

Varied Fluency

Step 2: Equivalent Lengths – m and cm

National Curriculum Objectives:

Mathematics Year 3:(3M1a) [Compare lengths \(m/cm/mm\)](#)

Mathematics Year 3:(3M2a) [Measure lengths \(m/cm/mm\)](#)

Differentiation:

Developing Questions to support converting from m to cm and vice versa. Lengths in multiples of 10cm. One step questions.

Expected Questions to support converting from m to cm and vice versa. Lengths in increments of 1cm. One step questions.

Greater Depth Questions to support converting from m to cm and vice versa. Lengths in increments of 1cm including the use of 0 as a place holder in the tens column. One and two step questions.

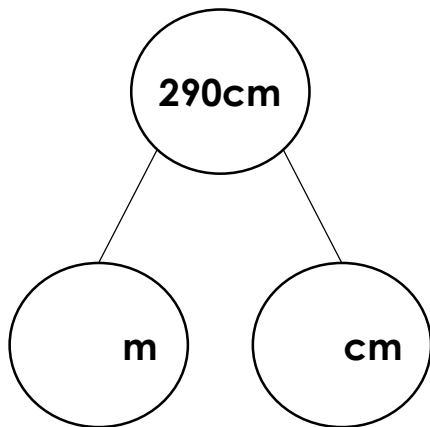
[More resources](#) which follow the same small steps as White Rose.

Did you like this resource? Don't forget to [review](#) it on our website.

Equivalent lengths–m and cm

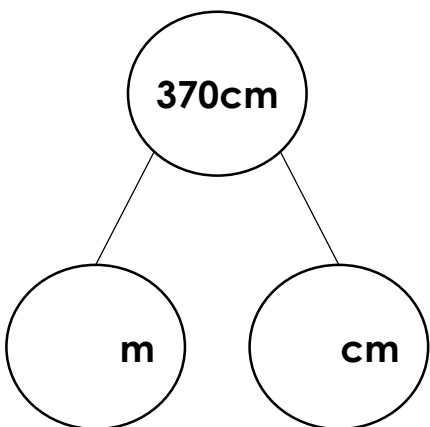
Equivalent lengths – m and cm

1a. Complete the part whole model.



VF

1b. Complete the part whole model.



VF

2a. Complete the statements with < > or =

400cm 4m 0cm

8m 30cm 820cm



VF

2b. Complete the statements with < > or =

630cm 6m 70cm

5m 30cm 540cm



VF

3a. Put these lengths in order from shortest to longest.

3m 20cm	230cm
390cm	2m 90cm



VF

3b. Put these lengths in order from longest to shortest.

5m 60cm	570cm
580cm	5m 90cm



VF

4a. Complete the conversion table:

m and cm	cm
2m and 40cm	
	410cm
8m and 70cm	
	990cm
0m and 90cm	



VF

4b. Complete the conversion table:

m and cm	cm
3m and 20cm	
	160cm
5m and 50cm	
	630cm
7m and 80cm	

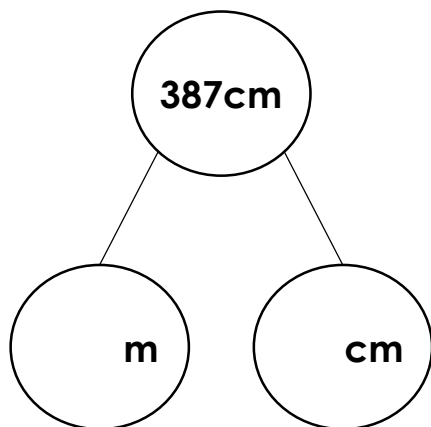


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Equivalent lengths – m and cm

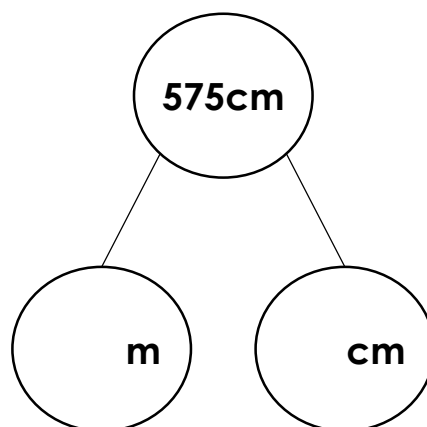
Equivalent lengths – m and cm

5a. Complete the part whole model.



VF

5b. Complete the part whole model.



VF

6a. Complete the statements with < > or =

120cm 1m 25m 152cm

2m 32cm 232cm 223cm



VF

6b. Complete the statements with < > or =

395cm 3m 59m 358cm

4m 72cm 472cm 427cm



VF

7a. Put these lengths in order from shortest to longest.

