Year 3 teaching overview

Autumn	1	2	3	4	5	6	7	8	9	10	11	12
Times tables	Count in multiples of 3 up to 12x3 fluently. Start to recall multiples of 3 up to 12x3.						Recall multiples of 3 up to 12x3 in any order, including missing number problems and related division facts fluently. Count in multiples of 4 to 12x4 with growing fluency. Introduce relating x4 to counting in multiples of 8.					
White Rose	<u>Number Place Value</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>Number Addition and Subtraction</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 a10 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 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>Number Multiplication and Division</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			
National Curriculum links	Identify, represent and estimate numbers using different representations. 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. Read and write numbers up to 1000 in numerals and in words. Solve number problems and practical problems involving these ideas. Count from 0 in multiples of 4, 8, 50 and 100.			Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens, a three digit number and hundreds. 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. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.					Count from 0 in multiples of 4, 8, 50 and 100. 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 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 objectives.			
Spring	1	2	3	4	5	6	7	8	9	10	11	12

Times tables	Recall multiples of 3 up to 12x3 in any order, including missing number problems and related division facts fluently. Count in multiples of 4 to 12x4 fluently. Count in multiples of 8 to 12x8 with growing fluency.						Recall multiples of 4 up to 12x4 in any order, including missing number problems and related division facts fluently. Count in multiples of 8 to 12x8 fluently.					
White Rose	<u>Number Multiplication and Division</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>Measurement Length and Perimeter</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 length Step 10 What is perimeter? Step 11 Measure perimeter Step 12 Calculate perimeter			<u>Number Fractions A</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 on a bar model			<u>Measurement Mass and Capacity</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		
National Curriculum Links	Count from 0 in multiples of 4, 8, 50 and 100. 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 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 objectives.			Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2D shapes.			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 and use fractions as numbers: unit fractions and nonunit fractions with small denominators. Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators. Solve problems that involve all of the above.			Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm). The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or 5 times as high) and this connects to multiplication.		
Summer	1	2	3	4	5	6	7	8	9	10	11	12
Times tables	Recall multiples of 4 up to 12x4 in any order, including missing number problems and related division facts fluently. Recall multiples of 8 up to 12x8 in any order, including missing number problems and related division facts with growing fluency.						Recall multiples of 8 up to 12x8 in any order, including missing number problems and related division facts fluently.					

White Rose	Number Fractions B	Measurement Money	Measurement Time	Geometry Shape	Statistics	
	Step 1 Add fractions Step 2 Subtract fractions Step 3 Partition the whole Step 4 Unit fractions of a set of objects Step 5 Non-unit fractions of a set of objects Step 6 Reasoning with fractions of an amount	Step 1 Pounds and pence Step 2 Convert pounds and pence Step 3 Add money Step 4 Subtract money Step 5 Find change	Step 1 Roman numerals to 12 Step 2 Tell the time to 5 minutes Step 3 Tell the time to the minute Step 4 Read time on a digital clock Step 5 Use am and pm Step 6 Years, months and days Step 7 Days and hours Step 8 Hours and minutes – use start and end times Step 9 Hours and minutes - use durations Step 10 Minutes and seconds Step 11 Units of time Step 12 Solve problems with time	Step 1 Turns and angles Step 2 Right angles Step 3 Compare angles Step 4 Measure and draw accurately Step 5 Horizontal and vertical Step 6 Parallel and perpendicular Step 7 Recognise and describe 2-D shapes Step 8 Draw polygons Step 9 Recognise and describe 3D shapes Step 10 Make 3D shapes	Step 1 Interpret pictograms Step 2 Draw pictograms Step 3 Interpret bar charts Step 4 Draw bar charts Step 5 Collect and represent data Step 6 Two-way tables	

National Curriculum Links	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 and use fractions as numbers: unit fractions and nonunit fractions with small denominators.
	Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators.
	Solve problems that involve all of the above.
		Pounds and pence.
		  Converting pounds and pence.
		  Adding money.
		  Subtracting money.
		Giving change
			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].
				Recognise angles as a property of shape or a description of a turn.
				  Identify right angles, recognise that two right angles make a halfturn, 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.
				  Draw 2-D shapes and make 3-D shapes using modelling materials.
				Recognise 3-D shapes in different orientations and describe them.
					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	