



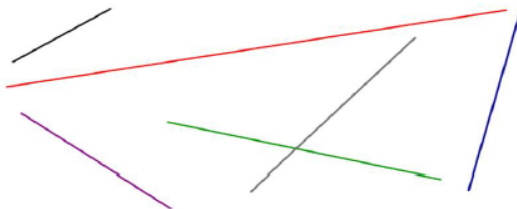
School name: _____ MATHS PLANNING YEAR A



Teacher: _____ Class: _____ Year: _____ Term: Spring 1 Week Commencing: Week 3

Topic		NC Links: Pupils should be taught to:						
Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Mon	<p><u>L.O. Recall 6x table</u></p> <p><u>L.O. fluency</u></p> <p>2417 + 483 = 600 - 477 = 762 x 6 = 800 ÷ 6 =</p>	<p><u>L.O. To solve a multiplication pyramid</u></p>	<p><u>L.O. To measure length</u></p> <p><u>Must:</u> measure length with a ruler in cm <u>Should:</u> measure length with a ruler in mm <u>Could:</u> identify and correct errors</p> <p><u>Success Criteria</u></p>	<p>Children are introduced to millimetres for the first time and build on their understanding of centimetres and metres. Teach children to use different measuring equipment including rulers, tape measures, metre sticks and trundle wheels. They discuss which equipment is the most appropriate depending on the object they are measuring.</p>	<p>Chn decide what unit of measurement to use measuring various items eg fingernail, book, playground. Chn decide the length of pencils placed on different parts of a ruler. Chn decide how they could measure something with a broken ruler. Chn identify and correct errors. Chn measure lines in cm and mm</p> <p>SEN – L.O.</p>	<p>Metres Centimetres Millimetres Measure Ruler Zero</p>	<p>What do we have to remember when using a ruler to measure? What unit of measure would be best to measure___?</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Measure the lines to the nearest centimetre.
Can you measure the lines in millimetres?



What unit of measurement would you use to measure these real life objects? Millimetres, centimetres or metres?

Fingernail	Eraser	Pencil
Height of a house	Length of a playground	Length of a table

What is the length of each pencil?



Whitney's ruler is broken.
How could she use it to still measure items?



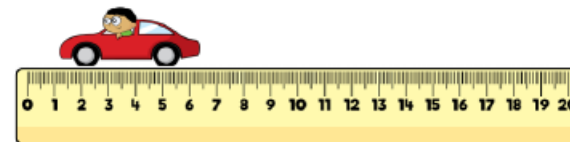
Tommy thinks that this chocolate bar is 4 cm long.
Is he correct?



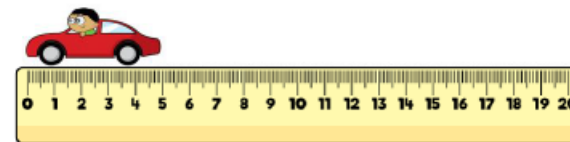
Convince me.

Three children measured the same toy car.