3m 29cm 239cm
392cm 2m 93cm



VF

7b. Put these lengths in order from longest to shortest.

5m 67cm 566cm
577cm 5m 76cm



VF

8a. Complete the conversion table:

m and cm	cm
2m and 41cm	
	415cm
8m and 74cm	
	999cm
0m and 98cm	



VF

8b. Complete the conversion table:

m and cm	cm
0m and 81cm	
	564cm
3m and 96cm	
	82cm
8m and 36cm	

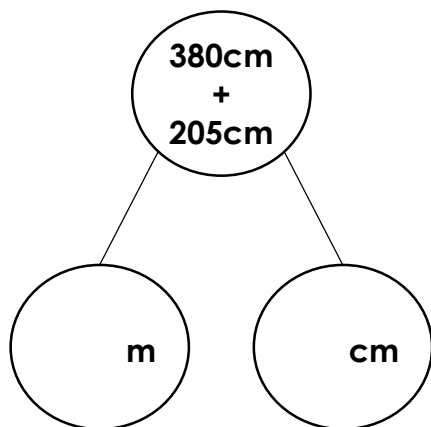


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Equivalent lengths – m and cm

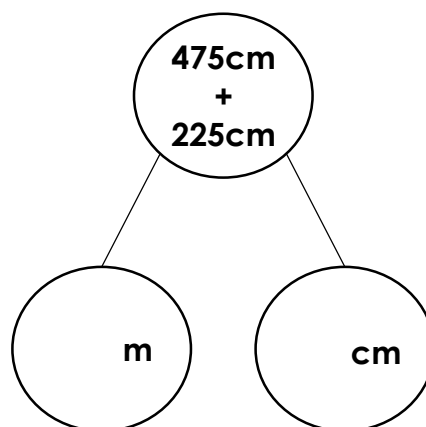
Equivalent lengths – m and cm

9a. Complete the part whole model.



VF

9b. Complete the part whole model.



VF

10a. Complete the statements with < > or =

109cm 1m 09m 190cm

2m 3cm 230cm 203cm



VF

10b. Complete the statements with < > or =

305cm 3m 50m 357cm

4m 70cm 4007cm 407cm



VF

11a. Put these lengths in order from shortest to longest.

3m 6cm + 42cm

290cm + 5m 6cm

39cm + 8m 40cm

4m 38cm + 3m



VF

11b. Put these lengths in order from longest to shortest.

8m 24cm + 43cm

790cm + 1m 6cm

104cm + 7m 5cm

7m 90cm + 2m



VF

12a. Complete the conversion table:

m and cm	↔	cm
2m and 4cm		
		505cm + 202cm
8m and 07cm		
		663cm + 224cm
0m and 8cm		



VF

12b. Complete the conversion table:

m and cm	↔	cm
1m and 1cm		
		415cm + 374cm
0m and 74cm		
		301cm + 99cm
6m and 3 cm		



VF

Varied Fluency
Equivalent lengths–m and cm

Developing

- 1a. 2m 90cm.
2a. =, >
3a. 230cm, 2m 90cm, 3m 20cm, 390cm
4a. 240cm, 4m 10cm, 870cm, 9m 90cm, 90cm

Expected

- 5a. 3m 87cm
6a. <, < and =, >
7a. 239cm, 2m 93cm, 3m 29cm, 392cm
8a. 241cm, 4m 15cm, 874cm, 9m 99cm, 98cm

Greater Depth

- 9a. 5m 85cm
10a. =, < and <, >
11a. 1. 3m 6cm + 42cm = 3m 48cm
2. 4m 38cm = 3m = 7m 38cm
3. 290cm + 5m 6cm = 7m 96cm
4. 39cm + 8m 40cm = 8m 79cm
12a. 204cm, 7m 7cm, 807cm, 8m 87cm, 8cm

Varied Fluency
Equivalent lengths–m and cm

Developing

- 1b. 3m 70cm
2b. <, <
3b. 5m 90cm, 580cm, 570cm, 5m 60cm
4b. 320cm, 1m 60cm, 550cm, 6m 30cm, 780cm

Expected

- 5b. 5m 75cm
6b. >, > and =, >
7b. 577cm, 5m 76cm, 5m 67cm, 566cm
8b. 81cm, 5m 64cm, 396cm, 0m 82cm, 836cm

Greater Depth

- 9b. 7m 0cm
10b. <, < and <, >
11b. 1. 7m 90cm + 2m = 9m 90cm
2. 790cm + 1m 6cm = 8m 96cm
3. 8m 24cm + 43cm = 8m 67cm
4. 104cm + 7m 5cm = 8m 9cm
12b. 101cm, 7m 89cm, 74cm, 4m, 603cm