White Rose Maths
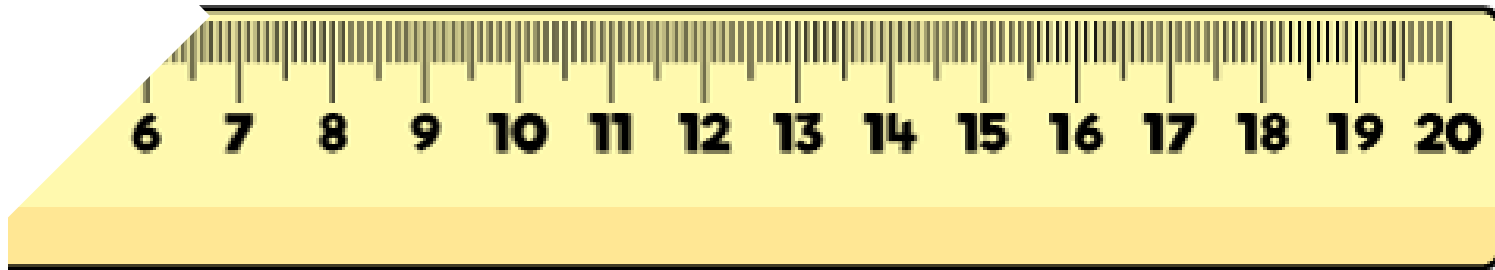
Year 3
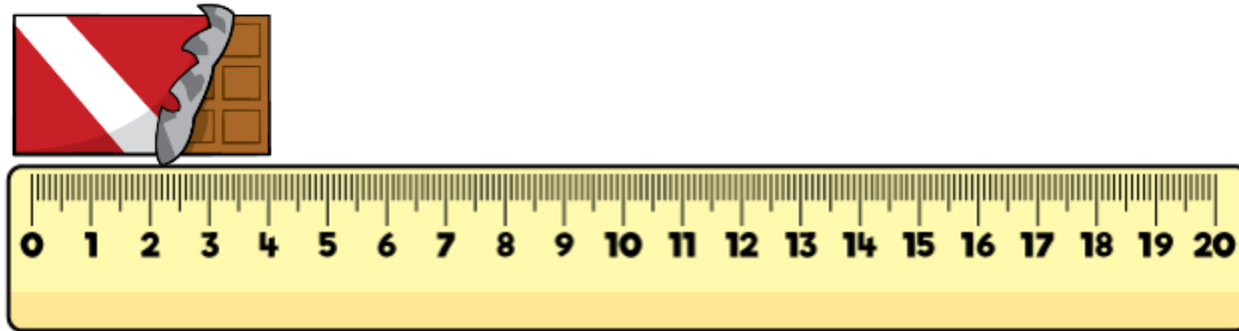
Length & Perimeter

Whitney's ruler is broken.
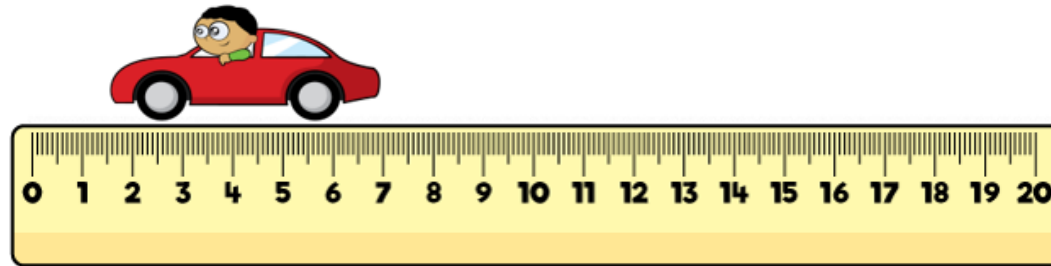How could she use it to still measure items?

Tommy thinks that this chocolate bar is 4 cm long.
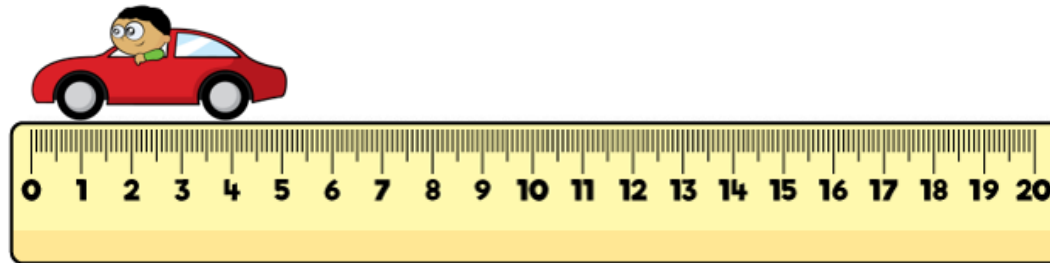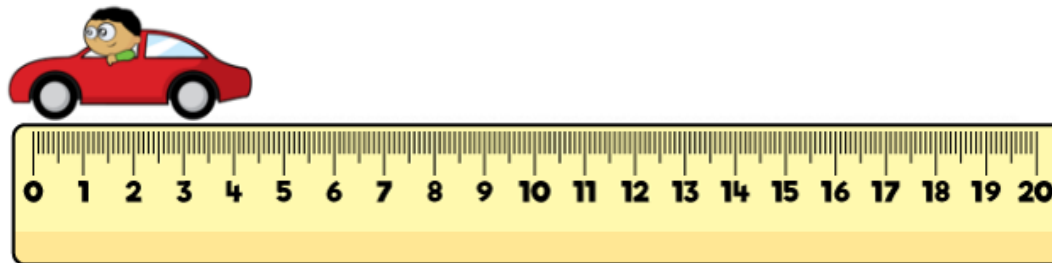Is he correct?

