Year 4- Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Number-Place Value				Number- Addition & Subtraction			Measure- Length & Perimeter	Number: Multiplication & Division					Consolidate
Spring	Measure: Area		Number: Fractions				Number: Decimals				Geometry: Properties of shape		Consolidate	
Summer	Measure: Time		Measure: Money	Geometry: Position & Direction	Statistics		Number- Addition & Subtraction/ Multiplication & Division- Recap		Number: Fractions - Recap		Consolidate	Note: Sports week – will be attendance statistics week.		

Autumn one

Place value - Starter 10mins

Counting Week 1	**Partitioning Week 2**	**Counting Week 3**	**Counting Week 4**
Count from 0 in multiples 50 and 100. *Review counting in 5s and 10s. Discuss how multiples of 5, 10, 50 and 100 end in 0 or 5. Use counting sticks, hundred square and/or gattegno charts.*	Partition numbers up to 1000 in as many different ways as possible. ***56** = 50 + 6, 25 + 25 + 6, 50 + 3 + 3...* *Progress to apply the above skill to 3 digit numbers.*	Count in multiples of 6. *Review counting in 3s and discuss the relationship between 3 and 6, double 3 is 6. Explore using that knowledge to calculate, for example, if I know 4 x 3 = 12, I can double 12 to answer 4x6=24.* *Use counting sticks, hundred squares and/or gattegno charts to model counting in multiples of 6s.*	Count in multiples of 7. *Use counting sticks, hundred squares and/or gattegno charts to model counting in multiples of 7s.*

NCETM PD Materials		**National Curriculum**
Week 1 to Week 4 Place Value **Number- Review of Place Value and Column addition and subtraction (up to 3- digits)** Spine 1 – 1-20 Teaching point 3-4 Spine 1 – 1.21 Teaching point 1-2 **Number-Place Value** Spine 1 – 1.22 – Teaching point 3 ordering - Teaching point 4 rounding	**Reasoning and problem-solving questions to be completed in this unit- Resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths.**10 questions of varied difficulties to use at the end of the unit. **NCETM- ready to progress year 4- Slide 2 – 4 & 16**	*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 or 1000 *Solve number and practical problems that involve all the above and with increasingly large positive numbers

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<table>
<tr><td>STOP at Teaching point 4</td><td colspan="2">Stem sentences to be included & recorded in books. Use ping pong effect with children & choral response for recalling maths strategies.

Additional resources are available on White Rose</td><td colspan="2"></td></tr>
<tr><td>Week 5 Addition & Subtraction- Starter 10mins</td><td>Partitioning Week 5

Partition numbers up to four digits in as many different ways as possible.

56 = 50 + 6, 25 + 25 + 6, 50 + 3 + 3…

Progress to apply the above skill to 3 and 4 digit numbers.</td><td>Adjust to subtract Week 6

Use number line to add on to subtract. Adding up to nearest tens.

87-25 =

25_____87

Progress to apply the above skill to 4 digit numbers.</td><td>Compensate to subtract Week 7

35 – 18 = ?

Add two to 18 to make 20 (friendly number)…
35 - 20 = 15

Then add 2 back on…
15+2=17

Progress to apply the above skill to 3 and 4 digit numbers.</td><td></td></tr>
<tr><td>Week 5 Addition & Subtraction
Number -Addition and Subtraction
Spine 1 – 1.20 starting point Teaching point 5
Spine 1 – 1.21 Revisit if needed, written methods
Spine 1 – 1.22 Teaching point 3 add, subtract, 10’s,100’s 1000’s
1.22 Teaching point 5 and 6, addition 3 digit & 4-digit addition
Spine 1 – 1.27 Negative numbers teaching point 1</td><td colspan="2">Reasoning and problem-solving questions to be completed in this unit- check out NCETM reasoning site

Mastery assessment – deep understanding of maths.12 questions of varied difficulties to use at the end of the unit.

Stem sentences to be included & recorded in books. Use ping pong effect with children & choral response for recalling maths strategy.

Additional resources are available on White Rose.</td><td colspan="2">*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.</td></tr>
<tr><td>Week 8 Measures
Starter – 10mins</td><td colspan="2">Number bonds to add Week 8

Use number bonds to add mentally.

