

Homework

Compare Lengths

National Curriculum Objectives:

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

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Identify the comparison statements that are correct. Statements compare lengths using m, cm and mm. All measurements given in multiples of 5.

Expected Identify the comparison statements that are correct. Statements compare lengths using m, cm and mm.

Greater Depth Identify the comparison statements that are correct. Statements compare lengths using m, cm and mm. Measurements include the use of quarter, halves and three quarters, with some unconventional partitioning.

Questions 2, 5 and 8 (Varied Fluency)

Developing Determine the mistakes that have been made with the comparison statement. Images shown with lengths using m, cm and mm. All measurements given in multiples of 5.

Expected Determine the mistakes that have been made with the comparison statement. Images shown with lengths using m, cm and mm.

Greater Depth Determine the mistakes that have been made with the comparison statement. Images shown with lengths using m, cm and mm. Measurements include the use of quarters and some use of unconventional partitioning.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Investigate three ways of completing the comparison statement using the digit cards provided. Includes the use of comparing all measurements given in multiples of 5.

Expected Investigate three ways of completing the comparison statement using the digit cards provided.

Greater Depth Investigate four ways of completing the comparison statement using the digit cards provided. Measurements include the use of quarters.

Compare Lengths

1. Circle the comparison statements that are correct.

A. $65\text{cm} > 70\text{mm}$

B. $1\text{m } 45\text{cm} = 145\text{cm} < 120\text{cm}$

C. $80\text{mm} < 65\text{mm} > 10\text{cm}$

D. $5\text{m} = 500\text{cm} > 435\text{cm}$



VF
HW/Ext

2. David has measured and is comparing lengths of items he has found in his garden.



leaf
70mm



plant pot
15cm



flower
5cm



fence
90cm

He says,



The leaf is greater than the plant pot
but the plant pot is less than the fence.

Not drawn to scale

Find the mistake he has made with his comparison statement.



VF
HW/Ext

3. Using the digit cards, complete the statement in three different ways. Use only one card for metres and centimetres.

5

3

4

2

1

 m

 5 cm

<

185

cm

<

2

m

 0 cm



RPS
HW/Ext

Compare Lengths

4. Circle the comparison statements that are correct.

A. $14\text{cm} < 170\text{mm} < 32\text{cm}$

B. $2\text{m } 65\text{cm} > 112\text{cm} = 1\text{m } 21\text{cm}$

C. $267\text{cm} = 2\text{m } 67\text{cm} > 198\text{cm}$

D. $31\text{cm} < 340\text{mm} > 67\text{cm}$



VF
HW/Ext

5. Alexa has measured and is comparing lengths of items she has found in her shed.



wheelbarrow
1m 32cm



shovel
96cm



hedge shears
54cm



bucket
360mm

She says,

Not drawn to scale



The bucket is greater than the shovel and the shovel is also greater than the wheelbarrow.

Find the mistakes she has made with her comparison statement.



VF
HW/Ext

6. Using the digit cards, complete the statement in three different ways. Use only one card for metres and up to two cards for centimetres.

5

2

9

4

1

7

8

m

cm

<

316

cm

>

m

cm



RPS
HW/Ext

Compare Lengths

7. Circle the comparison statements that are correct.

A. $487\text{cm} > 3\frac{3}{4}\text{m} = 2\text{m } 180\text{cm}$

B. $3\frac{1}{4}\text{m} < 589\text{cm} > 3\text{m } 198\text{cm}$

C. $43\text{mm} < 34\text{cm} > 30\text{cm } 80\text{mm}$

D. $3\text{m } 154\text{cm} = 454\text{cm} > 4\frac{1}{2}\text{m}$



VF
HW/Ext

8. Leah has measured and is comparing lengths of items she has found at a party.



party hat
150mm



gift box
128cm



bow
 $\frac{1}{4}\text{m}$



cupcake
50mm

She says,

Not drawn to scale



The party hat is greater than the gift box but the gift box is less than the bow.

Find the mistakes she has made with her comparison statement.



VF
HW/Ext

9. Using the digit cards, complete the statement in four different ways. Use only one card for metres and up to two cards for centimetres. Choose a suitable numerator for the fraction.

7

8

2

3

6

5

1

4

m

>

498

cm

>

m

cm



RPS
HW/Ext

Homework

Compare Lengths

Developing

1. A and D

2. The leaf is less than the plant pot. The comparison statement should be: leaf < plant pot < fence.

3. Various answers, for example: 1m 25cm < 185cm < 2m 40cm; 1m 35cm < 185cm < 2m 30cm; 1m 15cm < 185cm < 2m 20cm.

Expected

4. A and C

5. The bucket is less than the shovel and the shovel is less than the wheelbarrow. The comparison statement should be: bucket < shovel < wheelbarrow.

6. Various answers, for example: 2m 45cm < 316cm > 1m 79cm; 1m 89cm < 316cm > 2m 57cm; 2m 74cm < 316cm > 1m 9cm.

Greater Depth

7. B and D

8. The party hat is less than the gift box but the gift box is greater than the bow. The comparison statement should be: party hat < gift box > bow.

9. Various answers, for example: $7\frac{3}{4}$ m > 498cm > 3m 82cm; $6\frac{2}{4}$ m > 498cm > 1m 78cm; $5\frac{1}{4}$ m > 498cm > 2m 63cm; $5\frac{3}{4}$ m > 498cm > 2m 8cm.