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 10mm in 1cm		
	I know there are 100cm in 1 m		
	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:

67mm = 6.7 cm

37 mm = 3.7cm

298cm = 2.98 m

87.9 cm = 0.879m

Teacher led — Fluency

Teacher led:

= 1cm = 10mm

cm = centimetre

mm = millimetre

c x 10 = mm

mm ÷ 10 = c

9 cm = 90 mm

60 mm = 6 cm

1) 7 cm = 70 mm

1000s	100s	10s	1s	$\frac{1}{10}$
			7	
		7	0	

2) 3 2 mm = 3.2 cm

1000s	100s	10s	1s	$\frac{1}{10}$
		3	2	
			3 .	2

3) 1 6 5 mm = 16.5 cm

1000s	100s	10s	1s	$\frac{1}{10}$
	1	6	5	
		1	6 .	5

4) 1 8 cm = 1 8 0 mm

1000s	100s	10s	1s	$\frac{1}{10}$
		1	8	
	1	8	0	

1) A pound coin is 3mm thick.
How tall is a stack of 12?

3 x 12 = 36mm 3.6 cm

2) Last year, Lee's flower was 14.5 cm long. This year it is 8 mm longer. How tall is the new flower?

$$\begin{array}{r} 145 \\ +\ \ 8 \\ \hline 152 \end{array}$$ mm

15.2 cm

3) A shadow is 14.2 cm long. An hour later, it is 27 mm shorter.

$$\begin{array}{r} {}^{3}1{}^{1}4{}^{1}2 \\ -\ \ 27 \\ \hline 115 \end{array}$$

How long is the shadow now?

142 - 27 = 115mm 11.5 cm

1 m
100 cm

metres (m)
centimetres (cm)

m × 100 = cm

cm ÷ 100 = m

630 cm ÷ 100 = 6.3 m

2 m × 100 = 200 cm.

1) 4.35 m = 4 35 cm

1000s	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$
			4	3	5
	4	3	5		

2) 809 cm = 8.09 m

1000s	100s	10s	1s	$\frac{1}{10}$	
	8	0	9		
			8	0	9

3) 238 cm = 2.38 m

1000s	100s	10s	1s	$\frac{1}{10}$
	2	3	8	
			2 .	3 8

4) 16.2 m = 1620 cm

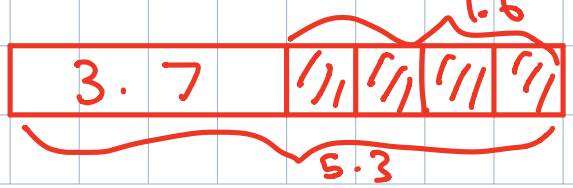
1000s	100s	10s	1s	$\frac{1}{10}$
		1	6 .	2
1	6	2	0	

1) A rope is 5.3m long.

4 equal lengths are cut off.

3.7m is left. How long was

each cut off piece? 40 cm



5.3 − 3.7 = 1.6

1.6 ÷ 4 = 0.4m

0.4
4 | 1.6

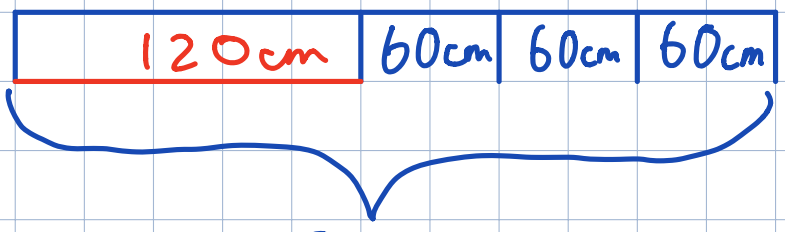
1.6

2) Carl is 1.25m tall.
His dad is 40cm taller.

How tall is Carl's father?

1.25 x 100 = 125 1.65 m
125 + 40 = 165

3) A pipe is 3m long.



3m.

3m x 100 = 300cm.

60 x 3 = 180

2 1
300 - 180 = 120

120cm

1.2m.

Fluency A.

1) 20 mm = ____ cm

2) 359 mm = ____ cm

3) 39 mm = ____ cm

4) 5 mm = ____ cm

5) 15 cm = ____ mm

6) 63 cm = ____ mm

7) 2.5 cm = ____ mm

8) 60 cm = ____ mm

9) 120 cm = ____ mm

10) 73 mm = ____ cm

Fluency B

1) 50 cm = m

2) 29 cm = m

3) 360 cm = m

4) 799 cm = m

5) 4.65 m = cm

6) 23.1 m = cm

7) 5.6 m = cm

8) 0.7 m = cm

9) 99 m = cm

10) 6 cm = m

Problem Solving and Reasoning

Explain it!

Sam thinks his chew bar is 13.2 cm long.

Do you agree? Explain why.

Use it!

Hamid made a stack of his collection of fishing magazines. Each magazine on the pile 2.5 mm thick. The total height of the stack was 11.5 cm high. How many magazines did he have in his pile?

Explain it!

Ribbon is sold in 200 mm pieces.
Georgie buys 4 metres of ribbon.
How many pieces does she buy?

Ribbon costs 26 p per piece.
There are 2 special offers on the ribbon.

Five pieces for the price of four.	1 metre of ribbon for only £1

Which is the best offer?
Explain your answer.

Use it!

A 10 pence coin is 2 mm thick.

Daniel makes a pile of 10 pence coins worth £1.30
What is the height of the pile of coins in centimetres?