



Long Term Planning

Year 4

National Curriculum Objectives and Small steps Overview

Term 1

<u>Unit</u>	<u>Number and Place Value to 10000</u>	<u>Addition and Subtraction (This will continue into Term 2)</u>
<p><u>National Curriculum Objectives</u></p>	<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 • 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 and 1000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • 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. 	<ul style="list-style-type: none"> • Pupils should be taught to: • 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 • solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
<p><u>Small Steps Guidance</u></p>	<p>Whitewire Autumn Block 1</p> <p>Revise numbers to 1000 from Year 3 including partitioning, ordering, comparing, 10, 1, 100 more or less</p> <ul style="list-style-type: none"> ➢ Count in 100s ➢ Count in 5s and 50s ➢ Count in multiples of 25 ➢ Count in 1000s ➢ Place value of numbers to 10,000 (partitioning) ➢ 1000 more or less ➢ Compare numbers to 10000 ➢ Order numbers to 10000 including using a number line. ➢ Round numbers to nearest 10 ➢ Round numbers to the nearest 100 ➢ Round to the nearest 1000 ➢ Roman numerals to 100 ➢ Negative numbers 	<p>Whitewire Autumn Block 2</p> <ul style="list-style-type: none"> ➢ Add and subtract mentally 1s, 10s, 100s to any 4 digit number ➢ Add and subtract 1000s ➢ Estimate and checking strategies to be taught and then applied through the unit ➢ Add two 3 digit numbers with more than 1 exchange ➢ Add two 3 digit numbers with 2 exchanges ➢ Add two four digit numbers with one exchange ➢ Add two four digit numbers with more than one exchange ➢ Add combinations of numbers (4 and 3, 4 and 2) lining digits correctly. ➢ Subtract two 3 digit numbers with more than 1 exchange ➢ Subtract two 3 digit numbers with 2 exchanges ➢ Subtract two four digit numbers with one exchange ➢ Subtract two four digit numbers with more than one exchange ➢ Subtract combinations of numbers (4 and 3, 4 and 2) lining digits correctly. ➢ Solve two step word problems involving addition and subtraction.



1 day a week

<u>Unit</u>	<u>Multiplication 4x 8x</u> <u>(Revision from Year 3)</u>	<u>Multiplication</u> <u>3x and 6x 9x</u> <u>(This will continue into Term 2)</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none">• recall multiplication and division facts for multiplication tables up to 12×12• use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers• recognise and use factor pairs and commutativity in mental calculations	<ul style="list-style-type: none">• recall multiplication and division facts for multiplication tables up to 12×12• use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers• recognise and use factor pairs and commutativity in mental calculations•
<u>Small Steps Guidance</u>	Whiterose Autumn Multiplication Block <ul style="list-style-type: none">➤ Revise and embed the links between the 4x and 8x tables➤ Derive related division facts➤ Solve missing number problems➤ Explore dividing by 0 and 1➤ Multiply 3 numbers by reordering to make the calculation easier,➤ Identify factor pairs	Whiterose Autumn Block 4 <ul style="list-style-type: none">➤ Explore the relationship between the 3x 6x and 9x.➤ Teach 6x and 9x table➤ Explore multiplying by 0 and 1➤ Multiply 3 numbers by reordering to make the calculation easier,➤ Identify factor pairs



Term 2

Continue addition and subtraction from Term 1

<u>Unit</u>	<u>Shape, Space and Position</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none">• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes• identify acute and obtuse angles and compare and order angles up to two right angles by size• identify lines of symmetry in 2-D shapes presented in different orientations• complete a simple symmetric figure with respect to a specific line of symmetry.• Pupils should be taught to:<ul style="list-style-type: none">• describe positions on the full coordinate grid (all four quadrants)• draw and translate simple shapes on the coordinate plane, and reflect them in the axes.• plot specified points and draw sides to complete a given polygon
<u>Small Steps Guidance</u>	<p>White Rose Summer blocks 5 and 6</p> <ul style="list-style-type: none">➤ Revise properties of shapes including symmetry and angles from Year 3➤ Identify angles➤ Compare and order angles➤ Types of triangles➤ Quadrilaterals➤ Horizontal and vertical/parallel and perpendicular➤ Symmetry ➤ Describe position➤ Draw on a grid➤ Move on a grid➤ Describe movement on a grid

