who do you agree with?  
Explain why.

Alex is correct because there are 2 full litres and 300 millilitres in the third cylinder.

True or False?

The tallest container has the largest capacity.

Use containers to decide whether the statement is true or false.

Record the capacity of the different containers in a table.

Children will collect different measurements of capacities from different containers. Children will hopefully find that as well as height, the capacity of the container also depends on its width.

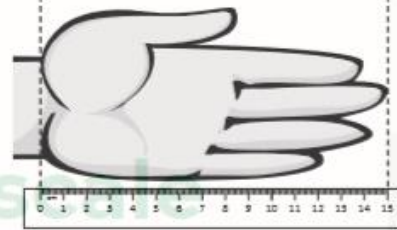
## Day 2

### Starter:

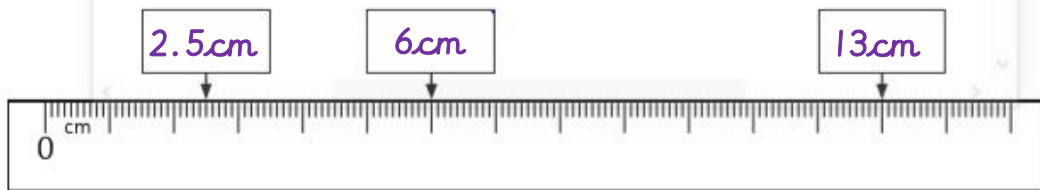
We use centimetres to measure smaller units of length.

There are 100 centimetres in a metre.

100 cm = 1 m



1 Record the lengths shown on this ruler in each box:



### Main Activity

The answers are given at the end of the video provided.

<https://classroom.thenational.academy/lessons/read-a-scale>

## HOTS



Sort the lengths into the table.

Longer than a metre	Shorter than a metre

1 m 65 cm

165 mm

165 m

165 cm

16 cm 5 mm

1 cm 65 mm

Are any of the lengths equivalent?

### Always, Sometimes, Never?

mm lengths are smaller than cm lengths.

Possible answer:

Sometimes.

E.g. 1 mm is smaller than 1 cm but 70 mm is larger than 3 cm.

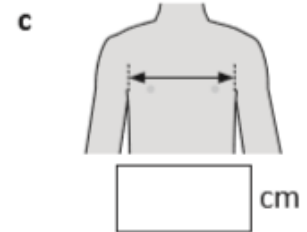
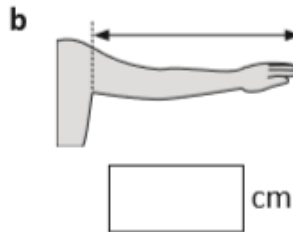
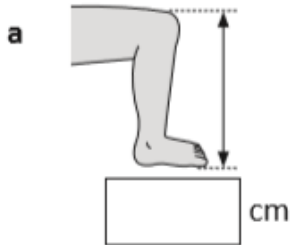
1 m 65 cm, 165 cm and 165 m are longer than a metre.  
165 mm, 16 cm 5 mm and 1 cm 65 mm are shorter than a metre.

1 m 65 cm is equivalent to 165 cm.  
165 mm is equivalent to 16 cm 5 mm.

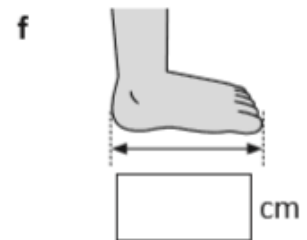
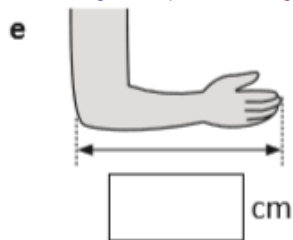
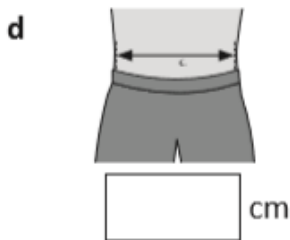
## Day 3

### Starter:

- 3 Measure these parts of your body with a piece of string. Lay the string beside a metre ruler to work out the correct measurement for each.



