

# Measure perimeter

## Notes and guidance

In this small step, children measure the sides of different shapes in centimetres to find the perimeter. This builds on the previous step, where children found the perimeter by counting the number of squares of each length.

Encourage children to work in a systematic order, possibly marking the lengths after they have been measured, to ensure that children measure the lengths of all the sides.

Children should also be encouraged to think about whether it is necessary to measure every side to find the perimeter or whether they can use the properties of 2-D shapes to help them.

Children could explore measuring the perimeter of shapes with curved sides by using a piece of wool or string to place along the edges and then measuring the wool or string with a ruler.

## Things to look out for

- When measuring, children may start from the beginning of the ruler, rather than from the zero mark.
- Children may not record the units of measurement in their answer.
- Children may measure using the non-metric side of the ruler.

## Key questions

- What does “perimeter” mean?
- What equipment is useful for measuring the perimeter of a shape?
- Does starting in different places when measuring the perimeter give you a different answer?
- Do you need to measure all the sides? How do you know?
- How do you know that you have measured all the sides?
- Which method do you prefer, to find the perimeter of a square?
- Can you find the perimeter of a shape with a curved edge? How?

## Possible sentence stems

- Perimeter is ...
- \_\_\_\_\_ cm + \_\_\_\_\_ cm + \_\_\_\_\_ cm + \_\_\_\_\_ cm = \_\_\_\_\_ cm

## National Curriculum links

- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2-D shapes

## Measure perimeter

### Key learning

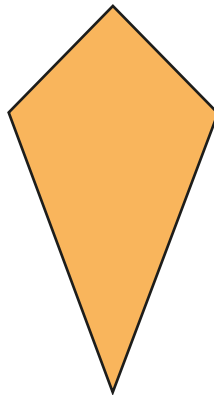
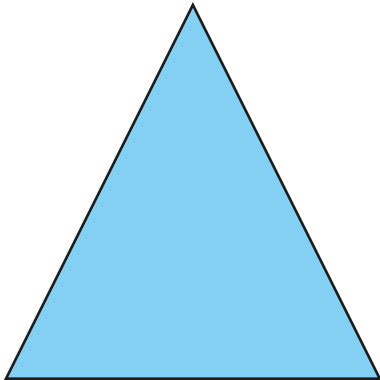
- Measure and label each side of the rectangle.



What is the perimeter of the rectangle?

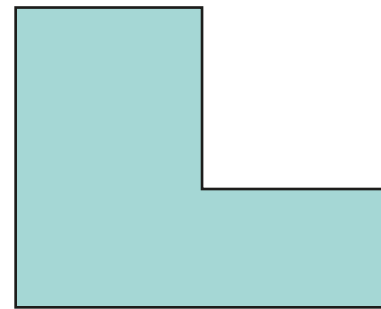
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ cm

- Measure and label the sides on each shape.



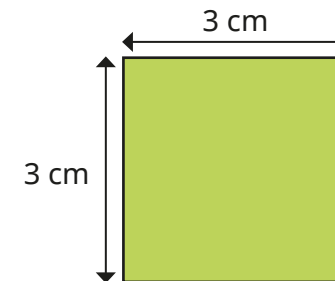
Work out the perimeter of each shape.

- Measure and label the sides of the hexagons.



Work out the perimeter of each hexagon.

- Here is a square.



Do you need to measure all the sides to find the perimeter?

What is the perimeter of the square?

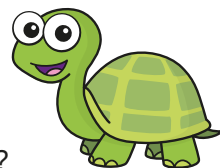
# Measure perimeter

## Reasoning and problem solving

Scott is measuring the perimeter of a rectangle.



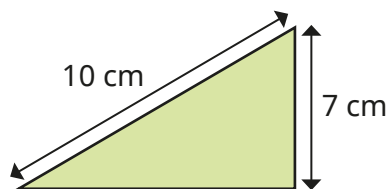
Scott only needs to measure two sides!



Do you agree with Tiny?  
Explain your answer.

Yes

Dexter thinks that the perimeter of the triangle is 17 cm.

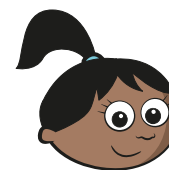
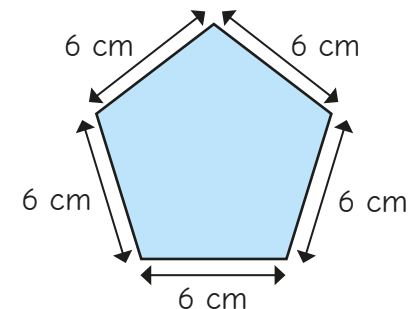
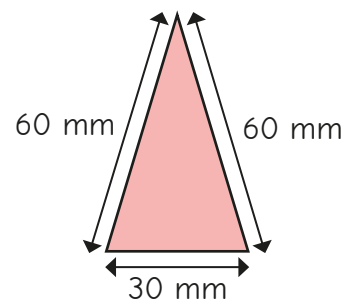


Explain why Dexter is incorrect.

Dexter has only measured two sides of the triangle.

The perimeter is the total distance around the shape.

Sam measures the sides to find the perimeters of the shapes.



The perimeter of the triangle is greater than the perimeter of the pentagon.

What mistake has Sam made?

The units of measurement are different.  
triangle = 15 cm; pentagon = 30 cm