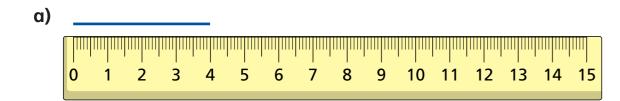
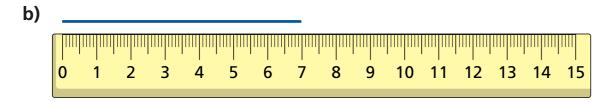
## Measure length



What is the length of each line?

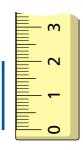


cm



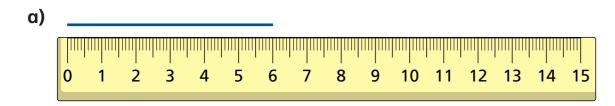
cm

c)



cm

Write the length of each line to the nearest millimetre.

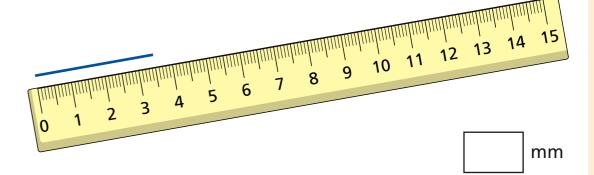


mm

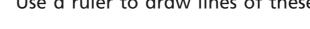
b)									_						
	0	 	 1	2	3	.	 			10	11	12	13	14	15

mm

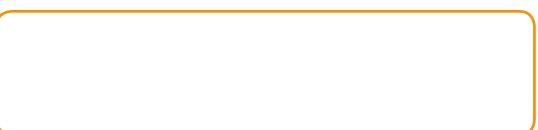
c)



3 Use a ruler to draw lines of these lengths.



**a)** 5 cm



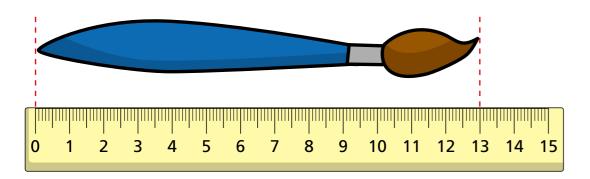
**b)** 75 mm



**c)** 42 mm

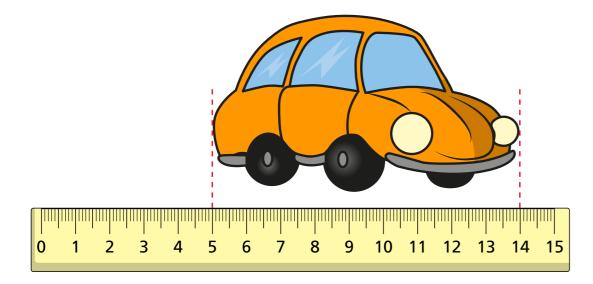


4 How long is the paintbrush?



The paintbrush is cm long.

How long is the toy car?



The toy car is cm long.

How tall is the baby giraffe?	3 m
	2
	_ - - - - - -
	0

The baby giraffe is m	n and	cm tall.
-----------------------	-------	----------

7 Tick the most sensible estimate for the height of a classroom door.

20 cm	2 m	20 m

8 Find items in the classroom that are the following lengths.
Write your answers in the table.

Less than 10 cm long	Between 10 cm and 1 m long	More than 1 m tall

Compare with a partner.







#### White Rose Maths

## Equivalent lengths – m and cm

There are 100 centimetres (cm) in 1 metre (m).Use the bar models to complete the sentences.

1 m

1 m 1 m 1 m

There are cm in 3 m.

b) 1 m 1 m 1 m 1 m 1 m

There are cm in 6 m.

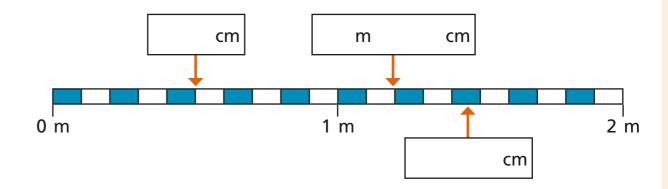
100 cm 100 cm 100 cm 100 cm

There are 500 cm in m.