*Answers will vary depending on the child.*



### Main Activity

The answers are given at the end of the video provided.

<https://classroom.thenational.academy/lessons/read-capacity-and-volume>

## HOTS



Rosie has a litre bottle of water.



She pours a drink for herself and two friends. Their glasses can hold up to 250 ml.



Teddy has more than Amir.  
Rosie has the most.

How much could each child have in their glass?

How much would be left in the bottle?

There are a range of possible answers the children could find. Rosie should have the most and Amir should have the least. The total should not exceed 750 ml

Possible answer:

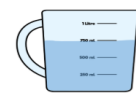
Rosie: 250 ml  
Teddy: 200 ml  
Amir: 150 ml  
There is 400 ml left in the bottle.



I know container 1 has more than container 2 in it because the water goes further up the side.



Container 1



Container 2

Is Eva correct? Explain your answer.

Eva is not correct. The measurements show that container 1 has 700 ml in it whereas container 2 has 750 ml in. Container 2 is wider than container 1 which is why it looks like it has less in it.

## Day 4

### Starter:

2 How many millimetres in:

a  $4 \text{ cm} = 40 \text{ mm}$

b  $9 \text{ cm} = 90 \text{ mm}$

c  $2 \text{ cm} = 20 \text{ mm}$

3 Write these measurements in centimetres:

a  $40 \text{ mm} = 4 \text{ cm}$

b  $70 \text{ mm} = 7 \text{ cm}$

c  $30 \text{ mm} = 3 \text{ cm}$

### Main Activity

The answers are given at the end of the video provided.

<https://classroom.thenationalacademy/lessons/compare-capacity-and-volume>

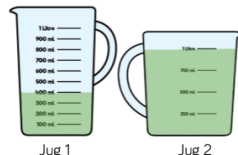


Tommy is pouring drinks using these jugs.  
A drink is 125 ml.



If I pour three more drinks using jug 2, both jugs will have the same amount of juice in.

Tommy



Is Tommy correct?  
If not, how much juice will be left in jug 2?

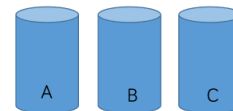
Tommy is not correct.  
If Tommy makes three more drinks he will use a further 375 ml of juice.  
 $1 \text{ l} - 375 \text{ ml} = 625 \text{ ml}$

Here are some measuring cylinders.  
The total liquid in all three cylinders is 400 ml.

Cylinder A has half of the total amount in it.

Cylinder B has 67 ml less than Cylinder A.

How much liquid does each cylinder contain?



A: 200 ml

B: 133 ml

C: 67 ml

## Day 5

### Starter:

- 1 These snakes are not drawn to scale. Compare their lengths and order them in the boxes below from shortest to longest.



A  
1 m 15 cm



B  
 $1\frac{1}{2}$  m



C  
105 cm



D  
155 cm



E  
1 m 45 cm

shortest      longest

### Main Activity

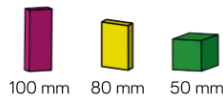
The answers are given at the end of the video provided.

<https://classroom.thenational.academy/lessons/ordering-capacity-and-volume>

## HOTS



Eva is building a tower using these blocks.



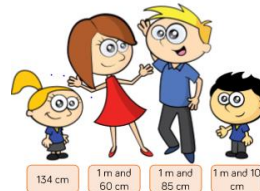
How many different ways can she build a tower measuring 56 cm?  
Can you write your calculations in mm and cm?

Possible answer:

Four 100 mm blocks and two 80 mm blocks.

There are many other solutions.

Eva and her brother Jack measured the height of their family.



Eva thinks their total height is 4 m and 55 cm

Jack thinks their total height is 5 m and 89 cm

Who is correct? Prove it.

Jack is correct.  
Eva has not included her own height.