Year 4 Maths Long Term Overview Scheme 3.0

Rationale

This overview is designed to run alongside the White Rose Schemes of Learning (Version 3.0) found here. The small steps within White Rose are not necessarily designed to cover one lesson so some may be repeated which can be used to consolidate concepts or allow children greater access to reasoning and problem solving. This is particularly evident in the Y1 schemes. The lessons that are linked to the DFE ready to progress criteria are identified with a reference such as **(NPV-1),** teachers can use these to refer to the document for additional planning support. Due to differing term lengths, these overviews do not directly match those on White Rose. For instance, some units are started earlier in the term or the term before, but they all correlate with the schemes of learning.

Vocabulary

There are also two vocabulary rows on the document, which show the subject specific vocabulary that needs to be introduced or re-introduced as part of the unit as well as what should have been covered in the previous year group. It is essential that teachers refer to previous year's vocabulary especially if children are not secure. If children are still struggling to define certain pieces of vocabulary, teachers should be encouraged to reintroduce them. Whole school vocabulary progression documents are within the Maths area on ReachIn and this language is also present on the accompanying knowledge organisers.

Consolidation/revisiting

The consolidation row has been removed from the most recent overviews as we suggest that the White Rose 'Flashback 4s' are used to revisit and consolidate learning as they reduce workload for teachers and comprehensively revisit taught content. If you chose not to use these, teachers should be encouraged to spend half the week looking at the previous year's small steps before teaching a unit and revisit them briefly. For the other half, they'd be encouraged to revisit learning they've done during the current year.

Also, the new White Rose schemes have removed the explicit recap sessions, however the beginning of the units include steps from the previous year to ensure children have the required knowledge to access new learning.

Assessment/Consolidation Weeks

The end of unit assessments have been left in, these can be taken from the previous years' resources as they will broadly match the topic being taught. Finally, within the plans there are also assessment/consolidation weeks which have been put in to revisit topics children struggled with or as buffers for if and when units overrun to accommodate assessments, trips, productions etc. These documents are also fully editable so topics or assessment weeks can be moved around or lengthened if necessary and to accommodate different term lengths. The term lengths are kept as seven weeks for the two autumn half terms and summer 2 and six for the rest. However, they can be adapted to meet differing term lengths

Autumn 1	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**
Units	**Number: Place Value**	**Number: Place Value**	**Number: Place Value**	**Number: Place Value**	**Number: Addition and subtraction**	**Number: Addition and subtraction**	**Number: Addition and subtraction**
Lesson objectives (Small steps)	1) Represent numbers to 1,000 **(NPV-2)** 2)Partition numbers to 1,000 **(NPV-2)** 3)Number line to 1,000 **(NPV-3)** 4) Thousands **(NPV-2)**	5) Represent numbers to 10,000 **(NPV-2)** 6) Partition numbers to 10,000 **(NPV-2)** 7) Flexible partitioning of numbers to 10,000 **(NPV-2)** 8) Find 1, 10, 100, 1000 more or less **(NPV-3)**	9) Number line to 10,000 **(NPV-3)** 10) Estimate on a number line to 10,000 **(NPV-3)** 11) Compare numbers to 10,000 **(NPV-3)** 12) Order numbers to 10,000 **(NPV-3)** 13) Roman numerals	14)Round to the nearest 10 **(NPV-3)** 15)Round to the nearest 100 **(NPV-3)**1) Count in 25s **(NPV-3)** 16) Round to the nearest 1,000 **(NPV-3)** 17) Round to the nearest 10, 100 or 1,000 18) Mini assessment (end of unit assessment)	1) Add and subtract 1s, 10s, 100s and 1000s 2) Add up to two 4-digit numbers – no exchange 3) Add two 4-digit numbers – one exchange 4) Add two 4-digit numbers – More than one exchange	5) Subtract two 4-digit numbers – no exchange 6) Subtract two 4-digit numbers – one exchange 7) Subtract two 4-digit numbers – more than one exchange	8) Efficient subtraction 9) Estimate answers 10) Checking strategies 11) Mini-assessment (end of unit assessment)
Vocabulary (Year group specific)	Four-digit Thousands	Four-digit Thousands 1000 more 1000 less	Thousands Four-digit 1000 more 1000 less Roman Numerals Round	Thousands 1000 more 1000 less Four-digit Round	4-digit number Thousands Operations Methods	4-digit number Thousands Operations Methods	4-digit number Thousands Operations Methods
Previous years Vocabulary	Count in multiples 3-digit number Hundreds 10 or 100 more 10 or 100 less	Count in multiples 3-digit number Hundreds 10 or 100 more 10 or 100 less	Count in multiples 3-digit number Hundreds 10 or 100 more 10 or 100 less	Count in multiples 3-digit number Hundreds 10 or 100 more 10 or 100 less	3-digit number Hundreds Column addition Column subtraction Exchange Estimate Complements Operations	3-digit number Hundreds Column addition Column subtraction Exchange Estimate Complements Operations	3-digit number Hundreds Column addition Column subtraction Exchange Estimate Complements Operations

