

Reasoning and Problem Solving

Step 3: Measure Length 2

National Curriculum Objectives:

Mathematics Year 1 (1M1): [Compare, describe and solve practical problems for: lengths and heights \[for example, long/short, longer/shorter, tall/short, double/half\] mass/weight \[for example, heavy/light, heavier than, lighter than\] capacity and volume \[for example, full/empty, more than, less than, half, half full, quarter\] Time \[for example, quicker, slower, earlier, later\]](#)

Mathematics Year 1 (1M2): [Measure and begin to record: lengths and heights, mass/weight, capacity and volume, time \(hours, minutes, seconds\)](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Identify and explain a mistake that has been made when measuring rectangular objects with a ruler that has all increments marked.

Expected Identify and explain a mistake that has been made when measuring non-rectangular objects with a ruler that has all increments marked.

Greater Depth Identify and explain a mistake that has been made when measuring non-rectangular objects on an unmarked ruler.

Questions 2, 5 and 8 (Problem Solving)

Developing Use the clues to identify whose object is being measured. Rectangular objects with a ruler that has all increments marked.

Expected Use the clues to identify whose object is being measured. Non-rectangular objects with a ruler that has all increments marked.

Greater Depth Use the clues to identify whose object is being measured. Non-rectangular objects on an unmarked ruler.

Questions 3, 6 and 9 (Reasoning)

Developing Explain if a given statement is correct when comparing the height of 2 objects. Rectangular objects with a ruler that has all increments marked.

Expected Explain if a given statement is correct when comparing the height of 2 objects. Non-rectangular objects with a ruler that has all increments marked.

Greater Depth Explain if a given statement is correct when comparing the height of 2 objects. Non-rectangular objects on an unmarked ruler.

More [Year 1 Length and Height](#) resources.

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

Measure Length 2

1a. Kim thinks her pencil case measures 8cm.



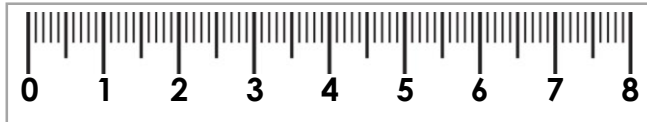
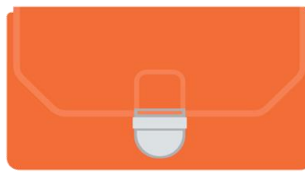
Explain the mistake she has made.



R

Measure Length 2

1b. Anna thinks her purse measures 5cm.



Explain the mistake she has made.



R

2a. Whose crayon is being measured?

My crayon is greater than 6cm long.



Helen

My crayon is less than 7cm long.



Ben



PS

2b. Whose crayon is being measured?

My crayon is less than 6cm long.



Joy

My crayon is greater than 6cm long.



Rob



PS

3a. Raj thinks the chocolate is taller than the juice.

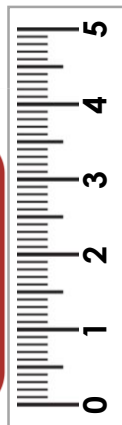


Is he correct? Explain your answer.



R

3b. Sam thinks the jam is taller than the soda.



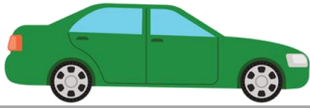
Is he correct? Explain your answer.



R

Measure Length 2

4a. Lucas thinks his toy car measures 3cm.



Explain the mistake he has made.



R

Measure Length 2

4b. Rosie thinks her toy truck measures 8cm.



Explain the mistake she has made.



R

5a. Whose pencil is being measured?

My pencil is less than 5cm long.



Reggie



Kat

My pencil is greater than 4cm long.



PS

5b. Whose pen is being measured?

My pencil is greater than 5cm long.



Max



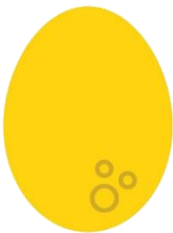
Tim

My pencil is less than 6cm long.



PS

6a. Sanjit thinks the melon is taller than the apple.

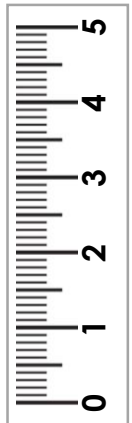


Is he correct? Explain your answer.



R

6b. Nancy thinks the pear is taller than the carrot.



Is she correct? Explain your answer.



R

Measure Length 2

7a. Zach thinks his two toys measure 7cm in total.



Explain the mistake he has made.



R

Measure Length 2

7b. Hannah thinks her two toys measure 8cm in total.



Explain the mistake she has made.



R

8a. Whose fork is being measured?

My fork is less than 8cm long.



Ella

My fork is greater than 5cm long.



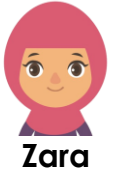
May



PS

8b. Whose spoon is being measured?

My spoon is greater than 7cm long.



Zara

My pencil is less than 5cm long.



Eshan



PS

9a. Ryan thinks the kiwi is shorter than the raspberry.



Is he correct? Explain your answer.



R

9b. Rocco thinks the corn is taller than the pepper.



Is he correct? Explain your answer.



R

Reasoning and Problem Solving

Measure Length 2

Developing

1a. Kim has not measured the pencil case from 0cm. Her pencil case measures 5cm.

2a. Ben

3a. Raj is incorrect. The apple juice is taller than the chocolate because 4cm is greater than 3cm.

Expected

4a. Lucas has not counted the ruler increments correctly. The toy car measures 4cm.

5a. Kat

6a. Sanjit is correct because 3cm is greater than 2cm.

Greater Depth

7a. Zach has left a gap between the toys. The helicopter and dinosaur measure 6cm in total.

8a. Ella

9a. Ryan is incorrect. The kiwi is taller than the raspberry because 3cm is greater than 2cm.

Reasoning and Problem Solving

Measure Length 2

Developing

1b. Anna has not counted the ruler increments correctly. Her purse measures 4cm.

2b. Joy

3b. Sam is incorrect. The soda is taller than the jam because 5cm is greater than 4cm.

Expected

4b. Rosie has not measured the toy truck from 0cm. The truck measures 6cm.

5b. Max

6b. Nancy is incorrect. The carrot is taller than the pear because 5cm is greater than 4cm.

Greater Depth

7b. Hannah has not measured the first toy from 0cm. The boat and train measure 7cm in total.

8b. Eshan

9b. Rocco is incorrect because both the corn and the pepper are 3cm. They are an equal height.