

**Units of Measurement:**

# **Length**



# Weekly Overview

**Monday** – Key facts & Get measuring!

**Tuesday** – Measuring curved objects.

**Wednesday** – The Long Jump!

**Thursday** – Converting metres to centimetres.

**Friday** – Adding & Subtracting.

# Length Vocabulary

equal

tallest

longest

Metre (m)

Centimetre  
(cm)

measure

estimate

shortest

distance

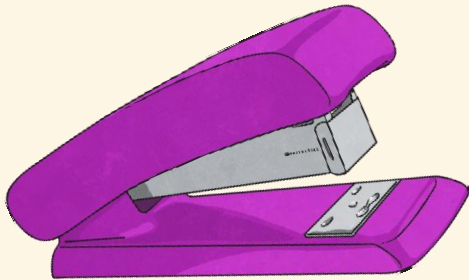
convert

longer

# Measure and compare the length of the objects.

We don't always need a ruler or a metre stick to measure objects.

We can use normal everyday objects to measure too!



The stapler is 4 paperclips.

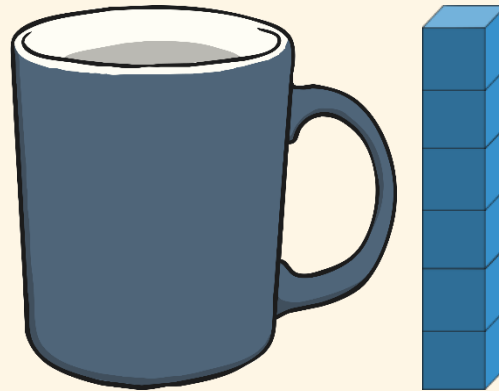


The pencil case is 6 paperclips.

Measure and compare the length of the objects.



The glue stick is  
7 base ten blocks.



The mug is 6 base  
ten blocks.

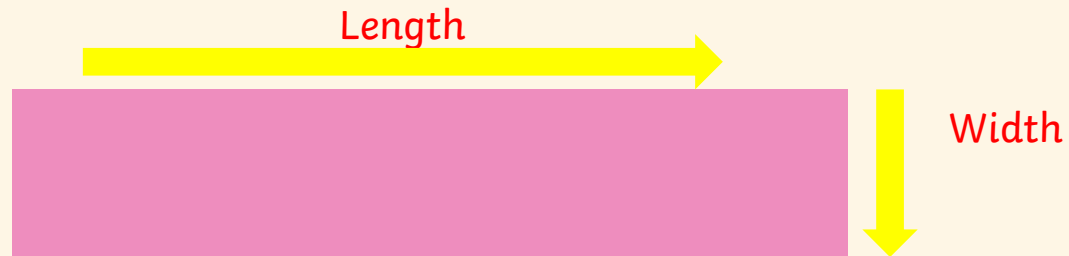


The jar is 8 base  
ten blocks.

The mug is the shortest. The jar is the tallest.

## Key Facts - Length

- Length describes the distance between two ends of an object/how long it is.
- Width describes how wide an object is.
- We use metres and centimetres to describe the length of an object.
- There are 100 centimetres (100cm) in one metre.
- There are 50 centimetres (50cm) in half a metre.
- There are 75 centimetres (75cm) in three quarters of a metre.



*Fun fact – Your fingertip measures approximately 1cm!*

# Monday – Get Measuring!

- Ask someone at home to draw some straight lines using a pencil and ruler (between 3 and 30cm) on an A4 sheet of paper. The lines may be vertical, horizontal or diagonal.
- Use your fingertip (approximately 1cm) as an estimation tool to estimate the length of the line.
- Once you have estimated the length, use a ruler to measure the actual length of the line. Compare your estimated answer and your actual answer (Is it bigger/smaller? Were you close?)
- Measure some familiar objects around the home, first by estimating and then using a ruler. Take a photo of some of the items you measured and share it along with your estimate/answer with your teacher! (For ideas on what to measure see the home-school document)



## Tuesday – Curved Lines!

- Draw a curved line on a piece of paper. Have a think and see how you would go about measuring this line? Do you use a ruler? If not, what would you use? Take some time and explore some different ways of measuring this line.
- Draw a number of curved lines on a piece of paper. Make an estimate on how long they are. Using your chosen piece of equipment measure the lines and see how close you were to your estimate.
- Could you create your own 'flexible ruler'? What materials could you use to make it? How would you make sure it is accurate?
- Use your 'flexible ruler' to measure some items around the house that have curved lines.



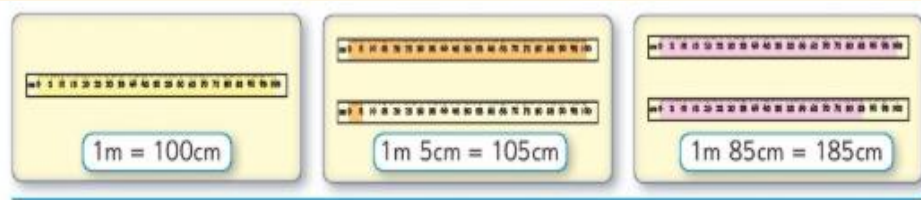
## Wednesday – The Long Jump!

