Year 6 Medium Term Plan Maths

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Number sense As part of starter activities each day count in steps of the multiplication tables that you want the children to rehearse, decimal and fraction steps and steps that help children with mental calculation strategies such as 25, 50 and 75. Link this to linear number sequences in algebra. It is also helpful to count in positive and negative integers across zero.				Additive Reasoning			
Term 1 Survival	Place Value Terms – positional, multiplicative, additive, base10 Place Value Grids & Digit cards Gettegno charts	Link to measurement- practical activities with mass capacity & vice versa Ordering and comparing, Greater than, less than, equals	Fractions – link to division and decimal place value, whole part relationships (animals) Problem solving throughout	Link to percentages /100 and make explicit links with f,d,p Pie charts, examples & bar modelling, Problem solving throughout	Mental Calculation – partitioning, doubling, halving, number pairs, multiples of 10 and adjusting, using known number facts, bridging through 10, counting on and counting back Time difference and durations Bar charts Perimeter and its formula Missing number problems link to algebra	Written methods for addition and subtraction, whole numbers, subtraction to check and vice versa Bar charts, finding totals and differences	Written methods for addition and subtraction, including decimals, Measures of length, cm and mm, mass kg and g, capacity, l and ml, practical activities and problem solving (sand)	Assessment Week

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	Multiplicative Reasoning				Geometric Reasoning			
Term 2 Survival	Mental calculation strategies, partitioning (123/4) doubling and doubling, halving and halving, x by 5 and 10 and halving, / by 5 and/ by 10 and doubling by 20 by x10 and double /20 by /10 and halving, x by 15, x by 10, halve and add, using known facts, Grouping Bar model problems, e.g. Sam had 23 cars, Tom had 5 times as many. How many more did	Written methods with reasoning for multiplication and division as the inverse. Make arrays using place value counters for 4 digit multiplication by single digit and link to grid method and then sort written method. Link this to division using the array, for example, 1 365 x 3 = 4 095, so 4 095 ÷ 365 = 3 and link to 4 095 ÷ 3 = 365. Link to measures: 1l 245ml juice in a jug, how much in 6 jugs?	Written methods with reasoning for division and multiplication as the inverse. Use manipulatives for 4 digits by single digit. Checking using multiplication. Word problems that have remainders and the children need to decide what to do, e.g. 145 children going on trip, mini buses hold 9 children. How many mini buses needed?	Scaling up and scaling down. Link to doubling and fractions. Currency conversion and metric to imperial conversion through problem solving. Link this to ratio.	3D shape: using plasticine to make sphere, cube, cuboid, pyramid, exploring what doing to get each new shape and properties and then visualising net of pyramid, then cube. Exploring which patterns make nets and which don't. Repeat net work for cuboids, prisms. Pyramid problem: tetrahedron, how many faces, edges, vertices, square based pyramid, how many f, e, v, same for	2D shape: compare and classify shapes according to properties. Focus on different named quadrilaterals and triangles	2D shape: drawing using given dimensions and angles, focussing on how to use a protractor. Exploring missing angles in shapes using formula, e.g. a = 180 – (b + c)	

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	Tom have? Link in with finding areas and solid volumes and exploring the formulae for these – practically on squared paper and using interlocking cubes. Creating, e.g. time/distance line graphs where scale goes up in multiples the children need to practice Missing number problems linking to algebra				pentagonal based pyramid, look for the pattern, then work out how many f, e, v on a 100 sided based pyramid and then generalisation for n sided based pyramid. Similar one for prisms			

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	Number Sense				Additive Reasoning			
Term 3 India	Place Value as in term 1 Also include algebra: finding pairs of numbers that satisfy an equation with two unknowns, e.g. a + b = 148 a – 36 = b	Negative numbers within the context of temperature, money and depth below sea level	Fractions, decimals and percentages: addition and subtraction, finding equivalences to do this, counting in fractional steps, improper fractions and mixed numbers – link to addition and counting, e.g. ½, 1, 1 ½, 2, 2 ½, how many halves? Multiplying and dividing fractions	ASSESSMENT WEEK	Mental calculation strategies as in Term 1, picking up on any that weren't covered, linking to time differences and durations, perimeter	Written calculation methods for addition and subtraction, linking to money multi-step problems		

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	Multiplicative Reasoning				Geometric Reasoning			
Term 4 India	Mental Calculation as in term 2 Also include finding pairs of numbers that satisfy an equation with two unknowns, e.g. a x 12 = b, a x b = 48	Written methods for multiplication and division Long multiplication through grid method Statistics: line graphs, bar graphs and mean of a set of data	Scaling up and scaling down as in term 2	Interesting numbers: primes, squares linking to area, cubes linking to volume Factor and multiple investigations.	Circles: radius, diameter, circumference Drawing triangles and quadrilaterals to given dimensions and angles Finding missing angles linking to algebra	Full coordinate grid work Translation		

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Term 5 WWii	SATs Revision Place value with addition and subtraction of positive and negative numbers Additive reasoning	SATs Revision Algebra: enumerate possibilities of combinations of two variables, e.g. ice cream, football kits Multiplicative reasoning	SATs Revision Geometric Reasoning: Properties of shapes including symmetry Translation Coordinates	SATS WEEK	Exciting project that involves all learnt over the year, e.g. planning a holiday, designing a bedroom, theme park			

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