



Long Term Planning

Year 3

National Curriculum Objectives and Small steps Overview

Term 1 (4 days)

<u>Unit</u>	<u>Place Value</u>	<u>Addition and Subtraction Mental Methods including Inverse</u>
<u>National Curriculum Objectives</u>	<p>Pupils should be taught to:</p> <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 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 read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas. 	<p>Pupils should be taught to:</p> <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 estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value,
<u>Small Steps Guidance</u>	<p>Whitrose Autumn Unit 1</p> <ul style="list-style-type: none"> ➤ Review objectives from Year 2 - counting/reading writing numbers to 100 and partitioning into 10s and 1s ➤ Numberline to 100 ➤ Hundreds ➤ Numbers to 1000- read and write in numerals and words ➤ Partition numbers to 1000 into 100s, 10s and 1s ➤ Partition in other ways. ➤ Hundreds, tens and ones ➤ 1, 10 or 100 more or less ➤ Numberline to 1000 ➤ Estimate on numberline to 1000 ➤ Compare numbers to 1000 in objects and numerals ➤ Order numbers to 1000 ➤ Count in 50s 	<p>Whitrose Autumn Unit 2</p> <ul style="list-style-type: none"> ➤ Review Year 2 add 1s and 10s using number bonds including crossing boundaries $17 + 5 = 17 + 3 + 2$ ➤ Add and subtract 1s (not crossing boundaries) ➤ Add and subtract 10s (not crossing boundaries) ➤ Add and subtract 100s (not crossing boundaries) ➤ Spot the pattern (+1 + 10 + 100 what do you notice?) ➤ Add 1s crossing boundaries - making 10 ➤ Add 10s crossing boundaries- making 100 ➤ Make connections ($8 + 4 = 12$ $80 + 40 = 120$) to be covered alongside other objectives as part of mental oral starters) <p>Subtraction bridging to be covered before the subtraction unit so that the units flow.</p>

Term 1 (1 days)

<u>Unit</u>	<u>Times tables 2x 5 x 10x 3x</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> Recall times tables for 2x 5 x 10 3x tables. solve problems, including missing number problems, involving multiplication and division
<u>Small Steps Guidance</u>	<p>Whitrose Autumn Term unit 3</p> <ul style="list-style-type: none"> ➤ 2x multiplication and division facts include $\frac{1}{2}$ numbers. ➤ Odd and even revision relate to tables.



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| | <ul style="list-style-type: none">➤ Count in 3s➤ Multiply by 3➤ Divide by 3➤ Teach 3x tables and division facts explore how multiplication can be reordered but division can not.➤ Missing numbers and inverse with 3x table. |
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Term 2 (4 days)

<u>Unit</u>	<u>Addition Written Methods</u>	<u>Subtraction Written Methods and Inverse.</u>
<u>National Curriculum Objectives</u>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • add 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 • add numbers with up to three digits, using formal written methods of columnar addition. • estimate the answer to a calculation and use inverse operations to check answers • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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 • subtract numbers with up to three digits, using formal written methods of columnar subtraction • estimate the answer to a calculation and use inverse operations to check answers • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
<u>Small Steps Guidance</u>	<ul style="list-style-type: none"> ➢ Review methods from Year 2. ➢ Add 2 2 digit numbers with written method without regrouping ➢ Add 2 2 digit numbers with written method with regrouping ➢ Add 3 and 1 digit number without regrouping then with regrouping ➢ Add 3 and 2 digit number without regrouping then with regrouping ➢ Add 3 and 3 digit number without regrouping then with regrouping ➢ Estimate and check 	<ul style="list-style-type: none"> ➢ Subtract 1s crossing boundaries - making 10 ➢ Subtract 10s crossing boundaries- making 100 ➢ Make connections ($8 + 4 = 12$ $80 + 40 = 120$) to be covered alongside other objectives as part of mental oral starters) ➢ Review methods from Year 2. ➢ Subtract 2 2 digit numbers with written method without regrouping ➢ Subtract 2 2 digit numbers with written method with regrouping ➢ Subtract 3 and 1 digit number without regrouping then with regrouping ➢ Subtract 3 and 2 digit number without regrouping then with regrouping ➢ Subtract 3 and 3 digit number without regrouping then with regrouping ➢ Estimate and check ➢ Inverse calculations ➢ Word Problems involving addition and subtraction- choose the method.

