

## Year 3 Autumn Term White Rose Planning

	Week 1 - Week 3	Week 4 - Week 8	Week 9 - Week 12		Week 13 – Week 15
	Place Value	Addition & Subtraction	Multiplication & Division A		Consolidation
White Rose Small Steps	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Represent numbers to 100 Step 2 Partition numbers to 100 Step 3 Number line to 100 Step 4 Hundreds Step 5 Represent numbers to 1,000 Step 6 Partition numbers to 1,000 Step 7 Flexible partitioning of numbers to 1,000 Step 8 Hundreds, tens and ones Step 9 Find 1, 10 or 100 more or less Step 10 Number line to 1,000 Step 11 Estimate on a number line to 1,000 Step 12 Compare numbers to 1,000 Step 13 Order numbers to 1,000 Step 14 Count in 50s <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Apply number bonds within 10 Step 2 Add and subtract 1s Step 3 Add and subtract 10s Step 4 Add and subtract 100s Step 5 Spot the pattern Step 6 Add 1s across a 10 Step 7 Add 10s across a 100 Step 8 Subtract 1s across a 10 Step 9 Subtract 10s across a 100 Step 10 Make connections Step 11 Add two numbers (no exchange) Step 12 Subtract two numbers (no exchange) Step 13 Add two numbers (across a 10) Step 14 Add two numbers (across a 100) Step 15 Subtract two numbers (across a 10) Step 16 Subtract two numbers (across a 100) Step 17 Add 2-digit and 3-digit numbers Step 18 Subtract a 2-digit number from a 3-digit number Step 19 Complements to 100 Step 20 Estimate answers Step 21 Inverse operations Step 22 Make decisions <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Multiplication – equal groups Step 2 Use arrays Step 3 Multiples of 2 Step 4 Multiples of 5 and 10 Step 5 Sharing and grouping Step 6 Multiply by 3 Step 7 Divide by 3 Step 8 The 3 times-table Step 9 Multiply by 4 Step 10 Divide by 4 Step 11 The 4 times-table Step 12 Multiply by 8 Step 13 Divide by 8 Step 14 The 8 times-table Step 15 The 2, 4 and 8 times-tables <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>		Y3 Autumn Term Assessment
	National Curriculum	Identify, represent and estimate numbers using different representations Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) Count from zero in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Count from zero in multiples of 4, 8, 50 and 100 Read and write numbers up to 1,000 in numerals and word Compare and order numbers up to 1,000 s	Add and subtract numbers mentally, including: <ul style="list-style-type: none"><li>• a 3-digit number and ones</li><li>• a 3-digit number and tens</li><li>• a 3-digit number and hundreds</li></ul> Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Estimate the answer to a calculation and use inverse operations to check answers	Show that multiplication of two numbers can be done in any order (commutative) and division on one number by another cannot (Y2) Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward (Y2) Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2) 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, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods	
Problem Solving	Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract). Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required. Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate. Independently find an efficient way to solve a range of problems. Independently work systematically. Independently find possibilities using patterns spotted to support. Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve). Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial). Independently investigate conjectures and provide examples and counter-examples. When they have solved a problem, pose a similar problem for a peer.		EXS	GDS	
			For all mathematical concepts, ideas and techniques: Represent it in a variety of ways (e.g. using concrete materials, pictures and symbols – the CPA approach). Make up his or her own examples (and non-examples) of it. See connections between it and other facts or ideas. Recognise it in new situations and contexts. Make use of it in various ways, including in new situations.	Solve problems of greater complexity (i.e. where the approach is not immediately obvious), demonstrating creativity and imagination. Independently explore and investigate mathematical contexts and structures.	
Reasoning	Provide a convinced argument. Reflect on others’ convinced explanations and use this to improve their work. Edit and improve their own and a peer’s convinced explanation. Investigate ‘what if?’ questions. Create ‘what if?’ questions.		Describe it in his or her own words. Explain it to someone else.	Communicate results clearly and systematically explain and generalise the mathematics.	