2 Complete the table to show equivalent lengths and continue the pattern.

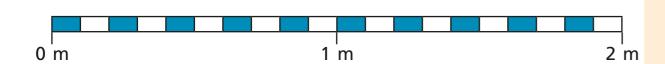
cm	m and cm		
310 cm	3 m and 10 cm		
320 cm	m and cm		
330 cm	m and cm		
cm	3 m and 40 cm		
cm	3 m and 50 cm		
cm	m and cm		
cm	m and cm		

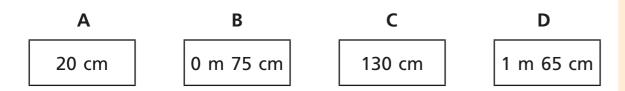
Write the missing measurements.



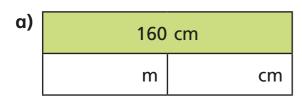
Draw an arrow to show the position of each measurement.

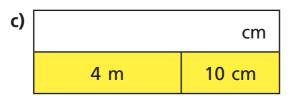


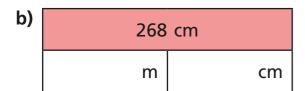


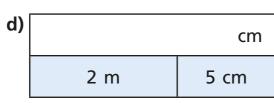


Complete the bar models.



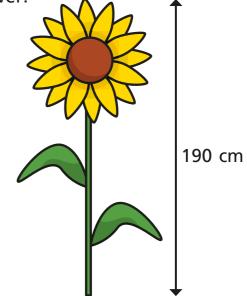






6 Complete the sentences.

- c) 508 cm = | m and | cm
- **d)** 2 m and 15 cm = cm
- e) 8 m and 3 cm = cm
- Here is Huan's sunflower.



Dani's sunflower is 2 m and 30 cm.

Tom's sunflower is exactly halfway between Huan's and Dani's.

How tall is Tom's sunflower?

Write your answer in metres and centimetres.

m and c	m
---------	---



#### Equivalent lengths – mm and cm



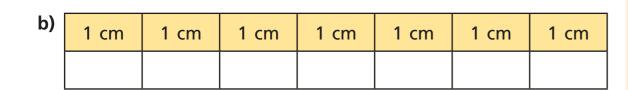
There are 10 millimetres (mm) in 1 centimetre (cm).

Use the bar models to complete the sentences.

1 cm



There are mm in 3 cm.



There are mm in 7 cm.



There are 40 mm in cm.

2 Match the equivalent lengths.

1 cm 3 mm

3 cm 1 mm

1 30 mm

33 mm

30 cm

300 mm

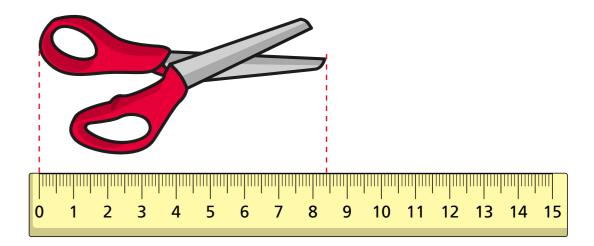
13 mm

31 mm

3 cm 0 mm

3 cm 3 mm

3 How long are the scissors?



The scissors are cm and mm long.

The scissors are mm long.

Find three items in your classroom.

Measure them and complete the table.

One has been done for you.

ltem	Length in cm and mm	Length in mm
toy car	9 cm 6 mm	96 mm

Filip and Kim are building towers using cubes.

Each cube is 3 cm high.

a) Filip uses 6 cubes.

How tall is Filip's tower?

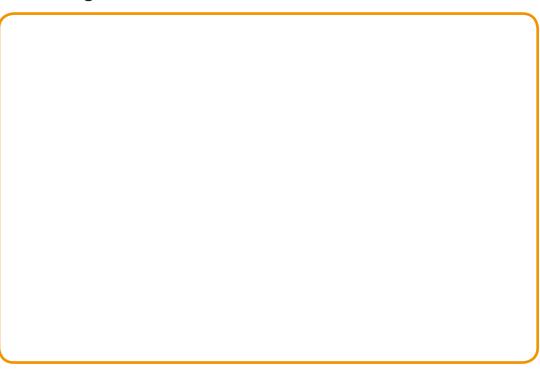
Give your answer in millimetres.

