

Week beginning 15.3.21

Maths

This week we are looking at converting measures, perimeter and area.

Monday

How do you convert units of length?

Please complete the following lesson on converting units of length

<https://classroom.thenational.academy/lessons/decimals-and-measures-convert-standard-lengths>

Task

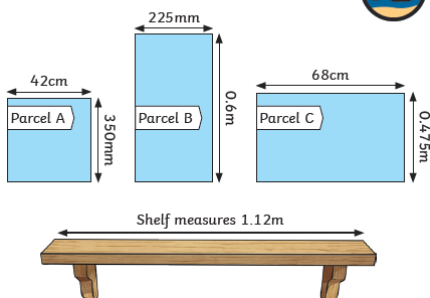
| mm | cm | m | km |
|--------|-------|------|------|
| 44,000 | | | |
| | 2,780 | | |
| | | 15.5 | |
| | | | 1.75 |

Match the equivalent measures.

| | | | |
|------|---------|-----------|---------|
| 4 cm | 0.095 m | 95 000 mm | 0.4 km |
| 95 m | 95 mm | 400 m | 9500 cm |
| 4 km | 0.04 m | 9.5 cm | 40 mm |

Challenge

Patsy, the postal worker, is arranging some parcels on the shelves in the post office.



- 1) How could she arrange the three parcels so that they sit on the shelf with no gaps? (Think about turning the parcels round so they could fit.)
- 2) How could Patsy fit the same parcels on a shelf which measures 1.05m?

Tuesday

Can you calculate with measures?

Please follow the link and watch the video titled calculate with metric measures
<https://whiterosemaths.com/homelearning/year-6/spring-week-7-measurement-converting-units/>

Task

1a) A fun run is 3km long.

Isla has run 900m.

How many metres has she got left to run?

b) The height of a bush is 2.5m

The fence next to it is 205cm tall.

Will you be able to see the bush over the top of the fence? Why?

c) A bag contains 2.5kg of frozen peas.

How many servings of 50g can be taken from the bag?

2) A book weighs 1.5kg

A second book weighs 800g.

How much do the 2 books weigh altogether?

3) A jug holds 1.5 litres of orange juice. The squash is poured equally into 5 glasses.

a) How many millilitres of squash are in each glass?

b) Every 100ml of squash contains 20ml of juice. How many millilitres of juice are in each glass of squash?

4) Max is 1.5m tall and is longer than his bed! When his head is at one end his feet stick 12cm out from the end.

Find the length of Max's bed.

Wednesday

Can you solve problems?

Use the video from yesterday to recap if needed before completing the tasks below.

Task

Explain the mistakes

$$23\text{cm} = \underline{2.3} \text{ mm}$$

$$3.05\text{m} = \underline{300.5} \text{ cm}$$

$$740\text{m} = \underline{7.4} \text{ km}$$

Some children are measuring the lengths of different items in their classroom:

- Bookshelf = 0.8m
- Exercise book = 30.5cm
- Pencil = 140mm
- Reading book = 12.5cm
- Chair = $1\frac{1}{4}$ m



What do the items measure altogether in metres?

Three children record their answer to this problem.



The milk bottle holds 1900ml. I poured the same amount of milk into three cups and had 1675ml left in the bottle. How much milk is in each cup?



Jessica:
7.5l



Jacob:
0.075l



George:
0.75l

Which child has given the correct answer?
Explain how you know.

A teacher is buying pencils for the school.

Each pencil has a mass of 2.35g. There are 38 pencils in each box. The teacher decides to buy 30 boxes of pencils for the school.

Give the total mass of the pencils she has bought, in kilograms.



Thursday

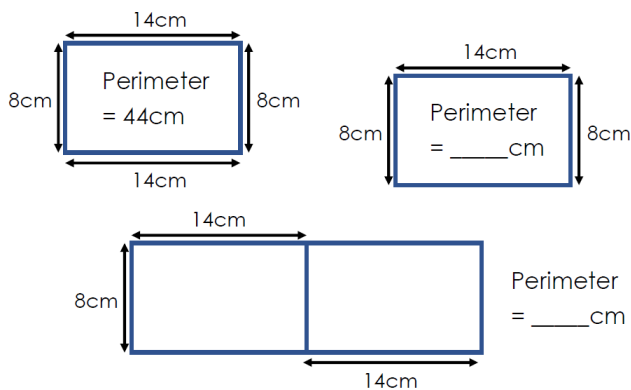
What is perimeter?

Please watch the video titled area of rectilinear shapes.

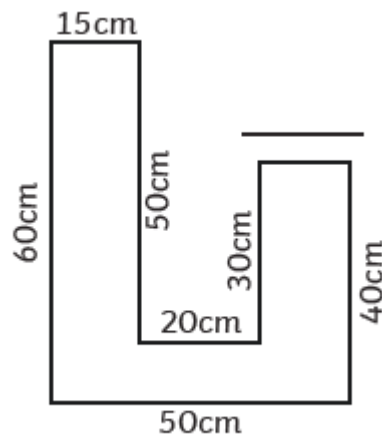
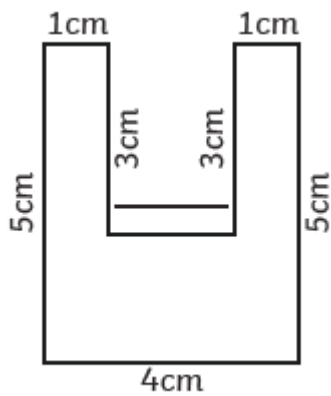
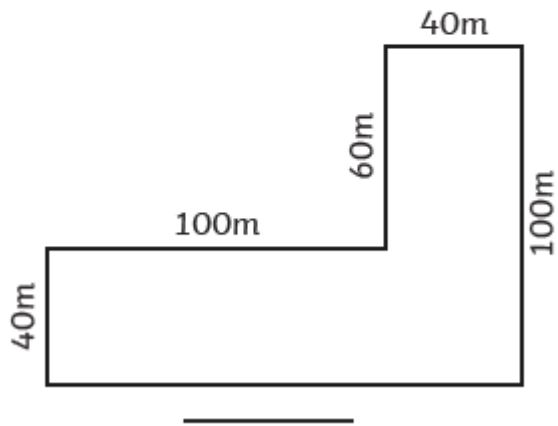
<https://whiterosemaths.com/homelearning/year-5/week-11-measurement-perimeter-area/>

