Varied Fluency
Compare Lengths

National Curriculum Objectives:

Mathematics Year 3: (3M1a) Compare lengths (m/cm/mm)

Differentiation:

Developing Questions to support comparing lengths using m, cm and mm. All units are in multiples of 5.
Expected Questions to support comparing lengths using m, cm and mm.
Greater Depth Questions to support comparing lengths. Includes the use of quarters, halves and three quarters. Some use of unconventional partitioning.

Compare Lengths

1a. Complete the table to match the statement. Find one possibility.

Eric > Leo > Jasmine

Name	Table length
Jasmine	1m 35cm
Eric	1m 70cm
Leo	___m ___0cm

VF

1b. Complete the table to match the statement. Find one possibility.

Albert < Isla < Gita

Name	Table length
Isla	___0cm
Gita	85cm
Albert	55cm

VF

2a. Three children measure their hats.


Craig
90mm


Wendy
5cm


Jane
80mm

A. Who has the shortest hat?
B. Who has the longest hat?
C. Whose hat is shorter than Jane's?

VF

2b. Three children measure their hats.


Cheng
75mm


Mia
10cm


Josh
80mm

A. Who has the longest hat?
B. Who has the shortest hat?
C. Whose hat is longer than Josh's?

VF

3a. Order the lengths from shortest to longest.

A. 95mm

B. 65cm

C. 60cm

VF

3b. Order the lengths from longest to shortest.

A. 15mm

B. 20mm

C. 5cm

VF

4a. Complete the statement using the measurements below.

☐ < ☐

A. 10cm

B. 85mm

VF

4b. Complete the statement using the measurements below.

☐ > ☐

A. 1m 25cm

B. 120cm

VF

Compare Lengths

5a. Complete the table to match the statement. Find one possibility.

Jacob < Ruby < Fozia

Name	Ribbon length
Ruby	
Jacob	1m 15cm
Fozia	124cm

VF

5b. Complete the table to match the statement. Find one possibility.

Ellie > Ryan > Indy

Name	Ribbon length
Ellie	8cm 5mm
Ryan	
Indy	73mm

VF

6a. Three children measure their height.


Cheng
1m 41cm


Grace
138cm


Oliver
120cm

A. Who is the tallest?
B. Who is the shortest?
C. Who is taller than Oliver?

VF

6b. Three children measure their height.


Zara
125cm


Farhan
1m 31cm


Lucy
118cm

A. Who is the shortest?
B. Who is the tallest?
C. Who is taller than Zara?

VF

7a. Order the lengths from longest to shortest.

A. 2m 55cm

B. 326cm

C. 2m 94cm

VF

7b. Order the lengths from shortest to longest.

A. 215cm

B. 1m 49cm

C. 2m 21cm

VF

8a. Complete the statement using the measurements below.

[ ] < [ ] > [ ]

A. 10cm 6mm | B. 112mm | C. 96mm

VF

8b. Complete the statement using the measurements below.

[ ] > [ ] > [ ]

A. 83mm | B. 4cm 6mm | C. 5cm 9mm

VF

Compare Lengths

9a. Complete the table to match the statement. Find one possibility.

Hammad < Imani < Eva

Name	String length
Hammad	$2\frac{1}{2}$ m
Eva	398cm
Imani	

GD VF

9b. Complete the table to match the statement. Find one possibility.

Danish < Gigi > Taylor

Name	String length
Gigi	320mm
Danish	
Taylor	25cm 30mm

GD VF

10a. Three children measure their arms.

Wendy
12cm 4mm

Craig
118mm

Freya
10cm 19mm

A. Who has the longest arm?
B. Who has the shortest arm?
C. Whose arm is longer than Freya's?

GD VF

10b. Three children measure their arms.

Jane
180mm

Jamie
17cm 9mm

Talha
16cm 11mm

A. Who has the shortest arm?
B. Who has the longest arm?
C. Whose arm is longer than Jamie's?

GD VF

11a. Order the lengths from shortest to longest.

A. $3\frac{3}{4}$ m

B. 3m 180cm

C. 407cm

GD VF

11b. Order the lengths from longest to shortest.

A. 4m 162cm

B. $4\frac{3}{4}$ m

C. 558cm

GD VF

12a. Complete the statement using the measurements below.

[ ] > [ ] > [ ]

A. $4\frac{1}{4}$ m | B. 391cm | C. 3m 142cm

GD VF

12b. Complete the statement using the measurements below.

[ ] < [ ] > [ ]

A. 237cm | B. 1m 133cm | C. $1\frac{3}{4}$ m

GD VF

Compare Lengths

Developing

1a. Various answers, for example: 1m 40m; 1m 50cm; 1m 60cm.
2a. A: Wendy; B: Craig; C: Wendy
3a. A, C, B
4a. B < A

Expected

5a. Various answers, for example: 117cm; 1m 20cm; 123cm.
6a. A: Cheng; B: Oliver; C: Grace and Cheng
7a. B, C, A
8a. C < B > A or A < B > C

Greater Depth

9a. Various answers, for example: 2m 153cm; 2m 64cm; 311cm.
10a. A: Wendy; B: Craig; C. Wendy
11a. A, C, B
12a. C > A > B

Developing

1b. Various answers, for example: 60cm; 70cm; 80cm.
2b. A: Mia; B: Danny; C: Mia
3b. C, B, A
4b. A > B

Expected

5b. Various answers, for example: 75mm; 8cm; 81mm
6b. A: Lucy; B: Farhan; C: Farhan
7b. B, A, C
8b. A > C > B

Greater Depth

9b. Various answers, for example: 300mm; 29cm; 31cm 7mm.
10b. A: Talha; B: Jane; C: Jane
11b. A, C, B
12b. B < A > C or C < A > B