Convince me.

Three children measured the same toy car.
Eva says that the car is 6 cm and 5 mm

Dexter says the car is 5 cm

Annie says the car is 4 cm 5 mm

Who is correct?

Who is incorrect?

Explain why.

Mo and Alex each have a skipping rope.

Alex says,

I have the longest skipping rope. My skipping rope is $2\frac{1}{2}$ metres long.

Mo says,

My skipping rope is the longest because it is 220 cm and 220 is greater than $2\frac{1}{2}$

Who is correct?
Explain your answer.

Three children are partitioning 754 cm
Teddy says,

75 m and 4 cm

Whitney says,

7 m and 54 cm

Jack says,

54 cm and 7 m

Who is correct?
Explain why.

Rosie is measuring a sunflower using a 30 cm ruler. Rosie says,

The sunflower is 150 cm tall.

Rosie is incorrect.
Explain what mistake she might have made.
How tall is the sunflower?

Ron is thinking of a measurement.
Use his clues to work out which measurement he is thinking of.

- In mm, my measurement is a multiple of 2
- It has 8 cm and some mm
- It's less than 85 mm
- In mm, the digit sum is 12

Always, Sometimes, Never?

mm lengths are smaller than cm lengths.

Sort the lengths into the table.

Longer than a metre	Shorter than a metre

1 m 65 cm
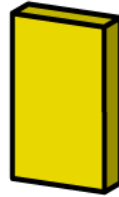
165 mm

165 m

165 cm

16 cm 5mm

1 cm 65 mm
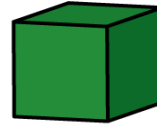
Are any of the lengths equivalent?

Eva is building a tower using these blocks.
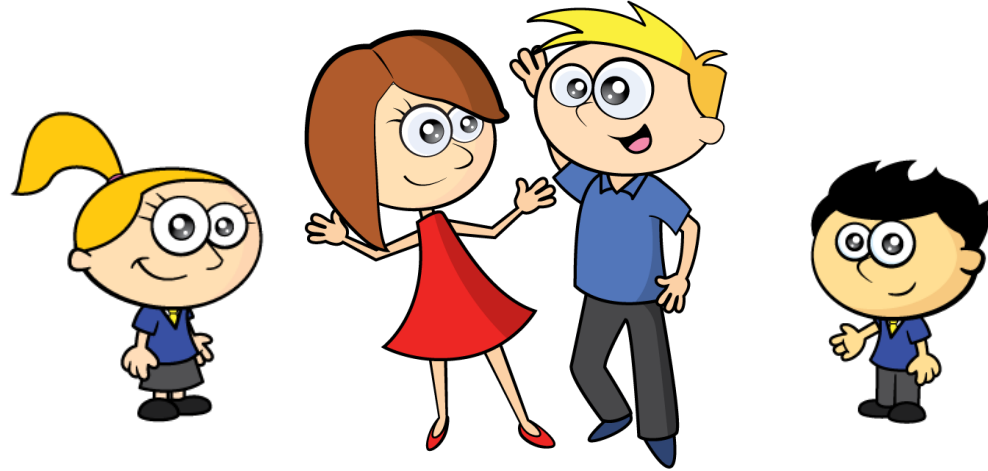
100 mm   80 mm   50 mm

How many different ways can she build a tower measuring 56 cm?

Can you write your calculations in mm and cm?

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

| 134 cm | 1m and 60 cm | 1m and 85 cm | 1m and 10 cm |

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.

A bike race is 950 m long.

Teddy cycles 243 m and stops for a break.

He cycles another 459 m and stops for another break.

How much further does he need to cycle to complete the race?

A train is 20 metres long.

A car is 15 metres shorter than the train.

A bike is 350 cm shorter than the car.

Calculate the length of the car.

Calculate the length of the bike.

How much longer is the train than the bike?

