



## Eleven Plus Maths How To Do - Length

The measure with which we are most familiar is the metre. A metre length is about that of a man's stride. It is the length of your left arm stretched out, measuring from the tip of your middle finger to a point just past your nose. Your height would be measured in metres.

If you wanted to measure something which is about the width of two dots side by side you would use millimetres (mm).

If you wanted to measure the width of the page in your maths book you would use the centimetre (cm).

If you wanted to measure the distance from your home to the railway station you would measure in kilometres (km).

Now we have to find how they tie up.

10 millimetres (10mm) = 1 centimetre (1cm)  
100 centimetres (100cm) = 1 metre (1m)  
1000 metres (1000m) = 1 kilometre (1km)

### Length Conversion

Make sure that you understand the rules of decimals. When you multiply a decimal number by 10 the figures move one place to the left.

When you divide a decimal number by 10 the figures move one place to the right.

The decimal point does not move.

10 mm = 1cm  
100 cm = 1m  
1000 m = 1km

- (a) To convert mm to cm divide by 10  
56mm = 5cm 6mm or 5.6cm

To convert 5.6cm to mm multiply by 10  
5.6cm = 56mm

- (b) To convert cm to m divide by 100  
145cm = 1m 45cm or 1.45m

To convert m to cm multiply by 100  
1.45m = 145cm

- (c) To convert m to km divide by 1000  
1545m = 1km 545m or 1.545km

To convert km to m multiply by 1000  
1.545km = 1545m  
545m = 0.545km  
0.545km = 545m