

# Measurement - Length and Perimeter - Knowledge Organiser

## Key Vocabulary

Metres (m)	A unit of measurement. Used to measure the length or distance.
Centimetres (cm)	A unit of measurement. Used to measure the length or distance.
Millimetres (mm)	A unit of measurement. Used to measure the length or distance.
Height	How tall an object is, measured from bottom to top.
Length	How long something is or the distance between two points.
Width	How wide something is, measured from side to side.
Perimeter	The total distance around the outside of a shape.

## Key Information

- We use a ruler to measure objects in cm and mm. We can use a metre stick or tape measure to measure in m.
- 1 metre is equivalent to 100 centimetres.  
1 centimetre is equivalent to 10 millimetres.
- We use  $<$ ,  $>$  and  $=$  when comparing measurements
- Perimeter is the distance around the outside of a closed 2D shape.

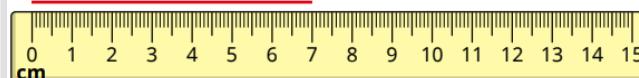
## Prior Knowledge

- Measurement: Length and height  
Compare objects using longer, shorter and taller. Measure objects using a ruler in cm.
- Measurement: Length and height  
Measure using a ruler in cm. Measure using a metre stick and tape measure in m. Compare and order lengths. Apply the four operations to measurements.

## Worked Examples

Measure in metres, centimetres and millimetres.

What is the length of the line? 7cm.

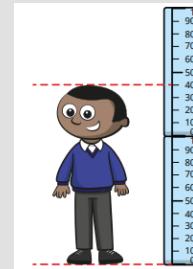


What is the length of the line?  
15mm



## Worked Examples

How tall are they? 1m and 40cm.



## Equivalent lengths.

Complete the bar models.

$$4\text{m} = 400\text{ cm}$$

1 m	1 m	1 m	1 m
100 cm			

$$6\text{cm} = 60\text{mm}$$

1 cm	1 cm	1 cm	1 cm	1 cm	1 cm
10 mm					

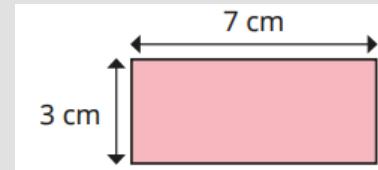
## Add and subtract lengths

$$7\text{cm} + 30\text{mm} = 7\text{cm} + 3\text{cm} = 10\text{cm}$$

$$1\text{m} - 42\text{cm} = 100\text{cm} - 42\text{cm} = 58\text{cm}$$

## Perimeter

Find the perimeter of the rectangle.



$$7\text{cm} + 7\text{cm} = 14\text{cm}$$

$$3\text{cm} + 3\text{cm} = 6\text{cm}$$

$$14\text{cm} + 6\text{cm} = 20\text{cm}$$

The perimeter of the rectangle is 20cm.