Term 2 (1 days)

<u>Unit</u>	<u>Times tables 4x 8x</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> • Recall times tables for 2x 5 x 10 3x and 4x 8x tables. • solve problems, including missing number problems, involving multiplication and division
<u>Small Steps Guidance</u>	<p>Whiterose Autumn Term unit 3</p> <ul style="list-style-type: none"> ➢ Count in 4s ➢ Multiply by 4 ➢ Divide by 4 ➢ Link 2x and 4x table facts ➢ Teach 4x table facts and division facts ➢ Count in 8s



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| | <ul style="list-style-type: none">➤ Multiply by 8➤ Divide by 8➤ Link 4x 8x table facts.➤ Teach 8x table and division facts |
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Term 3 (4 days)

<u>Unit</u>	<u>Multiplication Methods</u>	<u>Division (Begin)</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> recall and use multiplication and division facts 3 x multiplication tables write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 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>Pupils should be taught to:</p> <ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 multiplication tables write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods <p>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>
<u>Small Steps Guidance</u>	<p>Whiterose Spring 1 (check calculation policy and use alongside the unit)</p> <p>Revise use of arrays from year 2</p> <ul style="list-style-type: none"> ➤ Continue to practice timestables 2x 5x 10 x 3x 4x ➤ Review 8x and related division facts ➤ Comparing statements with multiplication and division facts 4 x 5 > 3 x 3 etc ➤ Multiplying by 10 using pv grids ➤ Related calculations 3 x 30 ➤ Explore inverse calculations ➤ Multiply 2 digits x 1 digit expanded method (see cal. Policy) ➤ Multiply 2 digits by 1 digit formal method (for those who can) ➤ Scaling ➤ How many ways (possibility and correspondence problems) 	<p>Whiterose Spring 1 (check calculation policy and use alongside the unit)</p> <p>Revise use of arrays from year 2</p> <ul style="list-style-type: none"> ➤ Continue to practice division timestables 2x 5x 10 x 3x 4x ➤ Teach 8x and related division facts ➤ Comparing statements with multiplication and division facts 4 x 5 > 3 x 3 etc ➤ Dividing by 10 using pv grids (whole numbers only) ➤ Related calculations ➤ Explore inverse calculations ➤ Divide 2 digits by 1 digit using numberlines extending on from year 2 to include remainders. <p>Divide larger numbers using tens and ones partitioning method.</p>

Term 3 (1 day)

<u>Unit</u>	<u>Money</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in practical contexts add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. 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.
<u>Small Steps Guidance</u>	<p><u>Revise names of notes and coins from Year 2</u></p> <ul style="list-style-type: none"> ➤ Count money pence (Year 2 revision) ➤ Count money pounds (Year 2 revision) ➤ Compare money pounds and pence ➤ Convert money pounds and pence ➤ Add money- written methods and mental methods ➤ Subtract money- including use of written methods and numberlines for pounds ➤ Explore change practically and with written methods (including numberlines) ➤ Solve two step problems involving adding and giving change ➤ Solve missing number money problems



Term 4 (3 days)

<u>Unit</u>	<u>Division (Continued)</u>	<u>Comparing, ordering, adding fractions</u>
<u>National Curriculum Objectives</u>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 multiplication tables write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 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>Pupils should be taught to:</p> <ul style="list-style-type: none"> recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators recognise and show, using diagrams, equivalent fractions with small denominators add and subtract fractions with the same denominator within one whole [for example, $7\ 5 + 7\ 1 = 7\ 6$] compare and order unit fractions, and fractions with the same denominators solve problems that involve all of the above.
<u>Small Steps Guidance</u>	<p>Whiterose Spring 1 (check calculation policy and use alongside the unit)</p> <p>Revise use of arrays from year 2</p> <ul style="list-style-type: none"> Continue to practice division timestables 2×5 10×3 $4 \times$ Teach $8 \times$ and related division facts Comparing statements with multiplication and division facts $4 \times 5 > 3 \times 3$ etc Dividing by 10 using pv grids (whole numbers only) Related calculations Explore inverse calculations Divide 2 digits by 1 digit using numberlines extending on from year 2 to include remainders. Divide larger numbers using tens and ones partitioning method. 	<p>White rose Summer Unit 1</p> <p>Revise halves, quarters and thirds of shapes from year 2</p> <ul style="list-style-type: none"> Introduce other fractions of shapes including fifths, sixths, eights, tenths (no decimals at this point) Recognise the importance of a whole through concrete and pictorial resources Revise equivalent fractions to $\frac{1}{2}$ from Year 2 Explore equivalent fractions using models and images Compare fractions using understanding of a whole, models and images Add fractions with same denominators using models and images Subtract fractions with same denominators using models and images Fractions on a numberline including modelling over a whole

Term 4 (1 days)

<u>Unit</u>	<u>Statistics</u>
<u>National Curriculum Objectives</u>	<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.
<u>Small Steps Guidance</u>	<p>White Rose Spring Block 3</p> <p>Practice times tables using venn and carroll diagrams</p> <p>Revise pictograms from Year 2 including where one unit represents 2 5 or 10</p> <ul style="list-style-type: none"> Solve problems involving pictograms including where the unit is missing or halved



Term 5 (4 days)