Autumn 2	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**
Units	**Measurement: Area**	**Number: Multiplication and division**	**Assessment/ consolidation week**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Consolidation**
Lesson objectives (Small steps)	1) What is area? 2) Count squares 3) Make shapes 4) Comparing areas 5) Mini-assessment (end of unit assessment Unit could be extended to be over two weeks and time taken from assessment week or Multiplication and Division	1) Multiples of 3 **(NF1, MD-2)** 2)Multiply and divide by 6 **(NF1, MD-2)** 3) 6 times-table and division facts **(NF1, MD-2)**	Week can be used to carry out assessment or as an opportunity to consolidate learning done so far. Also can be used as a buffer for any units that overrun such as area	4) Multiply and divide by 9 **(NF1, MD-2)** 5) 9 times-table and division facts **(NF1, MD-2) 6** 6) 3, 6 and 9 times-table **(NF1, MD-2)**	7) Multiply and divide by 7 **(NF1, MD-2)** 8)7 times-table and division facts **(NF1, MD-2)** 9) 11 times-table and division facts **(NF1, MD-2)** 10) 12 times-table and division facts **(NF1, MD-2)**	11) Multiply by 1 and 0 12) Divide a number by 1 and itself **(NF1, MD-2)** 13) Multiply 3 numbers **(NF1, MD-2)** 14) Mini assessment/problem solving	Week used for additional activities on content learnt or as consolidation. Could also be used to bring forward the first week of next term.
Vocabulary (Year group specific)	Area	Derived facts Distributive law		Derived facts Distributive law	Derived facts Distributive law	Derived facts Distributive law	
Previous years Vocabulary	N/A	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Derived Facts		Mathematical statements Missing number problems Integer scaling problems Correspondence problems Derived Facts	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Derived Facts	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Derived Facts	

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Number: Multiplication and division B**	**Number: Multiplication and division B**	**Number: Multiplication and division B**	**Measurement: Length and perimeter**	**Measurement: Length and perimeter**	**Fractions**
Lesson objectives (Small steps)	1) Factor pairs **(MD-2)** 2) Use factor pairs **(MD-2)** 3) Multiply by 10 **(MD-1)** 4) Multiply by 100 **(MD-1)** 5) Divide by 10 **(MD-1)**	6) Divide by 100 **(MD-1)** 7) Related facts – multiplication and division **(MD-2)** 8) Informal written methods for multiplication 9) Multiply a 2-digit number by a 1-digit number 10) Multiply a 3-digit number by a 1-digit number	11) Divide a 2-digit number by a 1-digit number (1) 12) Divide a 2-digit number by a 1-digit number (2) 13) Divide a 3-digit number by a 1-digit number 14) Correspondence problems **(MD-3)** 15) Efficient multiplication **(MD-3)** 16) Mini-assessment (end of unit assessment)	1) Measure in kilometres and metres 2) Equivalent lengths (kilometres and metres) 3)Perimeter on a grid **(G-2)** 4) Perimeter of a rectangle **(G-2)** 5) Perimeter of rectilinear shapes **(G-2)**	6) Find missing shapes in rectilinear shapes **(G-2)** 7) Calculate the perimeter of rectilinear shapes **(G-2)** 8) Perimeter of regular polygons **(G-2)** 9) Perimeter of polygons **(G-2)** 10) Mini-assessment (end of unit assessment)	1) Understand the whole 2) Count beyond 1 3) Partition a mixed number **(F-2)** 4) Number lines with mixed numbers **(F-1)**
Vocabulary (Year group specific)	Formal written layout Factor pairs Distributive law	Formal written layout Factor pairs Distributive law Remainders	Formal written layout Factor pairs Distributive law Remainders	Rectilinear figure Kilometres	Rectilinear figure Kilometres	Convert Proper fractions Improper fractions
Previous years Vocabulary	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange Derived facts Remainders	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange Derived facts Remainders	Mathematical statements Missing number problems Integer scaling problems Correspondence problems Exchange Derived Facts Remainders	Millimetre mm Perimeter	Millimetre mm Perimeter	Equivalent fractions Tenths Numerator Denominator One whole