Filip's tower is \_\_\_\_\_\_ mm tall.



b) Kim's tower is 300 mm tall.

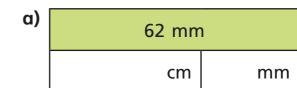
How many cubes does she use?



Complete the bar models.

cubes.

Kim uses



c)		mm
	30 cm	1 mm

b)	4 mm	
	cm	mm

d)		mm
	30 cm	10 mm





# Compare lengths



Write <, > or = to compare the lengths.

a) 60 mm ( ) 6 c

c) 5 cm ( ) 45 mm

How did you work this out?

Eva, Mo, Alex and Dexter have each built a tower.
Use the table to complete the sentences.

Child	Height of tower
Eva	1 m 5 cm
Мо	135 cm
Alex	1 m 45 cm
Dexter	1 m 25 cm

a) \_\_\_\_\_\_'s tower is the tallest.

b) \_\_\_\_\_'s tower is the shortest.

c) Mo's tower is \_\_\_\_\_ than Dexter's.

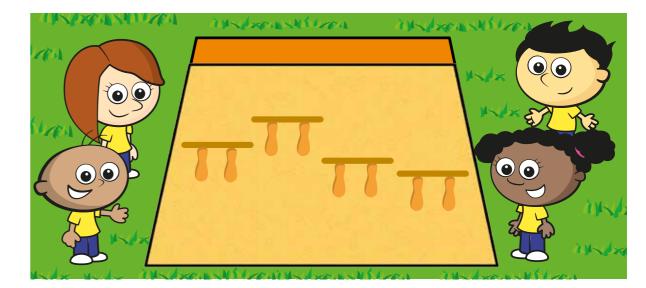
d) Eva's tower is \_\_\_\_\_ than Alex's.

Write the following lengths in order from shortest to longest.

160 cm 950 mm 1m 50 mm 200 cm 1 m 25 cm

shortest

Jack, Tommy, Rosie and Whitney have a jumping competition.



Here are the results.

Jack	Tommy	Rosie	Whitney
870 mm	105 cm	1 m and 30 mm	1 m and 10 cm

The person who jumped the furthest wins the competition. Put the children in order from 1st to 4th place.

1st ) (2nd)

3rd 4th

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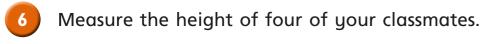
longest

5	Measure 1	the h	height	of four	of	your	classmates.

Measure their foot length and then complete the table.

Name	Height in cm	Foot length in cm

What have you found? Do taller people have longer feet?



Measure how far they can jump and then complete the table.

Name	Height in cm	Jump length in cm

Talk about what your results show.

Can taller people jump further?









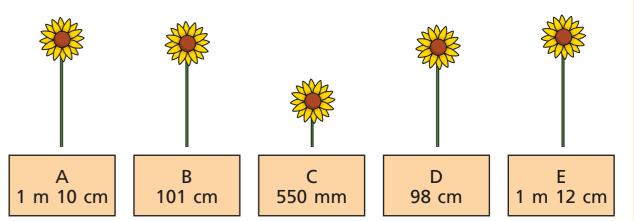






Teddy, Mo, Amir, Dora and Annie have each grown a sunflower.

Use the clues below to work out which sunflower belongs to which child.





My sunflower is twice as tall as Teddy's.



My sunflower is less than 1 m tall.



Dora

My sunflower is 3 cm taller than Mo's.



My sunflower is the tallest.



Annie

Write the owner of each sunflower.

sunflower A: \_\_\_\_\_ sunflower D: \_\_\_\_\_

sunflower B: \_\_\_\_\_ sunflower E: \_\_\_\_\_

sunflower C: \_\_\_\_\_

