Year 4

Children know how to:	Opportunities and ideas for journaling. "How do mathematicians.."	Problem Solving and reasoning opportunities	NCETM Spine and Assessment Materials
AUTUMN			
Number: Place Value (4 WEEKS)			Year 4 – Spine 1
Roman numerals to 100	White Rose Activities	NRICH	1.22: TP 1.1-1.8, 2.1-2.9
Round to the nearest 10		What distance?	
Round to the nearest 100	Represent numbers to 10,000	Nice or Nasty	1.22: TP 3.1- 3.8
Count in 1000s		Dicey Operations	
1000s, 100s, 10s, and 1a	Introducing Negative Numbers	The Deca Tree	1.22: TP 4.1- 4.13
Partitioning		Four-digit Targets	
Number line to 10000		Ordering journeys	Yr4 NCETM assessment materials
1000 more or less	How do mathematicians round numbers?	Representing numbers	Page 9-11
Compare numbers		Reasoned rounding	
Order numbers			
Round to the nearest 1000	How do mathematicians represent numbers differently?	I See Reasoning Page 7-34	
Count in 25s			
Negative numbers			
Number: Addition and Subtraction (3 WEEKS)			Year 4 – Spine 1
Add and subtract 1s, 10s, 100s, and 1000s	How do mathematicians add?	NRICH	1.22: TP 5.1- 5.6
Add two 4-digit numbers- no exchange		Fifteen Cards	
Add two 4-digit numbers- one exchange		Money Bags	Yr4 NCETM assessment materials
Add two 4-digit numbers- more than one exchange	How do mathematicians subtract?	Amy's Dominoes	Page 12-14
Subtract two 4-digit numbers – no exchange		Sealed Solution	
Subtract two 4-digit numbers – one exchange		Roll These Dice	
Subtract two 4-digit numbers – more than one exchange	How do mathematicians estimate answers?		
Efficient subtraction		I See Reasoning Page 35-59	
Estimate answers			
Checking strategies	How do mathematicians check answers?		
Measurement: Time (1 WEEK)			Year 4 – Spine 1
Hours, minutes and seconds	How do mathematicians measure time?		1.24 TP: 5.9
Years, months, weeks and days			
Analogue to digital – 12 hour			Yr4 NCETM assessment materials
Analogue to digital – 24 hour	How do mathematicians convert time?		Page 22-24

Number: Multiplication and Division (1) (3 WEEKS)			**Year 4 – Spine 2**
Multiply by 10	How do mathematicians multiply/divide by 10/100? How do mathematicians multiply by ...?	NRICH Multiplication Square Jigsaw Shape Times Shape Let Us Divide! Carrying Cards Light the Lights Again Multiples Grid Zios and Zepts Times Tables Shifts Table Patterns Go Wild! I See Reasoning Page 60-92	2.10: TP 1.1- 1.8, 2.1-2.10, 3.1-3.3 2.11: TP 1.1- 1.9 2.11: TP 2.1-2.8, 3.1- 3.2 2.11: TP 4.1-4.3 2.12: TP 1.1-1.8, 2.1-2.6, 3.1-3.5 Yr4 NCETM assessment materials Page 15-17
Multiply by 100			
Divide by 10			
Divide by 100			
Multiply by 1 and 0			
Divide by 1 and itself			
Multiply and divide by 6			
6 times table and division facts			
Multiply and divide by 9			
9 times table and division facts			
Multiply and divide by 7			
7 times table and division facts			
SPRING			
Number: Multiplication and Division (2) (3 WEEKS)			**Year 4 – Spine 2**
11 and 12 times-table	How do mathematicians find all factor pairs? How do mathematicians use an efficient written method for multiplication? How do mathematicians divide numbers?	See above	2.13: TP 1.1-1.9, 6.1-6.7 2.14: TP 1.1- 1.6, 2.1-2.15 2.13: TP 3.1-3.8, 5.1-5.7, 7.1-7.8 2.14: TP 3.1- 3.4, 4.1- 4.7 2.15: TP 1.1- 1.7, 2.1-2.10 2.15: TP 3.1- 3.4, 4.1-4.11 Yr4 NCETM assessment materials Page 15-17
Multiply 3 numbers			
Factor pairs			
Efficient multiplication			
Written methods			
Multiply 2-digits by 1-digit			
Multiply 3-digits by 1-digit			
Divide 2-digits by 1-digit (1)			
Divide 2-digits by 1-digit (2)			
Divide 3-digits by 1-digit			
Correspondence problems			
Measurement: Length and Perimeter (1 WEEK)			
Kilometres			
Perimeter on a grid			
Perimeter of a rectangle			
Perimeter of rectilinear shapes			
Measurement: Area (1 WEEK)			
What is area?			
Counting squares			
Making shapes			

Comparing area			
Number: Fractions (4 WEEKS)			
What is a fraction?			
Equivalent fractions (1)			
Equivalent fractions (2)			
Fractions greater than 1			
Count in fractions			
Add 2 or more fractions			
Subtract 2 fractions			
Subtract from whole amounts			
Calculate fractions of a quantity			
Problem solving- calculate quantities			
Measurement: Money (2 WEEKS)			
Pounds and pence	Big focus on addition and subtraction		
Ordering money			
Estimating money			
Four operations			
SUMMER			
Number: Multiplication and Division (1 WEEK)			
Times table and written method	Consolidation of earlier times tables and training for MTC		
Number: Decimals (3 WEEKS)			
Recognise tenths and hundredths			
Tenths as decimals			
Tenths on a place value grid			
Tenths on a number line			
Divide 1-digit by 10			
Divide 2-digits by 10			
Hundredths			
Hundredths as decimals			
Hundredths on a place value grid			
Divide 1 or 2-digits by 100			
Number: Decimals (2 WEEKS)			
Make a whole			
Write decimals			
Compare decimals			
Order decimals			
Round decimals			
Halves and quarters			

Number: Addition and Subtraction (1 WEEKS)			
Consolidation of earlier methods			
Geometry: Properties of shapes (3 WEEKS)			
Identify angles			
Compare and order angles			
Triangles			
Quadrilaterals			
Lines of symmetry			
Complete a symmetric figure			
Geometry: Position and Direction (1 WEEK)			
Describe position			
Draw on a grid			
Move on a grid			
Describe a movement on a grid			