

Year 3 Maths

Hello Year 3,

I hope you all enjoyed your half term break. Here is your maths home learning for the week.

We will be continuing with length and perimeter this week. Below, you will see links to each lesson video followed by the two-page worksheets in order afterwards.

Some of the questions on your sheet on Wednesday asks you to measure children in your class. You could have a go at measuring others in your house or you can move on to the next question if you are not able to do this. If you do not have a ruler at home then estimate the measurements and see if you can see if taller people do have bigger feet.

Your parents have been sent my school email address so please do send over completed work when you get a chance.

Many thanks,

Mr Wheatley

Mon ^{22nd} Feb - **Equivalent lengths (mm and cm)**

<https://vimeo.com/504918866>

Tues 23rd Feb - **Compare lengths recap**

<https://vimeo.com/505647236>

Weds 24th Feb - **Compare lengths**

<https://vimeo.com/506146737>

Thurs 25th Feb - **Add lengths**

<https://vimeo.com/506146810>

Fri 26th Feb - **Subtract lengths**

<https://vimeo.com/506146876>

Equivalent lengths – mm and cm

- 1 There are 10 millimetres (mm) in 1 centimetre (cm).
Use the bar models to complete the sentences.

1 cm
10 mm

a)

1 cm	1 cm	1 cm

There are mm in 3 cm.

b)

1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm

There are mm in 7 cm.

c)

10 mm	10 mm	10 mm	10 mm

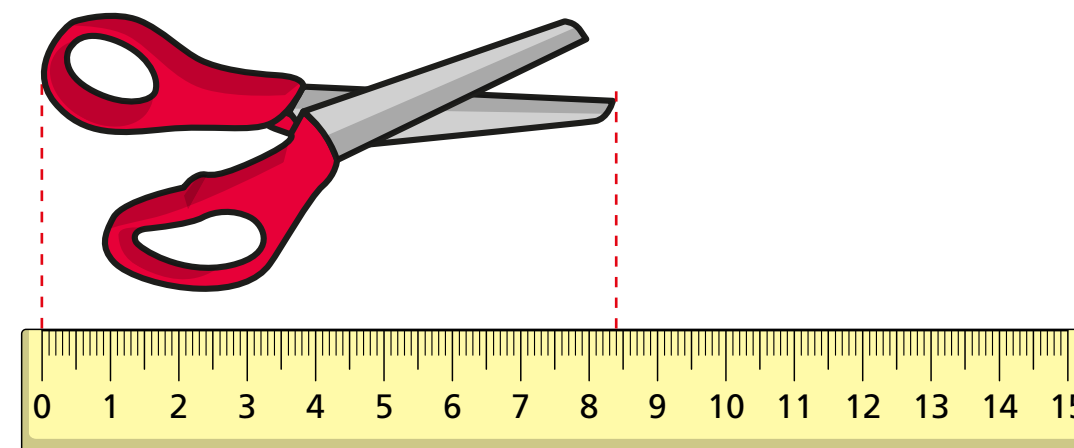
There are 40 mm in cm.

- 2 Match the equivalent lengths.

1 cm 3 mm	3 cm 1 mm	30 mm	33 mm	30 cm
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300 mm	13 mm	31 mm	3 cm 0 mm	3 cm 3 mm
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- 3 How long are the scissors?



The scissors are cm and mm long.

The scissors are mm long.

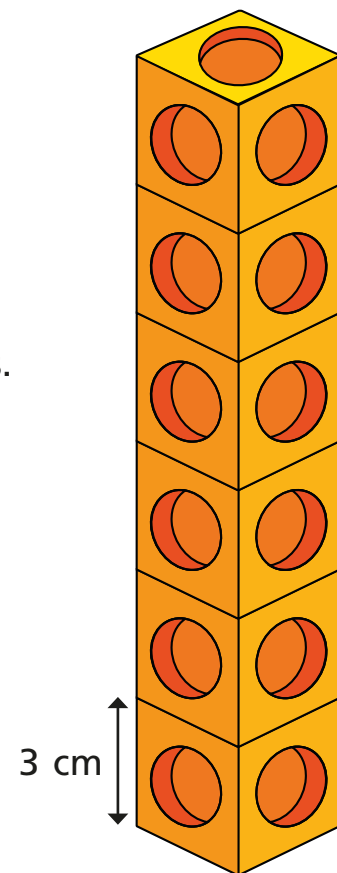
- 4 Find three items in your classroom.
Measure them and complete the table.
One has been done for you.

