

Maths Medium Term

Year: 6 Term: Spring Teacher: Mrs Pemberton

<u>Week</u>	<u>Topic</u>	<u>Objectives</u>
	MEASURES -	 Read, write and convert time between analogue and digital 12 hour clock and 24 hour clock
Week 1	TIME TO SOLVE	 Solve problems involving converting between units of time e.g. seconds and minutes, half past 12 and
(2 days)	PROBLEMS	13:30
		 Complete, read and interpret information in tables, including timetables – link to 24 hour clock
	STATISTICS TO	 Understand and use approximate equivalences between metric and common imperial units such as pints
	SOLVE	 Revise continuous and discrete data. Read and understand scales, including estimating points that are
	PROBLEMS	between the numbers marked on the scales
Week 2	STATISTICS TO	 Interpret line graphs and use these to solve problems
	SOLVE	 Begin to link pie charts to angles e.g. 360 degrees, fractions and percentages
	PROBLEMS	Begin to interpret pie charts and use these to solve problems
	NUMBER AND	 Read, write, order and determine the value of each digit for numbers up to 10 000 000
	PLACE VALUE	 Round any whole number to the nearest 10, 100, 1 000 or 10 000 using a number line
	TO SOLVE	 Order and identify the value of each digit in numbers to three decimal places
	PROBLEMS	
Week 3	NUMBER AND	 Round decimals with three places to the nearest whole number or to one decimal place
	PLACE VALUE	 Order and compare positive and negative numbers - on a number line
	TO SOLVE	 Use negative numbers in context and calculate intervals across zero
	PROBLEMS	 Generate and describe and extend or complete number sequences
		Solve problems that involve all of the above
Week 4	ADDIITON AND	Solve addition multi-step problems in contexts, deciding which operations and methods to use and why
	SUBTRACTION	 Subtract whole numbers and decimals using a formal written method
		Use inverse to check answers to calculations

	TO SOLVE	Express missing number problems algebraically
	PROBLEMS	 ALGEBRA- find pairs of number that satisfy number sequences involving two unknowns e.g. x+y= 1.5
		 Know how to calculate and interpret the mean as an average
Week 5	MULTIPLICATION	 Revise multiplying and dividing by 10, 100 and 1000 including with decimals
	AND DIVISION	 Multiply numbers with up to 4 digits by a two-digit whole number using a formal written method of long
	TO SOLVE	multiplication.
	PROBLEMS	 Multiply one-digit numbers with up to two decimal places by whole numbers
		 ALGEBRA- find pairs of number that satisfy number sequences involving two unknowns e.g. a x b= 36
		Express missing number problems algebraically
		 Divide numbers up to 4 digits by a two-digit number using a formal written method of short division where appropriate
		 Extend to division of numbers up to 4 digits by a two-digit whole number using a formal written method of long division
		 Interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
Week 6	RATIO AND	Understand ratio as unequal grouping or sharing
	PROPORTION	Understand proportion as scaling up or down
	TO SOLVE	Solve problems involving the relative sizes of two quantities where missing values can be found by using
	PROBLEMS	integer multiplication and division facts
Week 7	USE ALL FOUR	Use their knowledge of the order of operations (BODMAS) to solve problems involving a combination of
	OPERATIONS TO	addition, subtraction, multiplication and/or division
	SOLVE	 Solve problems involving addition, subtraction, multiplication and /or division
	PROBLEMS	
Week 8	FRACTIONS TO	 Revise how to use common factors to simplify fractions
& Week		 Revise how to use common multiples to turn two or more fractions to the same denomination
9	PROBLEMS	 Revising identifying prime numbers.
		 Revise how to compare and order fractions (such as 2/3, 3/4 and 5/6 by converting them to fractions
		with the same denominator), including fractions >1 (including on a number line)
		Add fractions with different denominators
		Subtract fractions with different denominators

		 Write a mixed number e.g. 1 and explain its meaning Write an improper fraction e.g. 11/6 and explain its meaning Convert mixed numbers to an improper fractions and vice versa Convert an improper fraction answer to a mixed number, e.g. 2 + 4 / 5 = 6 / 5 = 1 / 5 Solve problems involving fractions If appropriate: Extend to adding mixed numbers, using the concept of equivalent fractions Extend to subtracting mixed numbers, using the concept of equivalent fractions Extend to multiplying pairs of unit fractions, writing the answer in its simplest form (using diagram or manipulatives) Extend to dividing a unit fraction by a whole number (using diagrams or manipulatives)
Week 9 Cont'd	PERCENTAGES TO SOLVE PROBLEMS	 Recall and use equivalences between simple fractions, decimals and percentages Find decimal equivalents for simple fractions Find simple percentages of amounts Use percentages for comparison Solve problems involving the calculation of percentages
Week 10	SHAPE, POSITION AND DIRECTION TO SOLVE PROBLEMS	 Describe positions on a coordinate grid (first quadrant) Describe positions on the full coordinate grid (all four quadrants) Identify, describe and represent the position of a shape following a reflection using the appropriate language, and know that the shape has not changed Identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed Recognise, describe and build simple 3-D shapes, including making nets. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

Week 11	SHAPE, POSITION AND DIRECTION TO SOLVE PROBLEMS	 Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Solve problems with shapes and /or position and direction
Week 12	REVISION	Revision of topics requiring further work — to be identified