13 + 7 = ? 3+7 = 10 so 10 + 10 = 20

23 + 7 = 3 +7 = 10, so 10 +20 = 30…</td><td colspan="2"></td></tr>
</table>

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	Progress to apply the above skill to 3 digit number and 4 digit numbers			
Week 8 Measures **Length & Perimeter** Spine 2 – 2.16 Teaching points 1&2 (recap from year 3) teaching point 3 Multiplicative contexts; are & perimeter	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths.** 4 questions of varied difficulties to use at the end of the unit. **NCETM -ready to progress year 4- Slide 23-24** **Stem sentences to be included & recorded in books. Use ping pong effect with children & choral response for recalling maths strategy** Additional resources available on White Rose.		* 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 * Estimate, compare and calculate different measures.	
Week 9 Multiple & Division **Starter 10 mins**	**X 10, 100 and 1000 mentally. Week 9** *Children need to understand that the answer increases in multiplication. The Dienes and the 1, 10, 100, 1000 show visually what happens as the digits move left.*	**Dividing mentally: Week 10** *Use place value, known and derived facts to divide mentally, including: dividing by 1.*	**Multiplication and Division Week 11** *Continue to multiply and divide by 10, 100 and 1000 mentally in preparation for converting measures later in the year.*	**Dividing by 4. Week 12** *Encourage children to halve the number and halve again when dividing by 4. Model this by cutting a 2D shape in half, then halving it again to model quarters.*
Week 9 Multiple & Division **Number- Multiply & Division** Spine 2 – 2.6 Teaching point 5 (for x * 0 & 1) Spine 2- 2.8 (6x & 9x) Spine 2- 2.9 (7x) Spine 2- 2.13 (x * 10 &100) Spine 2 -2.11 (11x,12x)	**Reasoning and problem-solving questions to be completed in this unit- additional resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths.** 8 questions of varied difficulties to use at the end of the unit. **NCETM- ready to progress year 4- Slide 8 – 15** **Stem sentences to be included & recorded in books. Use ping pong effect with children & choral response for recalling maths strategy.**		*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 *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	

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	Additional resources available on White Rose	
Week 14 Consolidate		
Week 14- Starter 10 mins		
Spring		
Week 1- Measure **Starter 10 mins**		
Week 1 – Measure **Measure: Area** Spine 2- 2.16 Teaching points 4-6; Multiplicative contexts: area & perimeter 1 Indian Man Video	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site** **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy.**	*Find the area of rectilinear shapes by counting squares
Week 3- Number Fractions **Starter 10 mins**		
Week 3- Number Fractions Spine 3-3.5 Teaching points 1-6; working across one whole; improper fractions & mixed numbers Spine 3- 3.7 Teaching points 1-2; finding equivalent fractions & simplifying fractions	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths.** 12 questions of varied difficulties to use at the end of the unit. **NCETM- ready to progress year 4- Slide 17- 20** **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy**	*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 one hundred and dividing tenths by ten *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

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Week 7- Number Decimals **Starter 10 mins**		
Week 7- Number Decimals Spine 1 – 1.23 Teaching points 1-6; Composition & calculation: tenths Spine 1 – 1.24 Teaching points 1-7; Composition & calculation; hundredths & thousandths	**Reasoning and problem-solving questions to be completed in this unit- check out NCETM reasoning site** **Mastery assessment – deep understanding of maths.** 2 questions of varied difficulties to use at the end of the unit. **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy**	*Recognise and write decimal equivalents of any number of tenths or hundredths *Recognise and write decimal equivalents to ¼,1/2, 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 one decimal place to the nearest whole number *Compare numbers with the same number of decimal places up to two decimal places *Solve simple measure and money problems involving fractions and decimals to two decimal places
Week 11- Geometry **Starter 10 mins**		
Week 11- Geometry: Properties of Shape Oak Academy- Maths Year 4; unit 25 - 2D Shape & Symmetry - lesson 11 – 15 Split pin angle measure to make. Geoboards	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths.** 4 questions of varied difficulties to use at the end of the unit. **NCETM - ready to progress year 4- Slide 25-26** **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy**	*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.
Week 13 **Starter 10 mins**		
Week 13 Consolidate		

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Summer		
Week 1- Measure **Starter 10 mins**		
Week 1- Measure: Time Oak Academy- Maths Year 4; unit 28, 5 lessons	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site.** **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy**	*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.
Week 3- Measure **Starter 10 mins**		
Week 3- Measure: Money Spine 1 – 1.25 Teaching points 1-5 Addition & Subtraction; Money	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site.** **Stem sentences to be included & recorded in books.** **Use ping pong effect with children & choral response for recalling maths strategy**	*Estimate, compare and calculate different measures, including money in pounds and pence * Solve simple money and measure problems involving fractions and decimals to two decimal places.
Week 4- Geometry **Starter 10 mins**		
Week 4- Geometry: Position & Direction Oak Academy- Maths Year 4; unit 26- Position & Direction; 5 lessons	**Reasoning and problem-solving questions to be completed in this unit- resources available on the NCETM reasoning site** **Mastery assessment – deep understanding of maths**. 2 questions of varied difficulties to use at the end of the unit. **NCETM- ready to progress year 4- Slide 21-22 & 25-26**	*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

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	Stem sentences to be included & recorded in books. Use ping pong effect with children & choral response for recalling maths strategy	
Week 6 **Starter 10 mins**		
Week 6- Statistics Attendance Data for whole school	Whole school attendance statistic	*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
Week 7- Addition & Subtraction **Starter 10 mins**		
Week 7-Number: Addition, Subtraction, Multiply & Division Recap		Notes and guidance (non-statutory) Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency. Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency. Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example 600 ÷ 3 = 200 can be derived from 2 x 3 = 6) Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers.
Week 9- Fractions **Starter 10 mins**		
Week 9- Number: Fractions Recap		Notes and guidance (non-statutory) Pupils should connect hundredths to tenths and place value and decimal measure. They extend the use of the number line to connect fractions, numbers and measures. Pupils understand the relation between non-unit fractions and multiplication and division of quantities, with particular emphasis on tenths and hundredths. Pupils continue to practise adding and subtracting fractions with the same denominator, to become fluent through a variety of increasingly complex problems beyond one whole.

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Week 11 **Starter 10 mins**		
Week 11 Consolidate		