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

- 5 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.

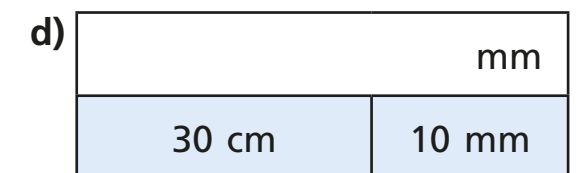
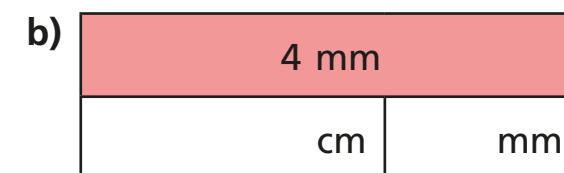
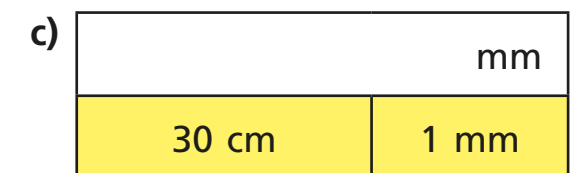
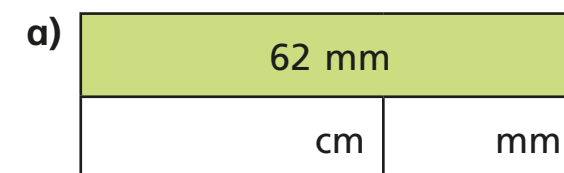


- b) Kim's tower is 300 mm tall.

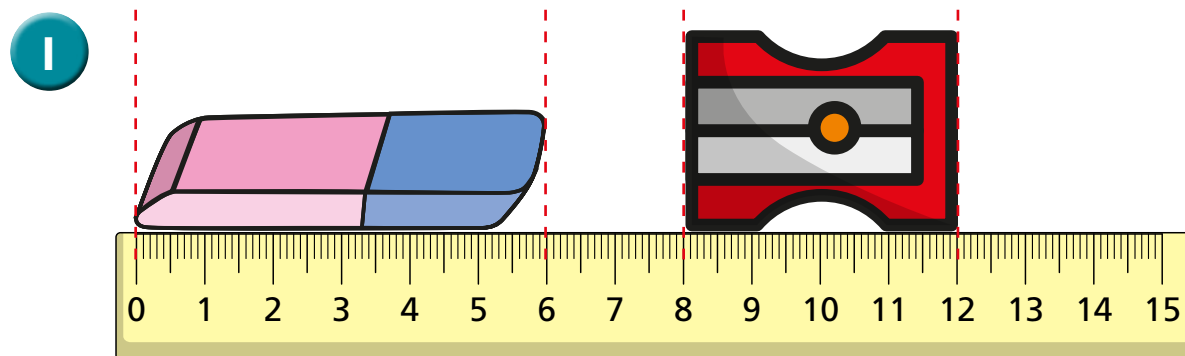
How many cubes does she use?

Kim uses cubes.

- 6 Complete the bar models.



Compare lengths



Choose a word to complete the sentences.

shorter

longer

The rubber is _____ than the sharpener.

The sharpener is _____ than the rubber.

2 Write $<$, $>$ or $=$ to compare the statements.

a) 9 cm 23 cm

b) fifty metres 50 m

c) one metre 1 cm

3 Write digits in the boxes to make the statements correct.

a) cm $<$ 41 cm

b) 14 m $<$ m

c) 14 cm $>$ cm

d) 12 m $<$ m $<$ 20 m

Is there more than one answer for each?

4 Would you measure each one using centimetres or metres?

Tick your answer.

centimetres metres

a) the height of a baby ☐ ☐

b) the length of a pencil ☐ ☐

c) the height of a school ☐ ☐

d) the height of your teacher ☐ ☐

What else would you measure in metres?

5 Write $<$, $>$ or $=$ to compare the statements.

a) $39 \text{ cm} + 9 \text{ cm}$ 47 cm

b) $22 \text{ m} - 6 \text{ m}$ $0 \text{ m} + 15 \text{ m}$

c) $4 \text{ cm} + 13 \text{ cm}$ $20 \text{ m} - 3 \text{ m}$

6

$5 \text{ m} = 5 \text{ cm}$

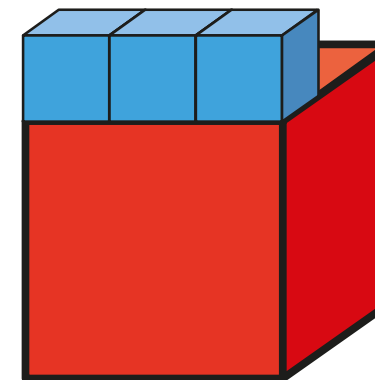
a) Why is the statement wrong?