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Fractions**	**Fractions**	**Fractions**	**Decimals A**	**Decimals A**	**Decimals A**
Lesson objectives (Small steps)	5) Compare and order mixed numbers **(F-1)** 6) Understand improper fractions **(F-2)** 7) Convert mixed numbers to improper fractions **(F-2)** 8) Convert improper fractions to mixed numbers **(F-2)**	9) Equivalent fractions on a number line **(F-1)** 10) Equivalent fraction families **(F-1)** 11) Add two or more fractions **(F-3)** 12) Add fractions and mixed numbers **(F-3)**	13) Subtract two fractions **(F-3)** 14) Subtract from whole amounts **(F-3)** 15) Subtract from mixed numbers **(F-3)** 16) Mini assessment (end of unit assessment	1) Tenths as fractions 2) Tenths as decimals 3) Tenths on a place value chart 4) Tenths on a number line	5) Divide 1-digit number by 10 6) Divide 2-digit number by 10 7) Hundredths as fractions 8) Hundredths as decimals	9) Hundredths on a place value grid 10) Divide 1- or 2-digit number by 100 11) Mini assessment (end of unit assessment Rest of the week to be used for consolidation and ass buffer for any units that overrun.
Vocabulary (Year group specific)	Convert Proper fractions Improper fractions Mixed numbers	Convert Proper fractions Improper fractions Mixed numbers	Convert Proper fractions Improper fractions Mixed numbers	Decimal equivalence Hundredths	Decimal equivalence Hundredths	Decimal equivalence Hundredths
Previous years Vocabulary	Equivalent fractions Tenths Numerator Denominator One whole	Equivalent fractions Tenths Numerator Denominator One whole	Equivalent fractions Tenths Numerator Denominators One whole	Tenths	Tenths	Tenths

Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Decimals B**	**Decimals B**	**Money**	**Money**	**Time**	**Time**
Lesson objectives (Small steps	1) Make a whole with tenths 2) Make a whole with hundredths 3) Partition decimals 4) Flexibly partition decimals	5) Compare decimals 6) Order decimals 7) Round to the nearest whole number 8) Halves and quarters as decimals	1) Write money using decimals 2) Convert between pounds and pence 3) Compare amounts of money	4) Estimate with money 5) Calculate with money 6) Solve problems with money 7) Mini-assessment (end of unit assessment)	1) Years, months, weeks and days 2) Hours, minutes and seconds 3) Convert between analogue and digital time	4) Convert to the 24 hour clock 5) Convert from the 24 hour clock 6) Mini-assessment (end of unit assessment)
Vocabulary (Year group specific)	Decimal equivalence Hundredths	Decimal equivalence Hundredths	Consolidate previous years	Consolidate previous years	Convert	Convert
Previous years Vocabulary	Tenths	Tenths	Money Coins Notes Pounds £ Pence p Value Change	Money Coins Notes Pounds £ Pence p Value Change	Analogue clock Digital Roman numerals Noon Midnight Leap year a.m./p.m. 12-hour clock 24-hour clock	Analogue clock Digital Roman numerals Noon Midnight Leap year a.m./p.m. 12-hour clock 24-hour clock

Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Units	**Geometry: Properties of shapes**	**Geometry: Properties of shapes**	**Statistics**	**Geometry: Position and direction**	**Geometry: Position and direction**	**Consolidation**	
Lesson objectives (Small steps)	1) Understand angles as turns **(G-2)** 2) Identify angles **(G-2)** 3) Compare and order angles **(G-2)** 4) Triangles **(G-2)**	5) Quadrilaterals **(G-2)** 6) Polygons **(G-2)** 7) Lines of symmetry **(G-3)** 8) Complete a symmetric figure **(G-3)**	1) Interpret charts **(NPV-4)** 2) Comparison, sum and difference **(NPV-4)** 3) Interpret line graphs **(NPV-4)** 4) Draw line graphs **(NPV-4)**	1) Describe position using coordinates **(G-1)** 2) Plot coordinates **(G-1)** 3) Draw 2D shapes on a grid **(G-1)**	4) Translate on a grid **(G-1)** 5)Describe translation on a grid **(G-1)** 5) Mini-assessment/ problem solving	These weeks to act as buffer for any units that needed to be extended due to AFL. These weeks can be used as a reflection of previous assessments to address any gaps in knowledge children have within the current years' curriculum and to revisit and consolidate learning from the year. Once these are devised, they can be added to the overview.	

			5) Mini-assessment (end of unit assessment)				
Vocabulary (Year group specific)	Isosceles Equilateral Scalene Acute angle Obtuse angle	Trapezium Rhombus Parallelogram Kite Geometric shapes Quadrilaterals Symmetric	Line graph Discrete data Continuous data Comparison problem Sum problem Difference problem Calculate Interpret	Co-ordinates First quadrant Grid Translation Plot Polygon	Co-ordinates First quadrant Grid Translation Plot Polygon		
Previous years Vocabulary	Orientations Angles Turn Right angles Right angle triangle Half turn Three quarters of a turn Greater than right angle Less than right angle Horizontal lines Vertical lines Perpendicular lines Parallel lines	Right Angle Triangle Heptagon Octagon Polygon Prism Horizontal lines Vertical lines Perpendicular lines Parallel lines	Table Bar chart One step problem Two step problem	(Year 2) Straight line Rotation Order Arrange Sequences Clockwise/anti-clockwise	(Year 2) Straight line Rotation Order Arrange Sequences Clockwise/anti-clockwise		