





Steps to Success

Date	10.02.20
Subject/s	Maths
Learning Objective 	To convert units of length

SA 	TA 

Success Criteria ✓! 	I know there are 1000m in 1 km
	I can use or imagine a place value grid to multiply and divide by 10, 100 and 1000
Support	Independent Adult Support () Group Work

Lockdown learning: DC

Pre-task:

Convert these units:

789m = 0.789km

1090 m = 1.09km

Teacher led

Fluency

Teacher led:

1 km
1 0 0 0 m

km = kilometre.

m = metre.

$$\text{km} \times 1000 = \text{m}$$

$$\text{m} \div 1000 = \text{km}$$

1) $62\text{ m} = 0.062\text{ km}$

10,000	1000s	100s	10s	1s	•	$\frac{1}{10}$		
			6	2	•	0	6	2
				0	•	0		

2) $4700\text{ m} = 4.7\text{ km}$

10,000	1000s	100s	10s	1s	•	$\frac{1}{10}$
	4	7	0	0		
				4	•	7

3) $0.3\text{ km} = 300\text{ m}$

10,000	1000s	100s	10s	1s	•	$\frac{1}{10}$
				0	•	3
	0	3	0	0		

4) $16.99\text{ km} = 1699\text{ m}$

10,000	1000s	100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$
			1	6	•	9	9
1	6	9	9				

1) Rolls of cable are 200m long.

4.8 km of cable is needed.

How many rolls do we need?



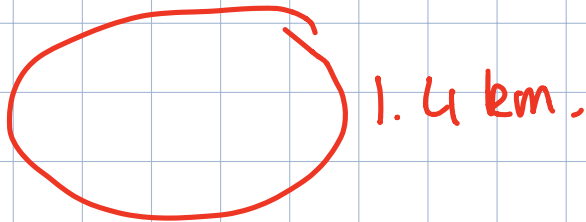
$$\begin{array}{r} 24 \\ 2 \overline{) 48} \end{array}$$

$$4.8 \times 1000 = 4800 \text{ m}$$

24 rolls of cable.

2) A race is 2 and a half laps of a field that has a perimeter of 1.4 km.

How far do they run?



$$\begin{array}{r} 1.4 \\ 1.4 \\ \hline 0.7 \\ \hline 3.5 \text{ km} \\ 1 \end{array}$$

Fluency

1) $2706 \text{ m} = \quad \text{km}$

2) $7.3 \text{ km} = \quad \text{m}$

3) $1801 \text{ m} = \quad \text{km}$

4) $650 \text{ m} = \quad \text{km}$

5) $5.2 \text{ km} = \quad \text{m}$

6) $9999 \text{ m} = \quad \text{km}$

7) $0.5 \text{ km} = \quad \text{m}$

8) $2.25 \text{ km} = \quad \text{m}$

9) $12,100 \text{ m} = \quad \text{km}$

10) $67.2 \text{ km} = \quad \text{m.}$

Complete the mymaths homework.

Problem Solving and Reasoning

Use it!



Dominic, Emma and Annabelle jumped a total of 34.77 m in a long jump competition.

Emma jumped exactly 200 cm further than Dominic.

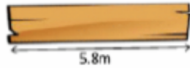
Annabelle jumped exactly 2,000 mm further than Emma.

What distance did they all jump?
Give your answers in metres.

Use it!



A plank of wood is 5.8 metres long.



Two lengths are cut from the wood.

175 cm

$3\frac{4}{5}$ m

How much of the wood is left?

Explain it!

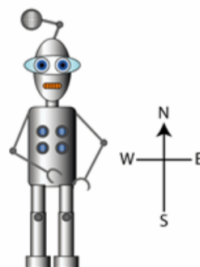


Kim says;
'One metre is 100 times bigger than one centimetre. One centimetre is 10 times bigger than one millimetre. So, one metre is 110 times bigger than one millimetre.'

Is Kim correct?
Explain your answer.

Further Challenge

Chippy the Robot was sent on a journey.



Chippy started from his base station and went 2m (metres) N (North).
Then he turned and went 2m E (East), 3m N, then 3m W (West) and 2m S (South).
After that he went 2m E, 3m N and 3m W again.
Then he went 5m S and 4m E.
Finally, he went 1m S.
There he stopped.

How many metres altogether did Chippy travel on that journey?
How far and in what direction must Chippy travel to get back to his base station?