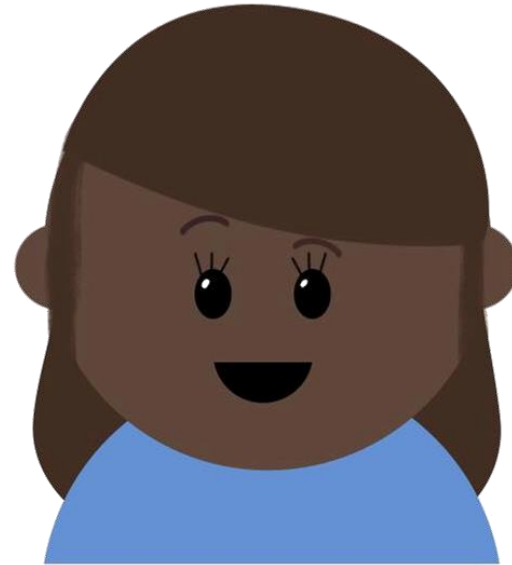


Progression in Mastery

Year 3 Equivalent Lengths mm & cm

Let's look at
equivalent
lengths!



Let's do this!

Group the same measurements together and order them in ascending order.

45mm

9m

19cm

152mm

61m

5cm

87mm

7cm

1m

12mm

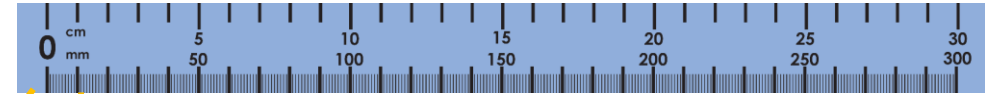
15m

25cm

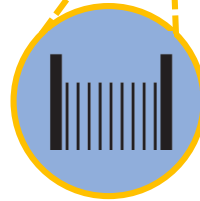
Let's revisit what we should know...



metres



millimetres



centimetres

1 _____ is larger than 1 _____.

1 _____ is smaller than 1 _____.

Let's revisit what we should know...

How do we convert mm into cm and vice versa?

$$10\text{mm} = 1\text{cm}$$

To convert mm into cm we divide by _____.

To convert cm into mm we multiply by _____.

Let's revisit what we should know...

How do we convert cm into m and vice versa?

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

To convert cm into m we divide by _____.

To convert m into cm we multiply by _____.

Let's learn

To compare and order different lengths, first we need to convert all of the lengths to the same unit of measurement.

382cm

124cm

2m 58cm

1m 12cm

These measurements are in cm and m so we can convert them all to cm or m to compare and order.

Let's learn

To change the m and cm into cm we need to multiply the metres by 100 and add on the cm.

382cm

124cm

2m 58cm

1m 12cm

$$2\text{m} \times 100 = 200\text{cm} + 58\text{cm} = 258\text{cm}$$

$$1\text{m} \times 100 = 100\text{cm} + 12\text{cm} = 112\text{cm}$$

Let's talk

Now the measurements are all in the same unit we can compare and order them.

112cm

124cm

258cm

382cm

_____ is taller/longer/shorter than _____.

The tallest/longest/shortest is _____.

Let's talk

Convert the measurements into the same unit and place them in the correct boxes.

2m 29cm

636cm

221cm

1m 38cm

>

>

<

Let's learn

We also need to convert mm and cm before we compare them.

35mm

2cm 5mm

6cm 8mm

93mm

These measurements are in cm and mm so we can convert them all to cm or mm to compare and order.

Let's learn

To change the cm and mm into mm we need to multiply the cm by 10 and add on the mm.

35mm

2cm 5mm

6cm 8mm

93mm

$$2\text{cm} \times 10 = 20\text{mm} + 5\text{mm} = 25\text{mm}$$

$$6\text{cm} \times 10 = 60\text{mm} + 8\text{mm} = 68\text{mm}$$

Let's talk

Now the measurements are all in the same unit we can compare and order them.

25mm

35mm

68mm

93mm

_____ is taller/longer/shorter than _____.

The tallest/longest/shortest is _____.

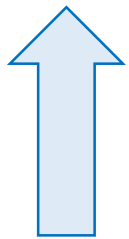
Let's talk

Complete the missing measurements in the table.

mm	cm and mm
58mm	
	2cm 6mm
	7cm 1mm
63mm	
82mm	

Let's develop our learning

There are two ways we can order measurements.



ascending

Ascending means that the numbers are going up and getting larger.



descending

Descending means that the numbers are going down and getting smaller.

Let's talk

Are these measurements in ascending or descending order?

2cm 1mm

6cm 3mm

6cm 5mm

7cm 2mm

385cm

319cm

218cm

178cm

Exit task – Dong Nao Jin

What could the missing measurements be?

482cm $>$ $<$ 3m 23cm $<$

$>$ 504cm $=$ $<$