1 day a week

(Continue multiplication 3x 6x 9x from Term 1)

<u>Unit</u>	<u>Multiplying and Dividing by 10, 100 and applying to related facts.</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none">• recall multiplication and division facts for multiplication tables up to 12×12• use place value, known and derived facts to multiply and divide mentally,• recognise and use factor pairs and commutativity in mental calculations
<u>Small Steps Guidance</u>	<ul style="list-style-type: none">➤ Revise from Year 3:➤ Multiply by 10 (whole numbers only)➤ Multiply multiples of 10 using facts they know e.g. $30 \times 5 =$➤ Divide by 10 (whole numbers only)➤ Multiply by 100 (whole numbers only)➤ Multiply multiples of 100 using facts they know e.g. $500 \times 4 =$➤ Divide by 100 (whole numbers only)



Term 3

<u>Unit</u>	<u>Multiplication</u>	<u>Division</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations To divide mentally using a numberline and to find remainders (continue from Year 3) To begin to use the formal method of short division (bus stop) to divide a 2 digit number by a 1 digit number.
<u>Small Steps Guidance</u>	Whiterose Autumn Block 4 and Spring Block 1 <ul style="list-style-type: none"> Written methods 2 x 1 digit expanded then into formal Multiply 3 digit by 1 digit 1 no exchange Multiply 3 digit by 1 digit 1 exchange Multiply 3 digit by 1 digit multiple exchange Efficient multiplication mental methods Correspondence problems 	Whiterose Spring Block 1 <ul style="list-style-type: none"> Review division on numberlines from Year 3 including remainders Extend more able to partitioning larger numbers to divide mentally Ensure all children can divide near tables with remainders moving from written to mental methods e.g. $33 \div 8 = 4 \text{ r } 1$ Divide 2 digit numbers just outside multiplication facts e.g. $36 \div 5 = 7 \text{ r } 1$ using numberlines and finding remainders (review from year 3 see cal policy) 2 digit divided by 1 digit using short method (bus stop) work through concrete/pictorial alongside abstract to develop understanding. Start with whole numbers only Divide 2 digit by 1 digit with 1 exchange Understand inverse calculations- multiplication and division. Correspondence problems

1 day a week

<u>Unit</u>	<u>7x and 9x table</u>	<u>11x 12x table</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> recall multiplication and division facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations 	<ul style="list-style-type: none"> recall multiplication and division facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations
<u>Small Steps Guidance</u>	Whiterose Autumn Block 4 <ul style="list-style-type: none"> Count in 7s and 9s. Learn the 7x table and 9x table and derive related division facts Explore factor pairs Multiply 3 numbers Multiply by 1 and 0 	Whiterose Autumn Block 4 <ul style="list-style-type: none"> Learn 11x and 12 table Factor pairs Multiply 3 numbers



Term 4

<u>Unit</u>	<u>Fractions</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none">• recognise and show, using diagrams, families of common equivalent fractions• solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number• add and subtract fractions with the same denominator
<u>Small Steps Guidance</u>	Whiterose Spring Block 3 <ul style="list-style-type: none">➤ Count in tenths (fractions) and hundredths (fractions)➤ Count in other fractions- use numberlines and sequences➤ What is a fraction? What is a whole? Revise names of fractions, fractions of a whole, basic equivalence from Year 3➤ Explore equivalent fractions using models and images.➤ Add fractions (revision from Year 3)➤ Adding fractions which go over a whole➤ Explore fractions over a whole➤ Add 2 fractions➤ Subtract fractions➤ Subtract 2 fractions➤ Subtraction fractions from over a whole➤ Find fractions of amounts (Year 3 revision)

