

Medium Term Maths Planning

Terms 1&2

Class:

EVERY DAY: Practise and develop oral and mental skills to promote mental fluency (e.g. counting, mental strategies, rapid recall of + , - , x and ÷ facts)

<u>Week</u> Date (approx. days)	<u>Programme of study</u> Strand and subheading	Year 3 objectives	Year 4 objectives
1	Number and place value Counting Number bonds	<ul style="list-style-type: none"> • count from 0 in multiples of 4, 8, (50 and 100); find 10 (or 100) more or less than a given number • read and write numbers up to 1000 in numerals and in words • solve number problems and practical problems involving these ideas. 	<ul style="list-style-type: none"> • count in multiples of 6, (7,) 9, (25 and 1000) • find 1000 more or less than a given number • count backwards through zero to include negative numbers • solve number and practical problems that involve all of the above • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
2	Number and place value Place Value	<ul style="list-style-type: none"> • recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • compare and order numbers up to 1000 • identify, represent and estimate numbers using different representations • solve number problems and practical problems involving these ideas. 	<ul style="list-style-type: none"> • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000 • identify, represent and estimate numbers using different representations • round any number to the nearest 10, (100 or 1000) • solve number and practical problems that involve all of the above and with increasingly large positive numbers
3	Addition Subtraction Mental calculation	<ul style="list-style-type: none"> • add and subtract numbers mentally, including: <ul style="list-style-type: none"> ➤ a three-digit number and ones ➤ a three-digit number and tens ➤ a three-digit number and hundreds 	<ul style="list-style-type: none"> • Pupils continue to practise mental methods

	<p>strategies (teaching the strategies – please use 'Teaching Children to Calculate Mentally'.)</p>	<ul style="list-style-type: none"> • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	<ul style="list-style-type: none"> • Solve problems using mental methods
4	<p>Addition Subtraction (Measures) Incl Money</p> <p><i>Cross strand links</i></p>	<ul style="list-style-type: none"> • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • estimate the answer to a calculation and use inverse operations to check answers • add and subtract amounts of money to give change, using both £ and p in practical contexts • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<ul style="list-style-type: none"> • add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • estimate and use inverse operations to check answers to a calculation • estimate, compare and calculate different measures, including money in pounds and pence • solve addition and subtraction (two-step) problems in contexts, deciding which operations and methods to use and why.
5	<p>Measures Length</p>	<ul style="list-style-type: none"> • measure, compare, add and subtract: lengths (m/cm/mm); • solve problems that involve the above. 	<ul style="list-style-type: none"> • estimate, compare and calculate different measures • Convert between different units of measure [for example, kilometre to metre • solve problems that involve the above.
6	<p>Geometry Shape</p>	<ul style="list-style-type: none"> • draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • solve problems that involve the above. 	<ul style="list-style-type: none"> • compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • solve problems that involve the above.
<p>Half term</p>			
7	<p>Multiplication/ Division</p>	<ul style="list-style-type: none"> • recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, 	<ul style="list-style-type: none"> • recall multiplication and division facts for multiplication tables up to 12 x 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1;

		<p>including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <ul style="list-style-type: none"> • solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. 	<p>multiplying together three numbers</p> <ul style="list-style-type: none"> • recognise and use factor pairs and commutativity in mental calculations • multiply two-digit and three-digit numbers by a one-digit number using formal written layout • solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
8	Fractions/ Decimals/ Percentages	<ul style="list-style-type: none"> • count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 • recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • solve simple measure and money problems involving fractions 	<ul style="list-style-type: none"> • count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{3}{4}$ • solve simple measure and money problems involving fractions
9	Problem Solving	<p><i>Teaching the skills and strategies of problem solving</i> <i>Could also be used for assessment purposes</i></p>	
10	Measures Capacity	<ul style="list-style-type: none"> • measure, compare, add and subtract: volume/capacity (l/ml) • solve problems that involve the above. 	<ul style="list-style-type: none"> • estimate, compare and calculate different measures – volume/capacity • Convert between different units of measure [for example, l to ml] • solve problems that involve the above.
11	Geometry Measures Angles Area and perimeter	<ul style="list-style-type: none"> • measure the perimeter of simple 2-D shapes • recognise angles as a property of shape or a description of a turn • identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; 	<ul style="list-style-type: none"> • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • identify acute and obtuse angles and compare and order angles up to two right angles by size

		<ul style="list-style-type: none"> • solve problems that involve the above 	<ul style="list-style-type: none"> • solve problems that involve the above
12	Statistics	<ul style="list-style-type: none"> • interpret and present data using bar charts, (pictograms and tables) • solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. • solve problems that involve the above 	<ul style="list-style-type: none"> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts (and time graphs.) • solve comparison, sum and difference problems using information presented in bar charts, (pictograms, tables and other graphs.) • solve problems that involve the above