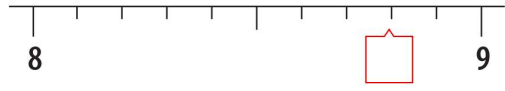


Number	Algebra	Ratio & Proportion	Geometry & Measures	Statistics and Probability
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Unit	7.1.1 Number Sense	MASTERY CRITERIA
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Learning Goals for this Unit		
1	To be able to interpret and use number lines	M763
2	To be able to describe and represent the place value of an integer	M704
3	To be able to describe and represent the place value of decimals	M522
4	To be able to order negative numbers and decimals	M527
5	To be able to round integers and decimals	M111 & M431

Emerging – Recall Recall of vocabulary and facts	Developing – Fluency Using calculations and methods
Write the following number in words 52172 What do we mean by place value? Describe in words what is meant by the inequality $10 > -3$	Calculate $1.9 + 0.6$ Fill in the gap to make the calculation correct $937 = 900 + \underline{\quad} + 7$ What decimal should go in the box on the number line below:  Write these numbers in ascending order -1.6, -1.9, -1.7, -1.3

Mastered – Problem Solving Solving contextual problems that require calculations and methods
Jen goes on holiday to Barbados. The temperature in Barbados is 32°C. The temperature in Brixham is 11°C. What is the difference in temperature between Brixham and the temperature in Barbados?

Ambitious – Deeper Thinking	
Solving complex contextual problems that link different areas of maths.	
Stefan believes that 1.25 is bigger than 1.7 Explain how Stefan might have made this mistake.	Sue thinks of a whole number. Rounded to the nearest 10, her number is 250 Rounded to the nearest 100, her number is 300. Her number is odd. What could her number be?

Unit	7.1.2 Adding and Subtracting	MASTERY CRITERIA
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Learning Goals for this Unit		
1	To be able to add integers	M928
2	To be able to add decimals	M429
3	To be able to subtract integers	M347
4	To be able to subtract decimals	M152
5	To be able to complete problem solving questions by adding and subtracting	

Emerging – Recall Recall of vocabulary and facts	Developing – Fluency Using calculations and methods	
1. Circle the words that represent adding sum total product difference share more than less than 2. Circle the words that mean subtract sum total product difference share more than less than	3. Calculate $\begin{array}{r} 137 \\ + 84 \\ \hline \\ \hline \end{array}$ 4. Work out $\begin{array}{r} 4.26 \\ + 5.43 \\ \hline \\ \hline \end{array}$	5. Work out $\begin{array}{r} 145 \\ - 64 \\ \hline \\ \hline \end{array}$ $\begin{array}{r} 9.56 \\ - 3.47 \\ \hline \\ \hline \end{array}$

Mastered – Problem Solving Solving contextual problems that require calculations and methods
6. Calculate the sum of £3.57, 42p and £14.82 7. Work out forty-nine point seven plus thirteen point one. 8. Add 127 and 345 then subtract 249 9. Abby buys 2 cans at 85p each and a chocolate bar for 65p. How much change does she get from a five pound note?

Ambitious – Deeper Thinking	
Solving complex contextual problems that link different areas of maths.	
10. Find the perimeter of the triangle below. 	11. Which digits replace A, B and C in the boxes? $\begin{array}{r} 3 \\ 4^1 \boxed{C}.78 \\ - 16.\boxed{B}6 \\ \hline 25.4\boxed{A} \end{array}$

Learning Goals for this Unit		
1	To be able to convert between hours and minutes	M928
2	To be able to convert between minutes and seconds	M429
3	To be able to use an analogue clock for time	M347
4	To be able to use timetables	M152
5	TO be able to use calendars	

Emerging – Recall Recall of vocabulary and facts	Developing – Fluency Using calculations and methods
How many minutes are in an hour?	Convert 2 hours and 15minutes into minutes.
How many seconds in a minute?	Convert 430 seconds into minutes and seconds
How many days in March?	How many days in total in April, May and June?

Mastered – Problem Solving Solving contextual problems that require calculations and methods	
The journey time from Leeds to Sheffield is always the same. Work out the time that goes in the gap Leeds → Sheffield 09:35 Leeds 09:45 Outwood 10:07 Moorthorpe 10:20 Swinton 10:49 Sheffield Leeds → Sheffield Leeds 07:52 Outwood 08:12 Moorthorpe 08:27 Swinton 08:54 Sheffield	How long was Andrew’s journey?  

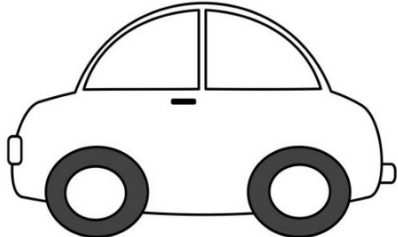
Ambitious – Deeper Thinking Solving complex contextual problems that link different areas of maths.	
The hands on an analogue clock are pointing in exactly opposite directions. Which two of the times below could the clock be showing? 12:30 23:27 09:43 01:27 15:45 14:43	On Thursday, a carpenter started making planks at 06:35 and finished at 12:25 She took 10 minutes to make each plank. How many planks did she make?