## Year 3 Spring Term White Rose Planning

	Week 1 - Week 3	Week 4 - Week 5	Week 6 - Week 8	Week 9 - Week 11	Week 11
	Multiplication & Division B	Measurement (length & perimeter)	Fractions	Measurement (mass & capacity)	Consolidation
White Rose Small Steps	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Multiples of 10 Step 2 Related calculations Step 3 Reasoning about multiplication Step 4 Multiply a 2-digit number by a 1-digit number – no exchange Step 5 Multiply a 2-digit number by a 1-digit number – with exchange Step 6 Link multiplication and division Step 7 Divide a 2-digit number by a 1-digit number – no exchange Step 8 Divide a 2-digit number by a 1-digit number – flexible partitioning Step 9 Divide a 2-digit number by a 1-digit number – with remainders Step 10 Scaling Step 11 How many ways? <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Measure in metres and centimetres Step 2 Measure in millimetres Step 3 Measure in centimetres and millimetres Step 4 Metres, centimetres and millimetres Step 5 Equivalent lengths (metres and centimetres) Step 6 Equivalent lengths (centimetres and millimetres) Step 7 Compare lengths Step 8 Add lengths Step 9 Subtract lengths Step 10 What is perimeter? Step 11 Measure perimeter Step 12 Calculate perimeter <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Understand the denominators of unit fractions Step 2 Compare and order unit fractions Step 3 Understand the numerators of non-unit fractions Step 4 Understand the whole Step 5 Compare and order non-unit fractions Step 6 Fractions and scales Step 7 Fractions on a number line Step 8 Count in fractions on a number line Step 9 Equivalent fractions on a number line Step 10 Equivalent fractions as bar models <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> Step 1 Use scales Step 2 Measure mass in grams Step 3 Measure mass in kilograms and grams Step 4 Equivalent masses (kilograms and grams) Step 5 Compare mass Step 6 Add and subtract mass Step 7 Measure capacity and volume in millilitres Step 8 Measure capacity and volume in litres and millilitres Step 9 Equivalent capacities and volumes (litres and millilitres) Step 10 Compare capacity and volume Step 11 Add and subtract capacity and volume <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	Y3 Spring Term Assessment
	National Curriculum Objectives	Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2) Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-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	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Measure the perimeter of simple 2-D shapes	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Compare and order unit fractions, and fractions with the same denominators Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Recognise and show, using diagrams, equivalent fractions with small denominators	
Problem Solving	Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract). Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required. Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate. Independently find an efficient way to solve a range of problems. Independently work systematically. Independently find possibilities using patterns spotted to support. Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve). Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial). Independently investigate conjectures and provide examples and counter-examples. When they have solved a problem, pose a similar problem for a peer.		EXS		GDS
			For all mathematical concepts, ideas and techniques: Represent it in a variety of ways (e.g. using concrete materials, pictures and symbols – the CPA approach). Make up his or her own examples (and non-examples) of it. See connections between it and other facts or ideas. Recognise it in new situations and contexts. Make use of it in various ways, including in new situations.		
Reasoning	Provide a convinced argument. Reflect on others’ convinced explanations and use this to improve their work. Edit and improve their own and a peer’s convinced explanation. Investigate ‘what if?’ questions. Create ‘what if?’ questions.		Describe it in his or her own words. Explain it to someone else.		Communicate results clearly and systematically explain and generalise the mathematics.

## Year 3 Summer Term White Rose Planning

	Week 1 - Week 2	Week 3 - Week 4	Week 5 - Week 7	Week 8 - Week 9	Week 10 - Week 11	Week 12 – Week 13
	Fractions	Measurement ( <i>money</i> )	Measurement ( <i>time</i> )	Geometry ( <i>shape</i> )	Statistics	Consolidation
White Rose Small Steps	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> <b>Step 1</b> Add fractions <b>Step 2</b> Subtract fractions <b>Step 3</b> Partition the whole <b>Step 4</b> Unit fractions of a set of objects <b>Step 5</b> Non-unit fractions of a set of objects <b>Step 6</b> Reasoning with fractions of an amount <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> <b>Step 1</b> Pounds and pence <b>Step 2</b> Convert pounds and pence <b>Step 3</b> Add money <b>Step 4</b> Subtract money <b>Step 5</b> Find change <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> <b>Step 1</b> Roman numerals to 12 <b>Step 2</b> Tell the time to 5 minutes <b>Step 3</b> Tell the time to the minute <b>Step 4</b> Read time on a digital clock <b>Step 5</b> Use am and pm <b>Step 6</b> Years, months and days <b>Step 7</b> Days and hours <b>Step 8</b> Hours and minutes – use start and end times <b>Step 9</b> Hours and minutes - use durations <b>Step 10</b> Minutes and seconds <b>Step 11</b> Units of time <b>Step 12</b> Solve problems with time <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> <b>Step 1</b> Turns and angles <b>Step 2</b> Right angles <b>Step 3</b> Compare angles <b>Step 4</b> Measure and draw accurately <b>Step 5</b> Horizontal and vertical <b>Step 6</b> Parallel and perpendicular <b>Step 7</b> Recognise and describe 2-D shapes <b>Step 8</b> Draw polygons <b>Step 9</b> Recognise and describe 3-D shapes <b>Step 10</b> Make 3-D shapes <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<u>Y2 PRE-ASSESSMENT and ADDRESS GAPS</u> <b>Step 1</b> Interpret pictograms <b>Step 2</b> Draw pictograms <b>Step 3</b> Interpret bar charts <b>Step 4</b> Draw bar charts <b>Step 5</b> Collect and represent data <b>Step 6</b> Two-way tables <u>Y3 POST ASSESSMENT and ADDRESS GAPS</u>	<b>Y3 Summer Term Assessment</b>
National Curriculum Objectives	Add and subtract fractions with the same denominator within one whole Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Add and subtract amounts of money to give change, using both £ and p in practical contexts	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, am/pm, 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	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 Measure the perimeter of simple 2-D shapes Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables	
Problem Solving	Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract). Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required. Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate. Independently find an efficient way to solve a range of problems. Independently work systematically. Independently find possibilities using patterns spotted to support. Independently check and improve work (e.g. look for other possibilities, repeats, missing answers, errors and ways to improve). Pattern spot and predict what will come next in a pattern/sequence (numbers, shape or spatial). Independently investigate conjectures and provide examples and counter-examples. When they have solved a problem, pose a similar problem for a peer.			<b>EXS</b>  For all mathematical concepts, ideas and techniques: Represent it in a variety of ways ( <i>e.g. using concrete materials, pictures and symbols – the CPA approach</i> ). Make up his or her own examples ( <i>and non-examples</i> ) of it. See connections between it and other facts or ideas. Recognise it in new situations and contexts. Make use of it in various ways, including in new situations.		<b>GDS</b>  Solve problems of greater complexity ( <i>i.e. where the approach is not immediately obvious</i> ), demonstrating creativity and imagination. Independently explore and investigate mathematical contexts and structures.
Reasoning	Provide a convinced argument. Reflect on others' convinced explanations and use this to improve their work. Edit and improve their own and a peer's convinced explanation. Investigate 'what if?' questions. Create 'what if?' questions.			Describe it in his or her own words. Explain it to someone else.		Communicate results clearly and systematically explain and generalise the mathematics.