Talk about it with a partner

b) Write $<$ or $>$ to correct the mistake.

5 m 5 cm

7 One large cube is three times as long as one small cube.



One small cube is 5 cm long.

a) How long are 2 small cubes?

 cm

b) How long are 10 small cubes?

 cm

c) How long is 1 large cube?

 cm

d) How long are 2 large cubes?

 cm

Compare lengths

1 Write $<$, $>$ or $=$ to compare the lengths.

a) 60 mm 6 cm c) 5 cm 45 mm

b) 1 m 50 cm 115 cm d) 100 mm 1 m

How did you work this out?

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

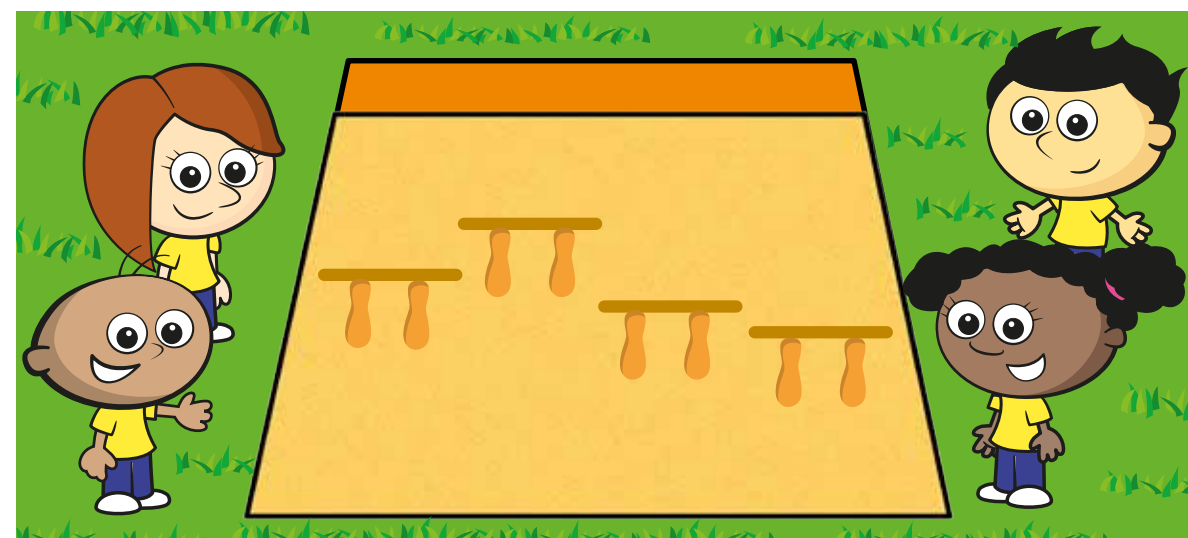
Child	Height of tower
Eva	1 m 5 cm
Mo	135 cm
Alex	1 m 45 cm
Dexter	1 m 25 cm

- 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.

3 Write the following lengths in order from shortest to longest.

160 cm	950 mm	1m 50 mm	200 cm	1 m 25 cm
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
shortest		longest		

4 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.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1st	2nd	3rd	4th

- 5 Measure the height of four of your classmates.
Measure their foot length and then complete the table.