<u>Unit</u>	<u>Fractions of Number</u>	<u>Length and Perimeter</u>
<u>National Curriculum Objectives</u>	<p>Pupils should be taught to: (Revise halving and doubling from Year 5)</p> <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 	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm) measure the perimeter of simple 2-D shapes estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. <p><i>Consolidate and apply addition, subtraction skills from Term 1 through problem solving about Length and perimeter. Include one and moving into 2 step problem solving where they need to choose the operation.</i></p>
<u>Small Steps Guidance</u>	<p>White Rose Summer Block (please also see calc. policy for models) Retrieve and consolidate recognition of unit fractions and non unit fractions in both symbol (3/4) and shape.</p> <ul style="list-style-type: none"> ➤ Revise tenths as a fraction and the concept of a whole ➤ Divide whole numbers by tens into decimal tenths using pv grids ➤ Tenths as decimals concrete, pictorial link with fractions ➤ Count in tenths fractions and decimals using numberlines ➤ Unit fractions of an amount - concrete experience, pictorial experience ➤ Non-unit fractions of an amount concrete experience, pictorial experience <p>(Please do not teach divide by the bottom times by the top-children need to understand that they are finding the unit fraction and then the non unit fraction)</p>	<p>White Rose Spring Term Block 4</p> <ul style="list-style-type: none"> ➤ Measure length cm ➤ Measure length m ➤ Equivalent lengths m and cm ➤ Measure length mm ➤ Equivalent lengths cm and mm ➤ Compare lengths ➤ Add lengths ➤ Subtract lengths ➤ Solve two step word problems involving lengths using addition and subtraction skills and fractions of number ➤ Measure perimeter ➤ Calculate perimeter <p>Solve word problems involving perimeter</p>

Term 5 (1 days)

<u>Unit</u>	<u>Exploring relationships</u> <u>2x 4x 8x table</u> <u>5x and 10x table</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 4 and 8 multiplication tables <p>(Use doubling to explore the relationships between these)</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.
<u>Small Steps Guidance</u>	<p>Short 2 week unit Revise work from Term 2 on times tables and the links between 2x 4x 8x and 5x 10x</p> <ul style="list-style-type: none"> ➤ Practice doubling ➤ Inverse relationships with division facts ➤ Missing number problems ➤ Balancing and comparing equations- $3 \times 4 = ___ \times 6$ ➤ Fractions of number questions including unit fractions - link to division and timestables.



Term 6 (4 days)

<u>Unit</u>	<u>Measurement mass and capacity</u>	<u>2D and 3D shape</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml) <p><i>Children should apply their addition, subtraction, multiplication and division methods to solve word problems involving mass and volume,</i></p> <p><i>Children should apply their understanding of fractions of number and fractional equivalence to solve problems involving mass and volume.</i></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 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; identify whether angles are greater than or less than a right angle identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
<u>Small Steps Guidance</u>	<p>White Rose Summer Block 4</p> <ul style="list-style-type: none"> ➤ Revise Year 2 Compare mass using mathematical language and practical resources ➤ Measure mass ➤ Compare mass (kg and g) ➤ Add and subtract mass ➤ Solve word problems involving mass including the 4 operations and fractions. 	<ul style="list-style-type: none"> ➤ Revise Year 2 comparing volume using non standard units and mathematical language ➤ Measure capacity ml and l ➤ Compare capacity ➤ Add and subtract capacity ➤ Solve word problems involving capacity involving the 4 operations and fractions.
		<p>Whiterose Summer Block 3</p> <p>Revise names of 2D and 3D shape from Year 2</p> <p>Revise properties of shape such as vertices, edges, sides and lines of symmetry from Year 2</p> <ul style="list-style-type: none"> ➤ Turns ➤ Right angles in shapes ➤ Compare angles ➤ Draw accurately ➤ Horizontal vertical ➤ Parallel and perpendicular lines ➤ Describing 2D shapes including lines and angles ➤ Describing 3D shapes including lines and angles ➤ Constructing 3D shapes

Term 6 (1 day)

<u>Unit</u>	<u>Time</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example to calculate the time taken by particular events or tasks].
<u>Small Steps Guidance</u>	<p>Whiterose Summer Block 2</p> <ul style="list-style-type: none"> ➤ Years, Months, days, hours, minutes (duration of events) ➤ Revise O'clock and half past from year 2 ➤ Revise and teach 5 minutes past the hour to half past, 5 past, 10 past, quarter past, 20 past, 25 past ➤ Revise and teach 5 minutes to the hour, 5 to , 10 to, 15 mins to, 20 to 25 to ➤ Am and pm- introduce digital time ➤ Relate analogue and digital time - 24 hour clock ➤ Finding duration ➤ Comparing duration ➤ Start and End times (word problems involving time) ➤ Minutes, seconds (duration of events) ➤ Measuring time in seconds



Caversham Park Primary School

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