

Can you remember what the perimeter of a shape is? It is the edge along the whole of the outside of a shape.

So, what's the difference between the area and perimeter?

If you think of a field with sheep in, this will help you. Image the fence that keeps the sheep inside, that would be the perimeter of the field. The area would be all the grass inside the fence that the sheep can run on and eat. Make sense? So, the perimeter is the very edge of the field whereas the area is the whole surface.

To find the perimeter of a shape, we need to know the lengths of all the sides of the shape and then simply add them together.

The diagram shows two shapes. On the left is a rectangle with a top side of 8 cm, a bottom side of 8 cm, a left side of 5 cm, and a right side of 5 cm. Below it is the calculation $8 + 5 + 8 + 5 = 26 \text{ cm}$. On the right is a trapezium with a top side of 8 cm, a bottom side of 4 cm, a left slanted side of 6 cm, and a right slanted side of 6 cm. Below it is the calculation $8 + 6 + 4 + 6 = 24 \text{ cm}$.

Calculate the perimeter of shapes A, B and C. Draw them into your books accurately using a ruler and write their perimeters underneath. Remember to check what unit of measurement has been used to measure each length.

A

B

C

Task:

1. I would like you to complete an object treasure hunt in your house. Take your book, a pencil and a ruler and find 5 objects that you will easily be able to calculate the perimeter of.

In your book, write what the object is, what each length is in cm and what the perimeter is. For example: Reading book - $15\text{cm} + 10\text{cm} + 15\text{cm} + 10\text{cm} = 50\text{cm}$. The perimeter of the book is 50cm.

Remember, you are measuring the perimeter of 2D shapes, so if you were measuring the perimeter of a book, you would only need to measure one face of it, not all the edges on the whole book. Off you go!

2. Now, draw 3 shapes in your book. Shape 1 should have a perimeter of 18cm. Shape 2 should have a perimeter of 16cm and shape 3 should have a perimeter of 20cm. Make them as original as you can. Use a ruler to draw them neatly and measure accurately.

Then you can answer your challenge question(s) after. Pick the one you want to do; you can answer them all if you really want to, but you don't have to.

CHALLENGE:

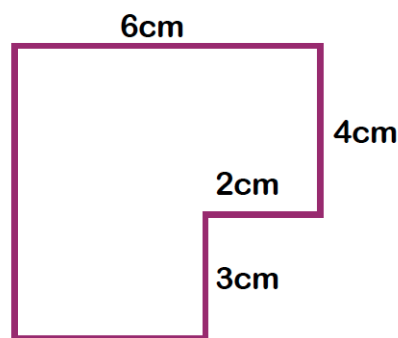
Jack: Ellie says, "5 inches + 5 inches + 10 inches + 8 inches + 6 inches = 34cm." What mistake has Ellie made?

Queen: When working out the perimeter of a square, you can add all lengths and widths together, or you can just do the length + the width $\times 2$. Prove it.

Ace: The perimeter of a rectilinear shape can never be odd. True or false? Explain how you know.

Joker: Calculate the perimeter of the shape:

Draw it in your book to help you if necessary.



Now it's time for you to practise your maths skills using Mathletics and Timestables.co.uk. Have fun! Keep learning your times tables.

If you need any help at all or would like to send me pictures of your amazing work, please email myself and Miss Senior. To those of you who received pens last week - I would love to see your handwriting!



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