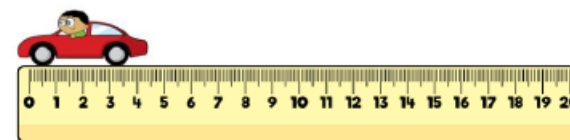
Eva says that the car is 6 cm and 5 mm



Dexter says the car is 5 cm



Annie says the car is 4 cm 5 mm

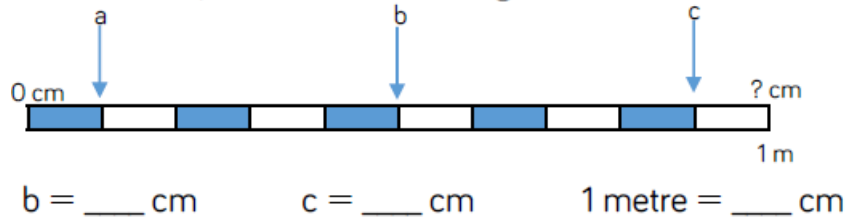


Who is correct?
Who is incorrect?
Explain why.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Tues	<p><u>L.O. Recall 6x table</u></p> <p><u>L.O. fluency</u></p> <p>3102 - 285 = 254 x 6 = 95 ÷ 6 = 1927 + 328 =</p>	<p><u>L.O. To explain errors</u></p>	<p><u>L.O. To understand equivalent lengths: cm & m</u></p> <p>Must: divide and multiply by 100 Should: find equivalent measures Could: identify and correct errors.</p> <p><u>Success Criteria</u></p>	<p>Teach children to recognise that 100 cm is equivalent to 1 metre. They use this knowledge to convert other multiples of 100 cm into metres and vice versa. When looking at lengths that are not multiples of 100, they partition the measurement and convert into metres and centimetres.</p>	<p>Multiply and divide numbers by 100.</p> <p>Chn convert m to cm and cm to m</p> <p>Calculate missing numbers on a metre rule.</p> <p>Chn match equivalent lengths.</p> <p>Chn identify and correct errors.</p> <p>SEN – <u>L.O.</u></p>	<p>Equivalent Equal Centimetre Metre Millimetre</p>	<p>Do we need to partition 235 cm into hundreds, tens and ones to convert it to metres? Is it more efficient to partition it into two parts? What would the two parts be?</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Do we need to partition 235 cm into hundreds, tens and ones to convert it to metres? Is it more efficient to partition it into two parts? What would the two parts be?

If $a = 10$ cm, calculate the missing measurements.



Can you match the equivalent measurements?

100 cm	9 m
5 m	200 cm
300 cm	500 cm
2 m	1 metre
900 centimetres	3 m

Eva uses this diagram to convert between centimetres and metres.

Use Eva's method to convert:

- 130 cm
- 230 cm
- 235 cm
- 535 cm
- 547 cm

120 cm	
100 cm	20 cm
1 m	20 cm
1m 20 cm	

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Mo and Alex each have a skipping rope.

Alex says,



I have the longest skipping rope. My skipping rope is $2\frac{1}{2}$ metres long.

Mo says,



My skipping rope is the longest because it is 220 cm and 220 is greater than $2\frac{1}{2}$

Who is correct?
Explain your answer.

Three children are partitioning 754 cm

Teddy says,



75 m and 4 cm

Whitney says,



7 m and 54 cm

Jack says,



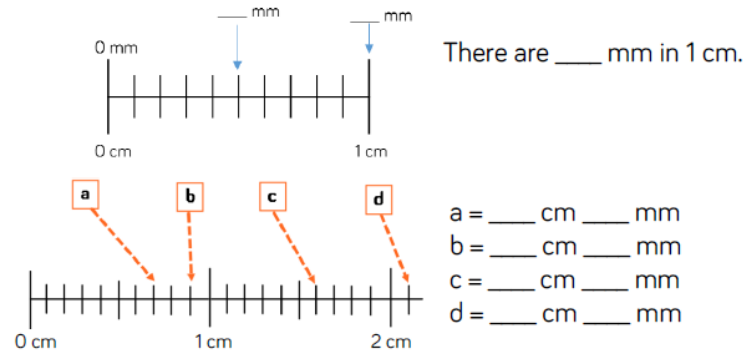
54 cm and 7 m

Who is correct?
Explain why.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Wed	<p><u>To know the 6x table</u></p> <p><u>L.O. Fluency</u></p> <p>600 - 285 = 199 x 6 = 156 ÷ 6 = 4029 + 1998 =</p>	<p><u>L.O. To work out the values of each shape</u></p>	<p><u>L.O. To convert between lengths: cm & mm</u></p> <p>Must: divide and multiply by 10 Should: find equivalent measures Could: solve problems</p> <p><u>Success Criteria</u></p>	<p>Teach chn to recognise that 10mm = 1cm. They use this knowledge to convert other multiples of 10mm into cm and vice versa. When looking at lengths that are not multiples of 10, teach them to partition the measurement and convert into cm and mm.</p>	<p>Write down 5 things you would measure in mm. Fill in blanks on a ruler. Complete part/whole models that combine cm and mm.</p> <p>Measure items around the classroom.</p> <p>Solve word problems</p> <p>SEN – L.O.</p>	<p>Equivalent Equal Centimetre Metre Millimetre</p>	<p>What items might be measured in mm? How many mm in 1/2cm? Fill in blanks on a ruler showing cm and mm.</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

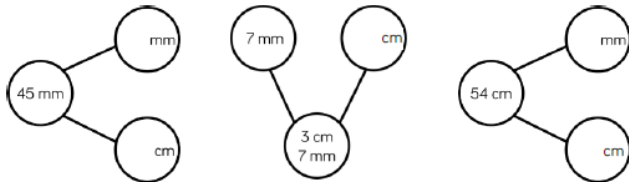
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Fill in the blanks.

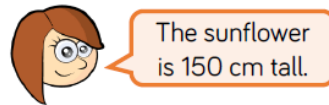


Measure different items around your classroom.
 Record your measurements in a table in cm and mm, and just mm.

Complete the part whole models.



Rosie is measuring a sunflower using a 30 cm ruler.
 Rosie says,



Rosie is incorrect.
 Explain what mistake she might have made.
 How tall is the sunflower?

Ron is thinking of a measurement.
 Use his clues to work out which measurement he is thinking of.