Name	Height in cm	Foot length in cm

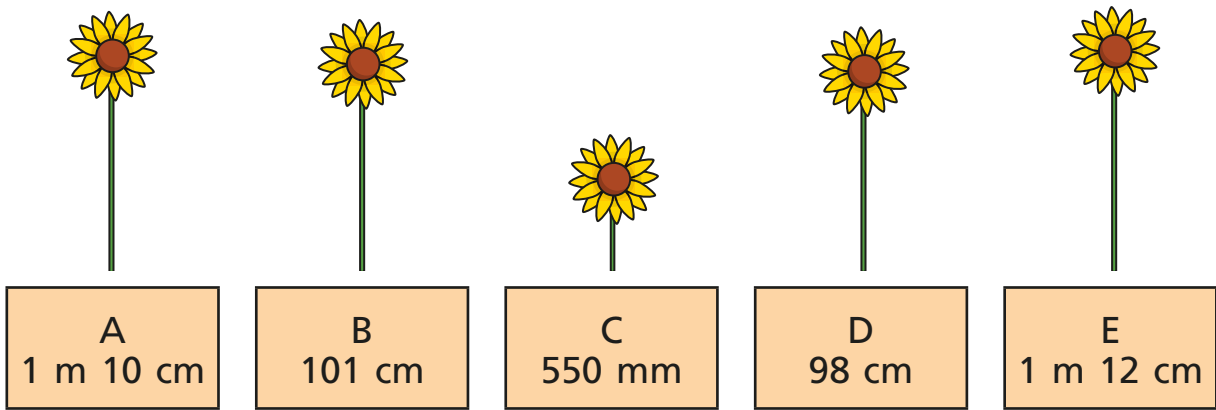
What have you found? Do taller people have longer feet?

- 6 Measure the height of four of your classmates.
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?

- 7 Teddy, Mo, Amir, Dora and Annie have each grown a sunflower.
Use the clues below to work out which sunflower belongs to which child.



Amir

My sunflower is twice as tall as Teddy's.

Dora

My sunflower is 3 cm taller than Mo's.

Mo

My sunflower is less than 1 m tall.

Annie

My sunflower is the tallest.

Write the owner of each sunflower.

sunflower A: _____

sunflower D: _____

sunflower B: _____

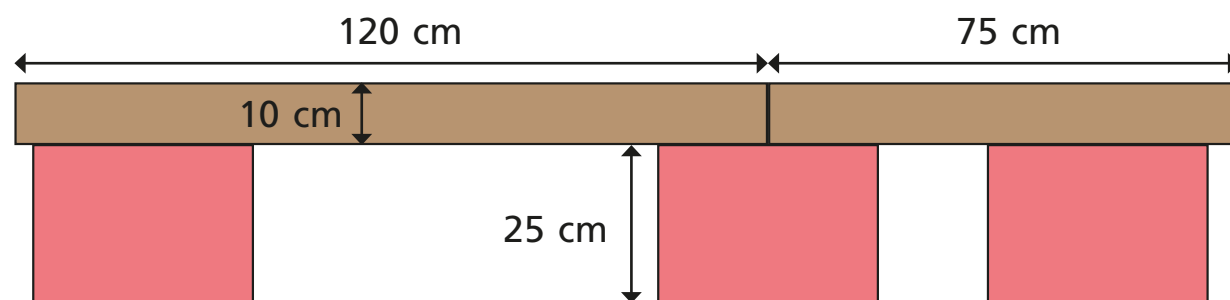
sunflower E: _____

sunflower C: _____

Add lengths



- 1 Scott builds a bridge using planks.



a) What is the total length of his bridge? cm

b) What is the height of his bridge? cm

- 2 Complete the additions.

a) $25 \text{ cm} + 75 \text{ cm} = \text{ } \text{m}$

b) $10 \text{ cm} + 50 \text{ mm} = \text{ } \text{cm}$

c) $1 \text{ m } 20 \text{ cm} + \text{ } \text{cm} = 2 \text{ m}$

d) $52 \text{ mm} + \text{ } \text{mm} = 6 \text{ cm}$

- 3 Brett is 115 cm tall.
His brother is 20 cm taller.
How tall is Brett's brother?
Write your answer in metres and centimetres.

m and cm

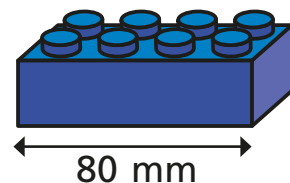
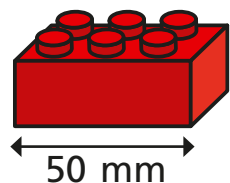
- 4 Dora builds a tower that measures 1 m and 5 cm.
Annie builds a tower that measures 80 cm.
Dexter builds a tower that measures 95 cm.
They put their towers together to make one high tower.
How tall is their new tower?

The new tower is cm tall.

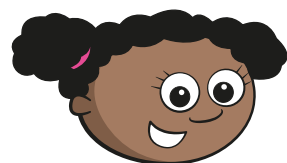
This is the same as m and cm.



- 5 Red bricks are 50 mm long.
Blue bricks are 80 mm long.

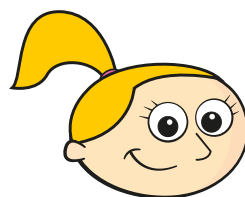


- a) Whitney and Eva make patterns using the bricks.
How long is each pattern?
Give your answers in centimetres.