Task

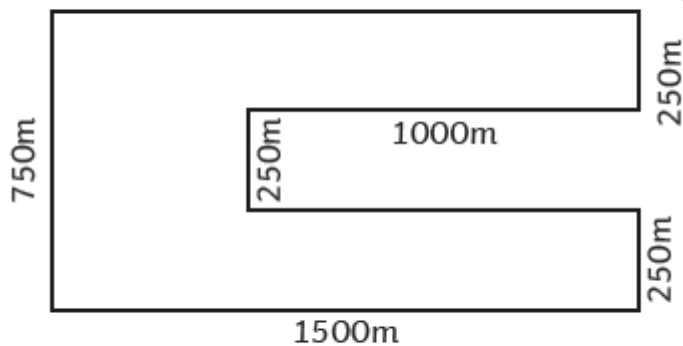
I know... so...



- 1) a) Use the labelled sides to find the length of the unlabelled side on each of these shapes.
- b) Calculate the perimeter of each shape.



Toby says, "This shape has a perimeter of 4000m."



- a) Explain his mistake.
- b) Calculate the correct perimeter.

Are these statements true or false? Explain how you know.

- a) A rectangle with sides 2cm and 8cm, will have the same perimeter as a square with 5cm sides.
- b) A long, thin rectangle will always have a longer perimeter than a shorter, wider rectangle.
- c) If you put a square with sides of 4cm and a square with sides of 6cm side by side on a straight line, they make a rectilinear shape with a perimeter of 40cm.

twinkl.co

Friday


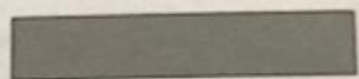
What is area?

Please watch the video titled *area of compound shapes*

<https://whiterosemaths.com/homelearning/year-5/week-12-measurement-perimeter-area/>

Task

1 Calculate the area of each rectangle. Do both the rectangles in each pair have the same area? Tick the correct box.

a) A  B  2 cm
10 cm

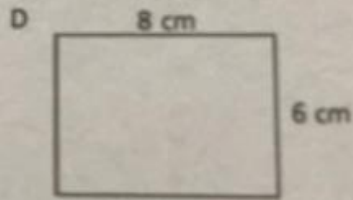
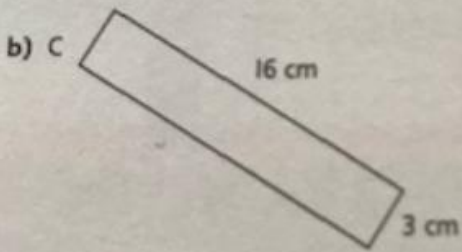
1 square = 1 cm²

Area of rectangle A = cm²

Area of rectangle B = cm²

Rectangles A and B have the same area.

Yes No



Area of rectangle C = cm^2

Area of rectangle D = cm^2

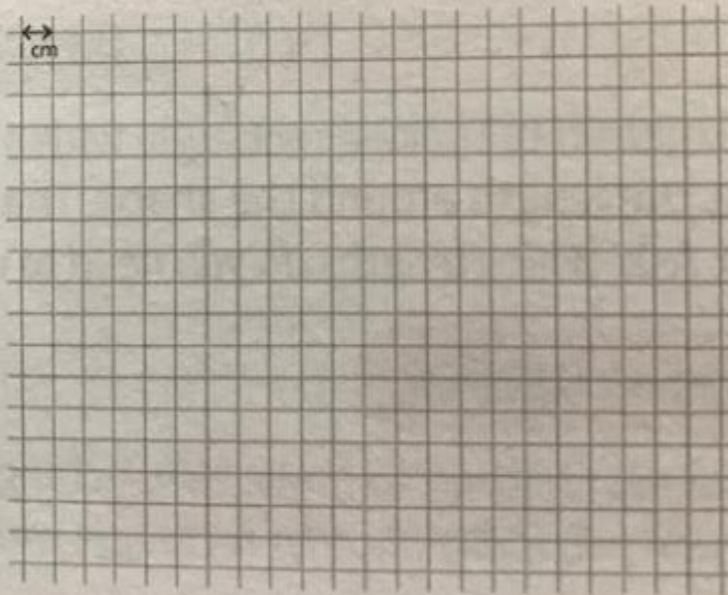
Rectangles C and D have the same area.

Yes

No

2 Use these clues to draw three shapes that each have an area of 36 cm^2 .

| | Shape A | Shape B | Shape C |
|--------|---------|---------------------|----------------|
| Clue 1 | Square | Rectangle | Compound shape |
| Clue 2 | | Length is 4 x width | |



3 All of these shapes have the same area. Calculate the missing measurements.

