

Year Group	Subject	Topic
4	Mathematics	Length and Perimeter

#### What does length and perimeter consist of?

In this unit, pupils will be taught to:

- convert between different units of measure [for example, kilometre to metre; metre to centimetre].
- compare and order lengths and record the results using  $>$ ,  $<$  and  $=$
- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.

#### Key Vocabulary

**metre (m)**

**centimetre (cm)**

**millimetre (mm)**

**height**

**length**

**width**

**perimeter**

**rectilinear**

**right angle**

## Measure Length

5mm      5cm

10mm = 1cm

4cm 6mm

38mm

## Equivalent Length

100 centimetres = 1 metre

10 millimetres = 1 centimetre

÷ 10

Millimetres (mm) → Centimetres (cm)

× 10

÷ 100

Centimetres (cm) → Metres (m)

× 100

317cm	
300cm	17cm
3m	17cm
3m 17cm	

## Compare Lengths

6mm < 6cm  
6cm = 60mm  
6mm is shorter than 6cm

320cm > 2m 6cm  
320cm > 200cm + 60cm  
320cm is longer than 2m 60cm

98mm < 12cm 3mm  
98mm < 120mm + 3mm  
98mm is shorter than 12cm 3mm

## Add and Subtract Lengths

14cm + 19cm = 33cm  
8cm 2mm + 16mm =  
98mm or 9cm 8mm

?	
8cm 2mm	16mm
82mm	16mm

6m – 2m 28cm  
6m – 2m = 4m  
4m – 28cm = 3m 72cm

6m	
2m 28cm	?

## Units of Measure for Perimeter

**km**      1 kilometre = 1000 metres

**m**        1 metre = 100 centimetres

**cm**        1 centimetre = 10 millimetres

**mm**

## Rectilinear Figures

A **rectilinear** figure is a 2D shape whose sides all meet at **right angles** (90°).

## Perimeter

..... = perimeter

5cm

2cm      2cm

5cm

5cm + 2cm + 5cm + 2cm = 14cm

3cm

3cm + 3cm + 3cm + 3cm + 3cm = 15cm

perimeter = 20cm

6cm + 6cm = 12cm

20cm – 12cm = 8cm

8cm ÷ 2cm = 4cm

?