Whitney

Whitney's pattern is cm long.



Eva

Eva's pattern is cm long.

- b) Draw some red and blue bricks to make a pattern that would be exactly 36 cm long.

- 6 Jack, Tommy and Alex took part in a hop, skip and jump competition.

Their distances are shown in the table below.

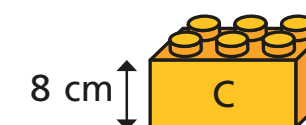
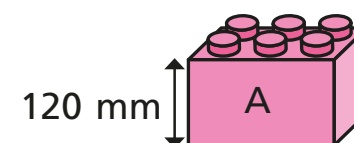
Complete the table to show the total distance each child travelled.

Name	Hop	Skip	Jump	Total
Jack	80 cm	60 cm	1 m 20 cm	
Tommy	70 cm	1 m	1 m 10 cm	
Alex	75 cm	75 cm	1 m	

- 7 Esther builds a tower using some bricks.

Her tower is 24 cm tall.

Which bricks could she have used?

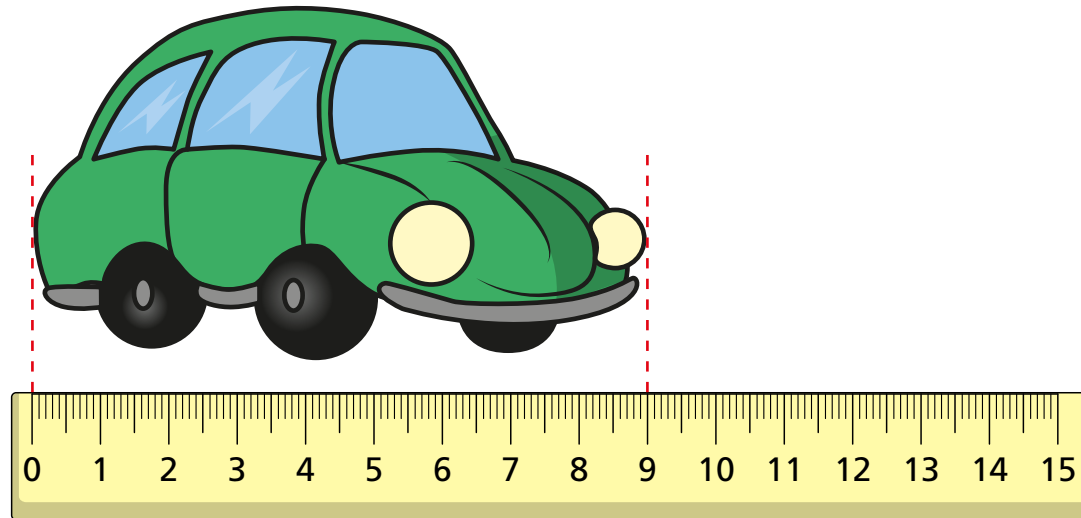


How many different answers can you find?

Subtract lengths

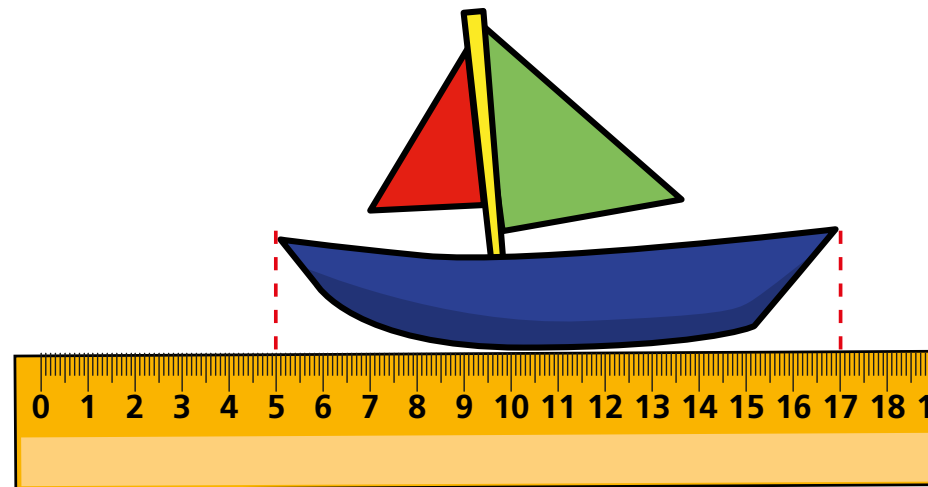
- 1 Complete the sentences to describe the lengths of the objects.