Number	Algebra	Ratio & Proportion	Geometry & Measures	Statistics and Probability
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Unit	7.1.4 Multiplying	MASTERY CRITERIA
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Learning Goals for this Unit		
1	To be able to multiply and dividing by 10, 100 and 1000	M113
2	To be able to multiply using place value	M911
3	To be able to use a written method to multiply integers	M187
4	To be able to use a written method to multiply decimals	M803

Emerging – Recall Recall of vocabulary and facts	Developing – Fluency Using calculations and methods
What does it mean to find the PRODUCT of 3 and 4? Describe how to use place value to multiply 13 by a. 10 b. 100 Describe how to use place value to divide 13 by a. 10 b. 100 How do you use place value to multiply 53 by 4?	Complete the following calculations: a. 2.6×100 b. 34×1000 Complete the following calculations, show your full working: a. 20×40 b. 43×26 c. 33×2.4

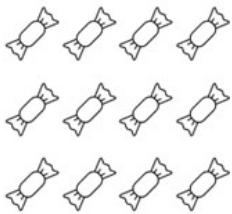
Mastered – Problem Solving Solving contextual problems that require calculations and methods
Jenny drives 175 miles to a meeting. Her company pays 46p for each mile she has to drive. How much does the company pay Jenny. Give your answer in pounds (£). 

Ambitious – Deeper Thinking	
Solving complex contextual problems that link different areas of maths.	
These two rectangles have the same area. Find the length of the second rectangle. 8cm 5cm 2cm x	Here are the prices of some fruit in a shop.  £0.97 per kilogram  £1.07 per kilogram  £1.46 per kilogram Calculate the cost of 1.2kg of apples and 3.5kg of bananas.

Number	Algebra	Ratio & Proportion	Geometry & Measures	Statistics and Probability
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Unit	7.1.5 Dividing	MASTERY CRITERIA
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Learning Goals for this Unit		
1	To be able to divide numbers into equal groups	(M462)
2	To be able to use a written method to divide integers	(M354)
3	To be able to divide with a remainder	(M873)
4	To be able to use a written method to divide by integers to get a decimal answer	(M262)
5	To be able to use a written method to divide by decimals	(M491)

Emerging – Recall	Developing – Fluency
Recall of vocabulary and facts	Using calculations and methods
To divide or division is sharing or grouping a number into equal parts. Share the sweets equally between 4 children. There are ____ sweets. ____ $\div$ 4 = ____ ____ $\times$ 4 = ____ 	Complete the following calculations 1) $168 \div 4$ 4 168 2) $132 \div 3$ 3 132

Mastered – Problem Solving
Solving contextual problems that require calculations and methods
There are 96 students in year 7. The maths teachers want to make 3 classes. How many students will be in each class? There are 107 students in year 8. The PE teachers want to make groups of 4 How many groups will there be? Will there be any students not in a group?
Ambitious – Deeper Thinking
Solving complex contextual problems that link different areas of maths.

3 pizzas cost £16.29 Each Pizza costs the same amount. How much does one pizza cost?	A group of 17 friends went to the cinema. Some of them bought a box of popcorn each. Each box cost £1.10, and the group spent a total of £14.30 on popcorn. How many of the group <u>didn't</u> buy popcorn?
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Number	Algebra	Ratio & Proportion	Geometry & Measures	Statistics and Probability
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Unit	7.1.6 Measures	MASTERY CRITERIA
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Learning Goals for this Unit		
1	To be able to measure capacity, mass and length	M828
2	To be able to estimate capacity, mass and length	M774
3	To be able to convert between metric units	M487

Emerging – Recall Recall of vocabulary and facts	Developing – Fluency Using calculations and methods
What does the prefix “kilo” mean in metric units? How many millimetres are in one centimetre? Write the conversion: 1000 g = ____ kg	Convert 3.5 metres to centimetres Fill in the blank: 2500 m = ____ km Convert 1.2 litres to millilitres Put these in ascending order: 0.5 kg, 750 g, 1.2 kg, 250 g
Mastered – Problem Solving Solving contextual problems that require calculations and methods	
A bottle contains 1.5 litres of water. You pour out 600 millilitres. How much is left in litres? A runner completes a 5 km race. How many metres did they run? You have 3.2 kg of apples. How many grams is that?	
Ambitious – Deeper Thinking Solving complex contextual problems that link different areas of maths.	
A recipe calls for 0.75 kg of flour. You only have a scale that measures in grams. How would you measure the correct amount?	Stefan pours 3.5 litres of juice into bottles that hold 250 ml each. How many bottles can he fill