

YR3 Knowledge Organiser - Perimeter

Key Concepts

- Measure the perimeter of simple 2D shapes

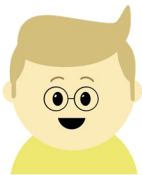
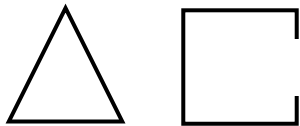
Key Vocabulary

- perimeter
- distance
- length
- measure
- centimetres
- method
- repeated addition
- multiplication



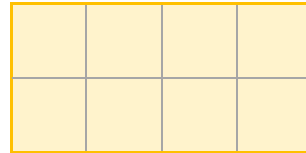
Measure Perimeter

The perimeter is the distance all the way around the outside of a 2D shape. We can only find the perimeter of a complete shape.



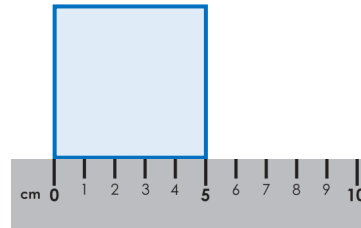
"We cannot find the perimeter of the second shape because there is a gap."

To find the perimeter of a shape, add the lengths of all of the sides.



$$4 + 2 + 4 + 2 = 12\text{cm}$$

We can use a ruler to measure the sides of a shape and find the perimeter.



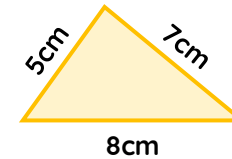
"I know that a square has four equal side lengths so I can use repeated addition. The perimeter = $5 + 5 + 5 + 5 = 20\text{cm}$ "



Calculate Perimeter

There are different methods we can use to calculate the perimeter of a shape.

For some shapes, where all of the sides are different lengths, we need to add all of the side lengths together.



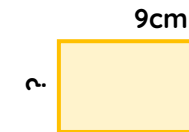
$$5\text{cm} + 7\text{cm} + 8\text{cm} = 20\text{cm}$$

For other shapes, where some of the sides are the same length, multiplication can also be used.



"Two of the sides are 10cm so $10\text{cm} \times 2 = 20\text{cm}$. Two of the sides are 3cm so $3\text{cm} \times 2 = 6\text{cm}$. $20\text{cm} + 6\text{cm} = 26\text{cm}$ "

Our knowledge of the perimeter can also be used to calculate the missing length of a side.



$$\text{Perimeter} = 26\text{cm}$$

"Two of the sides are 9cm. $9\text{cm} \times 2 = 18\text{cm}$, and $26\text{cm} - 18\text{cm} = 8\text{cm}$ so each missing side is half of 8cm. $8\text{cm} \div 2 = 4\text{cm}$ "