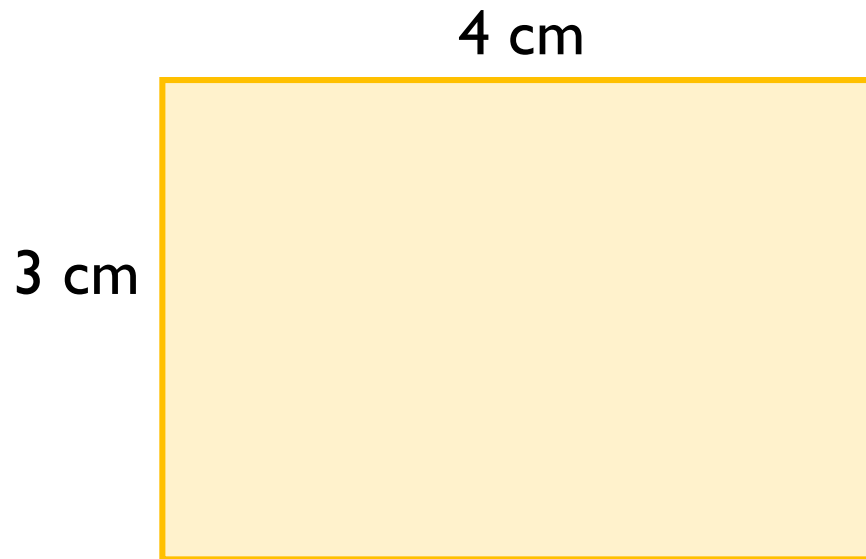Annie has a 3 m roll of ribbon.

She is cutting it up into 10 cm lengths.
How many lengths can she cut?

Annie gives 240 cm of ribbon to Rosie.
How much ribbon does she have left?
How many 10 cm lengths does she have left?

Amir is measuring the shape below.
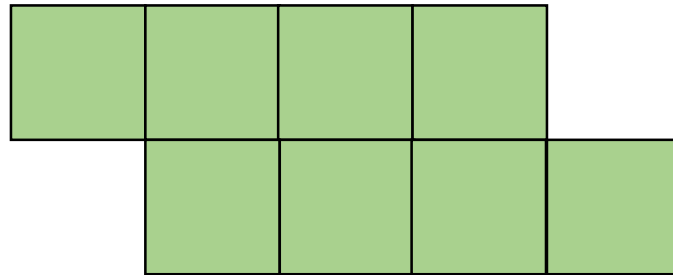He thinks the perimeter is 7 cm.

Can you spot his mistake?

4 cm

3 cm

Whitney is measuring the perimeter of a square.
She says she only needs to measure one side of the square.

Do you agree?
Explain your answer.

Here is a shape made from centimetre squares.

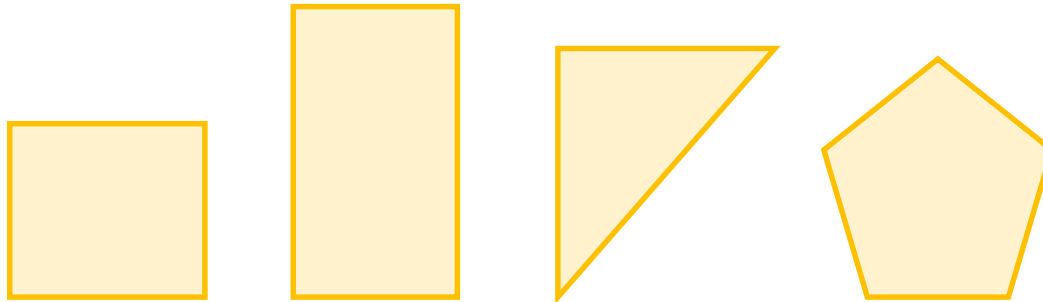Find the perimeter of the shape.

Can you use 8 centimetre squares to make different shapes?
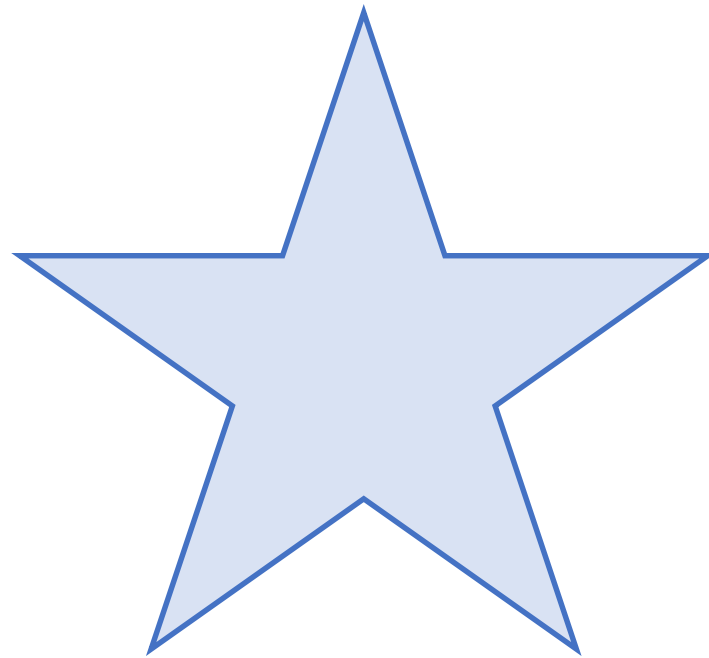
Find the perimeter of each one.

Teddy says,

You only need to know the length of one side of these 2-D shapes to work out the perimeter.

Do you agree with Teddy?
Explain your answer.

Each side of this shape is of equal length.
The perimeter is 60 cm.

How long is each side?

How many different rectangles can you draw with a perimeter of 20 cm?