a)



The toy car is mm long.

b)

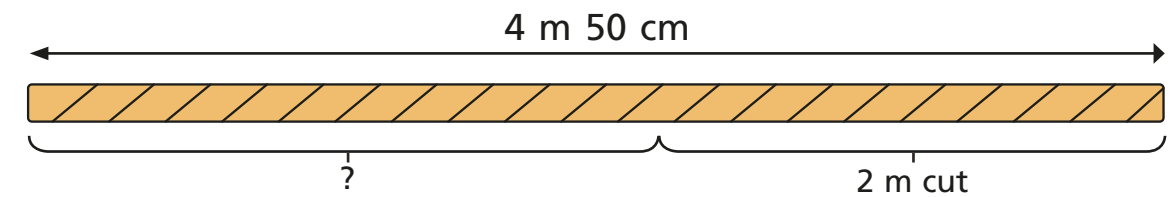


The toy boat is cm long.

c) The toy boat is cm longer than the toy car.

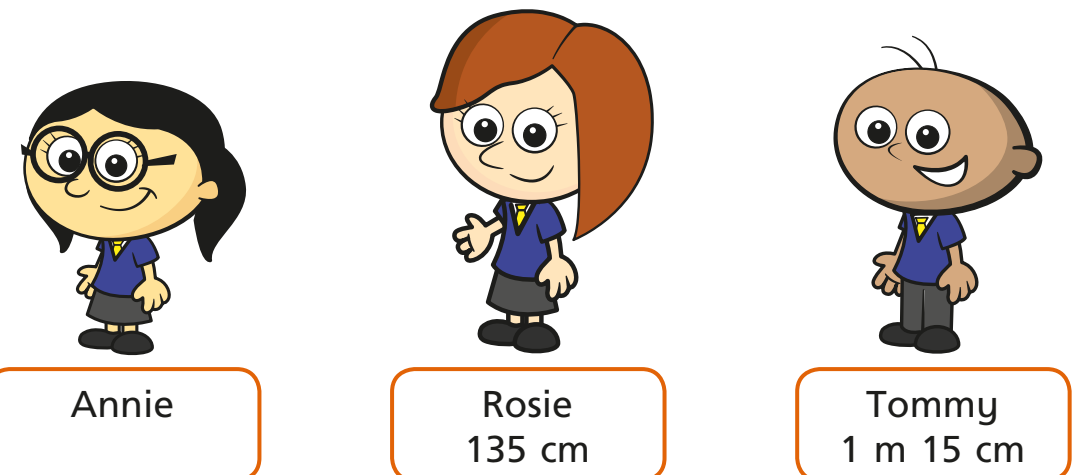
The toy car is mm shorter than the toy boat.

- 2 Jack's rope is 4 m 50 cm long.
He uses 2 m to make a swing.
How long is his rope now?



Jack's rope is now m and cm long.

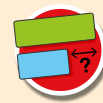
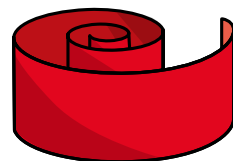
- 3 Tommy, Rosie and Annie each measure their height.



- a) What is the difference in height between Tommy and Rosie?

- b) Annie is 30 mm shorter than Rosie. What is Annie's height?

- 4 Nijah buys 5 m of ribbon.
She uses 78 cm of the ribbon to decorate a bag.
How much ribbon does she have left?



m and cm

- 5 Complete the number sentences.

a) $2 \text{ m} - 50 \text{ cm} = \text{ } \text{cm}$

b) $85 \text{ mm} - 2 \text{ cm} = \text{ } \text{mm}$

c) $9 \text{ cm } 5 \text{ mm} - 20 \text{ mm} = \text{ } \text{cm and } \text{ } \text{mm}$

d) $100 \text{ mm} - \text{ } \text{cm} = 6 \text{ cm}$

- 6 Huan has a 10 m ball of string.

He uses 50 cm to replace his shoelace.

He uses some more of his string to make a bow for his arrows.

He has 7 m and 45 cm of string left.

How much string did Huan use to make his bow?



m and cm

- 7 Fill in the empty boxes so that each row and column adds up to 2 m.

50 cm		50 cm
1 m 15 cm		
	85 cm	

Talk about what you did with a partner.

Are your answers the same?

Create your own problem like this using a different total.

Ask a partner to find the answer.

