Year 5 - Medium Term Plan

Year 5	Maths National Curriculum 2014 Programme of Study (POS)		Au	Sp	Su	Arithmetic Coverage	
Y5 1: Place Value	Y5 1a	Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.				**Calculation and Place Value:** • Count in multiples of 6,7,8,25 and 1000. • Count forwards or backwards in powers of 10. • Count forwards and backwards with positive and negative whole numbers. • Multiply and divide numbers mentally. • Establish whether a number up to 100 is prime. • Recognise square numbers and cube numbers. • Multiply and divide whole numbers by 10, 100 and 1000. • Find 1000 more or less than a given number. • Recognise the place value of each digit in a four-digit number.	**FDP:** • Order and Compare Fractions • Add and Subtract (Different Denominator) • Fractions of Amounts • Recognise Equivalent Fractions • Convert between Mixed Numbers and Improper Fractions • Convert between Equivalent Fractions • Multiply Mixed Numbers by Whole Numbers • Multiply Proper Fractions by Whole Numbers • Decimal, Fraction and
	Y5 1b	Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.					
	Y5 1c	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.					
	Y5 1d	Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000					
	Y5 1e	Solve number problems and practical problems that involve all of the above.					
	Y5 1f	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.					
Y5 2: Addition and Subtraction	Y5 2a	Add and subtract numbers mentally with increasingly large numbers.					
	Y5 2b	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.					
	Y5 2c	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.					
Y5 3: Multiplication and Division	Y5 3a	Multiply and divide numbers mentally drawing upon known facts.					
	Y5 3b	Multiply and divide whole numbers by 10, 100 and 1000.					
	Y5 3c	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.					
	Y5 3d	Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3)					
	Y5 3e	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.					
	Y5 3f	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.					
	Y5 3g	Establish whether a number up to 100 is prime and recall prime numbers up to 19					

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	Y5 3h	Multiply and divide numbers mentally drawing upon known facts.				• Order and compare numbers to at least 1000000. • Round numbers to the nearest 10, 100, 1000, 10000 and 100000 • Read Roman numerals to 1000. • Divide 4-digit numbers by a 1-digit number. • Multiply 4-digit numbers by a one- or two-digit number. • Add and subtract whole numbers with more than 4 digits. • Solve problems involving the four operations.	Percentage Equivalence
	Y5 3i	Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.					
	Y5 3j	Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.					
	Y5 3k	Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.					
Y5 4: Fractions, decimals and percentages	Y5 4a	Compare and order fractions whose denominators are multiples of the same number.					
	Y5 4b	Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.					
	Y5 4c	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number					
	Y5 4d	Add and subtract fractions with the same denominator and denominators that are multiples of the same number.					
	Y5 4e	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.					
	Y5 4f	Read and write decimal numbers as fractions.					
	Y5 4g	Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.					
	Y5 4h	Read, write, order and compare numbers with up to three decimal places.					
	Y5 4i	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.					
	Y5 4j	Round decimals with two decimal places to the nearest whole number and to one decimal place.					
	Y5 4k	Solve problems involving number up to three decimal places.					
	Y5 4l	Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.					
	Y5 4m	Solve problems which require knowing percentage and decimal equivalents of ___ and those fractions with a denominator of a multiple of 10 or 25.					
	Y5 4n	Solve problems involving numbers up to three decimal places					

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Y5 5: Position, Direction and Shape	Y5 5a	Identify 3D shapes, including cubes and other cuboids, from 2D representations.					
	Y5 5b	Use the properties of rectangles to deduce related facts and find missing lengths and angles.					
	Y5 5C	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.					
	Y5 5d	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.					
	Y5 5e	Draw given angles, and measure them in degrees (o)					
	Y5 5f	Identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and 1⁄2 a turn (total 180o) other multiples of 90o					
	Y5 5g	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.					
Y5 6: Area, Perimeter and Volume	Y5 6a	Measure and calculate the perimeter of composite rectilinear shapes in cm and m.					
	Y5 6b	Calculate and compare the area of rectangles (including squares), and including using standard units, cm2, m2 estimate the area of irregular shapes.					
	Y5 6c	Estimate volume [for example using 1cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]					
Y5 7: Measure	Y5 7a	Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml]					
	Y5 7b	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.					
	Y5 7c	Use all four operations to solve problems involving measure.					
Y5 8: Time	Y4 8a	Solve problems involving converting between units of time.					

Y5 9: Statistics	Y5 9a	Solve comparison, sum and difference problems using information presented in a line graph.					
	Y5 9b	Complete, read and interpret information in tables including timetables.					