Year 4 Mathematics Content Map

Unit and time	Skill	Reasoning	Problem Solving
	TERM 1		
Addition and Subtraction **(Column method review – 3 digit numbers only)** **1 week** NCETM – unit 1 (you could adapt White Rose too)	• add and subtract numbers with up to 3 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	Make an estimate	
Place Value **5 weeks** NCETM – unit 2 White Rose	• recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) • count in multiples of 1,000 • find 1,000 more or less than a given number • order and compare numbers beyond 1,000 • identify, represent and estimate numbers using different representations • round any number to the nearest 10, 100 or 1,000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • count backwards through 0 to include negative numbers • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Continue the pattern Do, then explain Possible answers	
Measurement - Area **1 week** White Rose	• Find the area of rectilinear shapes by counting squares	Always, sometimes, never	
	TERM 2		
Addition and Subtraction **2 weeks** White Rose (apply principles from NCETM unit 1 where appropriate)	• 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	Make an estimate Convince me	Exploring and noticing
Multiplication and division	• recall multiplication and division facts for multiplication tables – 3, 6 and 9 *(recap 2, 4 5, 8 and*	Fact families	

(3,6 and 9 times tables only) 3 weeks NCETM unit 4 White Rose (step 1 -6 only)	*10 – 3 taught in year 3 – focus on the relationship between the 3, 6 and 9 x)* • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers • recognise and use factor pairs and commutativity in mental calculations	What do you notice?	
Measurement – perimeter 2 weeks NCETM unit 3 White Rose	• measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Always, sometimes, never Convince me	
TERM 3 – 6 weeks			
Multiplication and division 6 weeks NCETM unit 5 and 6 White Rose (Multiplication B)	• count in multiples of 6, 7, 9, 25 and 1,000 • 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 3 numbers • 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 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects *ensure you cover previously taught objectives and include measure in problems*	Estimate (size of an answer) Prove it Hard and easy questions	Working systematically
TERM 4 – 6 weeks			
Statistics 1 weeks White Rose	• 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	What's the same? What's different?	Visualising
Fractions 5 weeks NCETM unit 8 and 9 White Rose	• recognise and show, using diagrams, families of common equivalent fractions • count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 • solve problems involving increasingly harder fractions to calculate quantities, and fractions to	True or false Odd one out Spot the mistake	

	divide quantities, including non-unit fractions where the answer is a whole number • add and subtract fractions with the same denominator • solve simple measure and money problems involving fractions		
TERM 5 – 4 ½ weeks			
Decimals **4 weeks** White Rose	• recognise and write decimal equivalents of any number of tenths or hundreds • recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ • 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 1 decimal place to the nearest whole number • compare numbers with the same number of decimal places up to 2 decimal places • solve simple measure and money problems involving fractions and decimals to 2 decimal places	Another and another Do, then explain Continue the pattern	Conjecturing and generalising
Time **½ week** NCETM unit 11 White Rose	• read, write and convert time between analogue and digital 12- and 24-hour clocks	What do you notice?	
TERM 6 – 6 weeks			
Time **1 week** NCETM unit 11 White Rose	• convert between different units of measure [for example, kilometre to metre; hour to minute] • estimate, compare and calculate different measures • solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days	What else do you know?	Reasoning and convincing
Money **1 week** White Rose	• convert between different units of measure • estimate, compare and calculate different measures, including money in pounds and pence	The answer is … what's the question?	
Shape **2 weeks**	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Visualising What's the same? What's different?	

NCETM unit 10 White Rose	• identify acute and obtuse angles and compare and order angles up to 2 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		
Position and direction **1 week** NCETM unit 7 White Rose	• describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon	Working backwards	
Statistics **1 week** White Rose	• 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	Create a question	