1 day a week

<u>Unit</u>	<u>Area</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none">• find the area of rectilinear shapes by counting squares
<u>Small Steps Guidance</u>	Whiterose Spring Block 2 <ul style="list-style-type: none">➤ Estimating area➤ Counting Squares➤ Making shapes with given area➤ Comparing area



Term 5

<u>Unit</u>	<u>Decimals</u>
<u>National Curriculum Objectives</u>	<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 halves and quarters • find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths • round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places
<u>Small Steps Guidance</u>	<p>Whiterose Summer Block 4 Spring Block 4 and Summer Block 1</p> <ul style="list-style-type: none"> ➢ Count in tenths ➢ Count in hundredths ➢ Recognise tenths and hundredths on a hundred square (show in fractions) ➢ Recognise tenths and hundredths on a hundred square in decimals and relate to money. ➢ Explore tenths in a place value grid ➢ Explore tenths on a number line ➢ Relate tenths in fractions to tenths in decimals ➢ Divide 1 digit by 10 ➢ Divide 2 digits by 10 ➢ Explore hundredths in a place value grid ➢ Explore hundredths on a number line ➢ Relate hundredths in fractions to hundredths in decimals. ➢ Divide 1 digits by 100 ➢ Divide 2 digits by 100 ➢ Bonds to 100 (from year2) ➢ Apply bonds to 100 to bonds to decimals making a whole ➢ Writing decimals ➢ Comparing decimals ➢ Ordering decimals ➢ Round decimals ➢ Begin to recognise decimal equivalents of halves and quarters

1 day a week

<u>Unit</u>	<u>Length and Perimeter</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> • Convert between different units of measure [for example, kilometre to metre; hour to minute] • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • solve simple measure and money problems involving fractions and decimals to two decimal places • estimate, compare and calculate different measures, including money in pounds and pence
<u>Small Steps Guidance</u>	<p>Whiterose Autumn Block 3 Revise equivalent lengths m and cm, cm and mm from year 3</p> <ul style="list-style-type: none"> ➢ Kilometres and convert between m and km ➢ Add and subtract lengths ➢ Solve word problems involving length. ➢ Perimeter on a grid ➢ Perimeter of a rectangle ➢ Perimeter of rectilinear shapes ➢ Find missing lengths in rectilinear shapes ➢ Calculate perimeter of rectilinear shapes ➢ Perimeter of regular polygons ➢ Perimeter of polygons



Term 6

<u>Unit</u>	<u>Money</u>	<u>Statistics</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> • solve simple measure and money problems involving fractions and decimals to two decimal places. • estimate, compare and calculate different measures, including money in pounds and pence 	<ul style="list-style-type: none"> • Pupils should be taught to: • 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. •
<u>Small Steps Guidance</u>	Whiterose Summer Block 2 <ul style="list-style-type: none"> ➢ Pounds and pence ➢ Ordering money ➢ Estimating money ➢ Converting pounds and pence ➢ Add money ➢ Subtract money ➢ Find change Solve word problems which involve money.	Whiterose Summer Block 4 <ul style="list-style-type: none"> ➢ Read and interpret bar charts ➢ Comparison, Sum and Difference bar charts/pictograms Introduce line graphs

1 day a week

<u>Unit</u>	<u>Time</u>
<u>National Curriculum Objectives</u>	<ul style="list-style-type: none"> • read, write and convert time between analogue and digital 12- and 24-hour clocks • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
<u>Small Steps Guidance</u>	Whiterose Summer Block 3 Revise telling the time to 5 minutes and 1 minute from Year 3. <ul style="list-style-type: none"> ➢ Am, pm ➢ Analogue to digital time 12 hour ➢ Analogue to digital 24 hour ➢ Hours, minutes seconds ➢ Years months weeks and days