- Watch the video of Greg Rutherford winning the Long Jump Gold medal in the London 2012 Olympics.  
<https://www.youtube.com/watch?v=twGoVVPO08Q&t=126s>
- What was the distance of the winning jump? Do you think he'd jump as far if he didn't run at it? Why/why not?
- Why would a metre stick/measuring tape be better for measuring this distance rather than using a ruler?
- Now it's your turn! Create your very own long jump outside your house. Mark the start point. Get someone to observe you as you practice your jump and mark your landing point. Measure the distance you jumped and write it down, see can you improve your jump!

*Why not get the whole family involved?*



# Thursday – Converting!



Convert these to metres and centimetres:

- |                          |                          |
|--------------------------|--------------------------|
| (a) 126cm = ___ m ___ cm | (b) 140cm = ___ m ___ cm |
| (c) 193cm = ___ m ___ cm | (d) 104cm = ___ m ___ cm |
| (e) 200cm = ___ m ___ cm | (f) 286cm = ___ m ___ cm |
| (g) 380cm = ___ m ___ cm | (h) 401cm = ___ m ___ cm |
| (i) 444cm = ___ m ___ cm | (j) 537cm = ___ m ___ cm |
| (k) 869cm = ___ m ___ cm | (l) 908cm = ___ m ___ cm |

Convert these to centimetres:

- |                      |                      |                      |
|----------------------|----------------------|----------------------|
| (a) 1m 23cm = ___ cm | (b) 1m 94cm = ___ cm | (c) 1m 42cm = ___ cm |
| (d) 1m 3cm = ___ cm  | (e) 2m 66cm = ___ cm | (f) 2m 17cm = ___ cm |
| (g) 2m 90cm = ___ cm | (h) 2m 11cm = ___ cm | (i) 3m 8cm = ___ cm  |
| (j) 3m = ___ cm      | (k) 4m 6cm = ___ cm  | (l) 4m 45cm = ___ cm |
| (m) 5m 58cm = ___ cm | (n) 7m 10cm = ___ cm | (o) 6m 19cm = ___ cm |
| (p) 9m 72cm = ___ cm | (q) 9m 9cm = ___ cm  | (r) 8m 1cm = ___ cm  |

Learning your key facts will really help you here 😊

Imagine your H T U layout!  
The hundreds are the metres  
and the tens and units are the  
centimetres!

If there is a 0 in the number  
we can't just forget about it!

1m 6cm is **not** equal to  
16cm (we forgot our zero)  
It is equal to **106**cm.

# Friday – Adding & Subtracting Lengths

## How do we lay our sums out?

We put our metres under our metres and our centimetres under our centimetres.

m	cm
3	23
+ 1	75

m	cm
3	32
+ 1	98

m	cm
4	53
- 2	21

m	cm
5	23
- 2	98

Cara jumped 1m 24cm in the long jump.  
Cian jumped 1m 85cm.  
How far did they jump altogether?

1m 24cm + 1m 85cm = ☆

Step 1: Add the cm.

Step 2: Add the m.

m	cm
1	24
+ 1	85
3	09



## Remember:

When taking away we must write the larger number on top.

Follow our take away rules:  
More on top - no need to stop!  
More on the floor – go next door and get ten more!

Rowan's train track measured 3m 26cm.  
He lost 1m 72cm of the track.  
How much did he have left?

3m 26cm – 1m 72cm = ☆

Step 1: Rename 1m as 100cm (if you need to).

Step 2: Subtract the cm.

Step 3: Subtract the m.

m	cm
<del>3</del> <sup>2</sup> 3	<del>2</del> 26
-	72
1	54

# Friday – Adding & Subtracting Length

It is your turn to do some sums! Take your time and try your best.  
Follow the proper layout & when you're finished take a photo and send them  
to your teacher to correct 😊

Now try these 5 addition sums by yourself:

1. (a)	m cm	(b)	m cm	(c)	m cm	(d)	m cm	(e)	m cm
	1 18		1 45		2 06		1 59		5 61
	+ 1 36		+ 1 93		+ 1 47		+ 2 81		+ 2 53
	<hr/>		<hr/>		<hr/>		<hr/>		<hr/>
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Now try these 5 subtraction sums by yourself:

3. (a)	m cm	(b)	m cm	(c)	m cm	(d)	m cm	(e)	m cm
	4 28		5 93		6 19		3 50		7 15
	- 1 73		- 2 32		- 5 37		- 1 46		- 5 87
	<hr/>		<hr/>		<hr/>		<hr/>		<hr/>
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Finally try this challenge!

## Challenge

A kangaroo hopped 4m 63cm. A rabbit hopped 1m 76cm less than the kangaroo. How far did the rabbit hop?

m  cm

**Well done on all your hard this week.  
Have a wonderful weekend!**