

Maths - Year 4

Measurement 3: Understanding and using units of length and distance

Key Vocabulary

Metre (m)	A unit to measure length. 1 metre = 100cm
Kilometre (km)	A unit to measure distance. 1000m—1km.
Centimetre (cm)	A unit to measure length. 1cm = 10mm.
Millimetre (mm)	A unit to measure length. 10mm = 1cm. 1000mm = 1m
Distance	The length of the space between two points.
Revolution	One complete turn (a rotation of 360°).

Mathematical Skills

- Give reasonable estimates of distance, up to about 100m.
- Choose an appropriate instrument for measuring distance.
- Recall the number of millimetres in a centimetre, centimetres in a metre and metres in a kilometre.
- Convert between and/or compare length measurements in different metric units.
- Construct a simple bar chart.

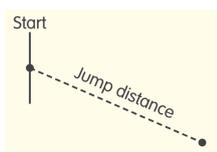
Mathematical Methods

- Measuring distance in whole metres e.g. measuring and marking outside 1m, 10m, 100m.

- Measuring distance in metres using decimal notation.

Event	World record distance (m and cm)	World record distance (m)	World record distance (cm)
Long jump (men)	8 m 95 cm	8.95 m	895 cm
Triple jump (men)	18 m 29 cm	18.29 m	1829 cm
Shot put (women)	22 m 63 cm	22.63 m	2263 cm
Discus (women)	76 m 80 cm	76.80 m	7680 cm
Javelin (men)	98 m 48 cm	98.48 m	9848 cm

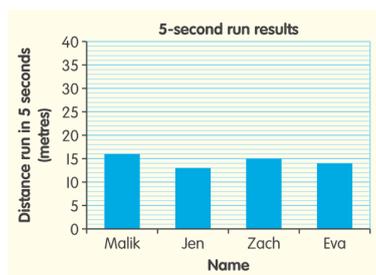
- Measuring and calculating with distances e.g. measuring distances jumped in a group and adding the group totals: $0.86\text{m} + 1.07\text{m} + 1.18\text{m} =$



- Recognising equal distances e.g. Recognising staggered starts in a 400m race still mean that each athlete runs 400m.

- Presenting distance data in a bar chart.

Name	Distance run in 5 seconds
Malik	16 m
Jen	13 m
Zach	15 m
Eva	14 m



- Introducing kilometres e.g. $3000\text{m} = 3\text{km}$; $3500\text{m} = 3.5\text{km}$.

Can you..?

- Which part of the school is furthest from the classroom?

Distances from the classroom:

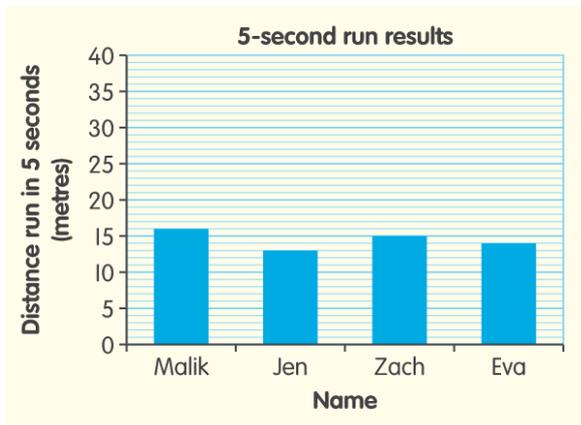
School hall 383 cm
Store room 209 cm
Library 805 cm
School field 1525 cm

Garden 4.75 m
Head teacher's office 8.8 m
Kitchen 3.6 m
Playground 5 m

- Roughly, how far have the children walked altogether?



- How much further does Malik run than Jen?



- If 1 lap on a track is 400m long, how many kilometres are in 2 laps?