- In mm, my measurement is a multiple of 2
- It has 8 cm and some mm
- It's less than 85 mm
- In mm, the digit sum is 12

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Thurs	<u>L.O. To know 6x table</u> <u>L.O. Fluency</u> 612 - 485 = 305 x 6 = 444 ÷ 6 = 5881 + 378 =	<u>L.O. To fill in the missing numbers</u>	<u>L.O. To Compare Lengths</u> Must: convert between units Should: compare lengths Could: solve problems <u>Success Criteria</u>	Teach chn to compare and order lengths based on measurements of mm, cm and m. They use their knowledge of converting units to compare and order. They convert to the same units before comparing and ordering. Is descending order going from highest to lowest or lowest to highest? What about ascending order?	Compare the heights of chn measured in a mix of m, cm and mm. < > exercise on heights of various towers measured in different units. Measure and compare widths of 5 reading books. Always, sometimes, never: mm measurements are smaller than cm measurements. Sort various lengths into a table of < or >1m. Are any equivalent?	Equivalent Equal Centimetre Metre Millimetre Descending Ascending Greater than Less than	Can you order yourselves in descending order of height? Now order yourselves in ascending order.	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL
					SEN – L.O.			

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Complete the sentences.

Child	Height
Rosie	109 cm
Amir	1 m 5 cm
Jack	135 cm
Dora	1 m 45 mm

Rosie is _____ than Jack.

Jack is _____ than Dora.

Amir is _____ than Rosie.

Dora is _____ than Amir.

Four friends are building towers.
 Eva's tower is 22 cm and 7 mm tall.
 Teddy's tower is 22 cm tall.
 Annie's tower is 215 mm tall.
 Dexter's tower is 260 mm tall.

Order the children's towers in descending order.

< < <

Using a ruler, measure the width of 5 different books to the nearest mm. Record your results in a table, then compare and order them.

Sort the lengths into the table.

Longer than a metre	Shorter than a metre

1 m 65 cm	165 mm	165 m
165 cm	16 cm 5 mm	1 cm 65 mm

Are any of the lengths equivalent?

Always, Sometimes, Never?

mm lengths are smaller than cm lengths.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Fri	To know 9x table <u>L.O. Fluency</u> $800 - 485 =$ $305 \times 9 =$ $444 \div 9 =$ $5771 + 3378 =$	<u>TMM</u> <u>L.O. To read arrays</u>	<u>L.O.</u> <u>To convert and order lengths</u> Must: convert between units Should: order lengths Could: solve problems <u>Success Criteria</u>	Teach chn to multiply and divide by 100 to convert between m and km. They apply their understanding of adding and subtracting with four digit numbers to find two lengths that add up to a whole number of km. Chn find fractions of kilometres using bar models.	Chn convert between m and km Chn find fractions of kilometres using bar models. Use inequality symbols to make statements correct. Solve problems	Metres Centimetres Millimetres kilometre	If 10 children ran 100 metres each, how far would they run altogether? Can we go outside and do this? How long do you think it will take to run 1 kilometre?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL
					SEN – L.O.			

Complete the statements.

$3,000 \text{ m} = \underline{\quad} \text{ km}$

$8 \text{ km} = \underline{\quad\quad\quad} \text{ m}$

$5 \text{ km} = \underline{\quad} \text{ m}$

$3 \text{ km} + 6 \text{ km} = \underline{\quad\quad\quad} \text{ m}$

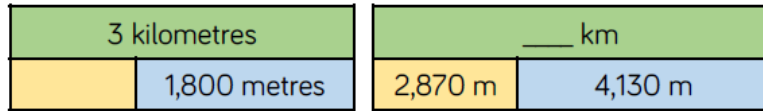
$500 \text{ m} = \underline{\quad} \text{ km}$

$250 \text{ m} = \underline{\quad\quad\quad} \text{ km}$

$9,500 \text{ m} = \underline{\quad} \text{ km}$

$4,500 \text{ m} - 2,000 \text{ m} = \underline{\quad\quad} \text{ km}$

Complete the bar models.



Use $<$, $>$ or $=$ to make the statements correct.

- | | | |
|-------|-----------------------|------------------|
| 500 m | <input type="radio"/> | $\frac{1}{2}$ km |
| 7 km | <input type="radio"/> | 800 m |
| 5 km | <input type="radio"/> | 500 m |

Dexter and Rosie walk 15 kilometres altogether for charity.

Rosie walks double the distance that Dexter walks.

How far does Dexter walk?

Dexter and Rosie each raise £1 for every 500 metres they walk.

How much money do they each make?

Complete the missing measurements so that each line of three gives a total distance of 2 km.

