Year 5 Maths Long Term Overview Version 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.

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: Addition and subtraction**	**Number: Addition and subtraction**	**Number: Multiplication and division A**	**Number: Multiplication and division A**
Lesson objectives (Small steps)	1) Roman numerals to 1000 2)Numbers to 10,000 3) Number to 100,000 4) Numbers to 1,000,000 5) Read and write numbers to 1,000,000 **(NPV-2)**	6) Powers of 10 **(MD-1)** 7)10/100/1000/10,000/ 1000,000 more or less **(NPV-3)** 8) Partition numbers to 1,000,000 **(NPV-3)** 9) Number line to 1,000,000 **(NPV-3)** 10) Compare and order numbers to 100,000 **(NPV-3)**	11) Compare and order numbers to a 1,000,000 **(NPV-3)** 12) Round to the nearest 10, 100 and 1,000 **(NPV-3)** 13) Round within 100,000 **(NPV-3)** 14) Round within 1,000,000 **(NPV-3)** 15) Mini assessment (end of unit assessment)	1) Mental strategies 2) Add whole numbers with more than four digits 3) Subtract whole numbers with more than four digits 4) Round to check answers	5) Inverse operations 6) Multi-step addition and subtraction problems 7) Compare calculations 8) Find missing numbers 9) Mini assessment (end of unit assessment)	1) Multiples **(MD-2)** 2) Common multiples **(MD-2)** 3) Factors **(MD-2)** 4) Common Factors **(MD-2)**	5) Prime numbers **(MD-2)** 6) Square numbers **(MD-2)** 7) Cube Numbers **(MD-2)**
Vocabulary (Year group specific)	Ten Thousand One Hundred Thousand Integer	Powers of Ten Thousand One Hundred Thousand Integer	Powers of Ten Thousand One Hundred Thousand Integer	Consolidate previous years' vocab	Consolidate previous years' vocab	Multiples Factors Prime numbers Product	Multiples Factors Prime numbers Square Numbers Cube Numbers Product
Previous years Vocabulary	1000 more 1000 less Count backwards Four digit Round Roman numerals Thousands	1000 more 1000 less Count backwards Four digit Round Roman numerals Thousands	1000 more 1000 less Count backwards Four digit Round Roman numerals Thousands	Operations Methods Inverse Round Strategies Calculations	Operations Methods Inverse Round Strategies Calculations	Factor pairs Derived facts Distributive law Formal written layout Remainders	Factor pairs Derived facts Distributive law Formal written layout Remainders

Autumn 2	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**
Units	**Number: Multiplication and division A**	**Number: Fractions A**	**Number: Fractions A**	**Assessment week/consolidation week**	**Number: Fractions A**	**Number: Fractions A**	**Consolidation week**
Lesson objectives (Small steps)	8) Multiply by 10, 100 and 1000 **(MD-1)** 9) Divide by 10, 100 & 1000 **(MD-1)** 10)Multiples of 10, 100 & 1000 **(MD-1)** 11) Mini assessment (end of unit assessment)	1) Find fractions equivalent to a unit fraction **(F-2)** 2) Find fractions equivalent to a non-unit fraction **(F-2)** 3) Recognise equivalent fractions **(F-2)** 4) Convert improper fractions to mixed numbers **(F-2)**	5) Convert mixed numbers to improper fractions **(F-2)** 6) Compare fractions less than 1 **(F-2)** 7) Order fractions less than 1 **(F-2)** 8) Compare and order fractions greater than 1 **(F-2)** 9) Add and subtract fractions with the same denominator	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.	10) Add fractions within 1 11) Add fractions with total greater than 1 12) Add to a mixed number 13) Add two mixed numbers	14) Subtract fractions 15) Subtract from a mixed number 16) Subtract from a mixed number – breaking the whole 17) Subtract mixed numbers 18) Mini assessment (end of unit assessment)	This week to act as a buffer for any units that over run or to revisit concepts children struggled with (also Xmas week and INSETs may be taking place)
Vocabulary (Year group specific)	Multiples Factors Prime numbers Square Numbers Cube Numbers Product	Mixed numbers Fifths Proper fractions Improper fractions Equivalent fractions	Mixed numbers Fifths Proper fractions Improper fractions Equivalent fractions		Mixed numbers Fifths Proper fractions Improper fractions Equivalent fractions	Mixed numbers Fifths Proper fractions Improper fractions Equivalent fractions	
Previous years' Vocabulary	Factor pairs Derived facts Distributive law Formal written layout Remainders	Convert Proper fractions Improper fractions Decimal Equivalence Hundredth Unit fractions Non-unit fractions	Convert Proper fractions Improper fractions Decimal Equivalence Hundredth Unit fractions Non-unit fractions		Convert Proper fractions Improper fractions Decimal Equivalence Hundredth Unit fractions Non-unit fractions	Convert Proper fractions Improper fractions Decimal Equivalence Hundredths Unit fractions Non-unit fractions	

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Number: Multiplication and division**	**Number: Multiplication and division**	**Number: Multiplication and division**	**Fractions B**	**Fractions B**	**Decimals and percentages**
Lesson objectives (Small steps)	1) Multiply up to a 4-digit number by a 1-digit number **(MD-3)** 2) Multiply a 2-digit number by a 2-digit number (area model) **(MD-3)** 3) Multiply a 2-digit number by a 2-digit number **(MD-3)** 4) Multiply a 3-digit number by a 2-digit number **(MD-3)**	5) Multiply a 4-digit number by a 2-digit number **(MD-3)** 6) Solve problems with multiplication **(MD-3)** 7) Short division **(MD-4)** 8) Divide a 4-digit number by a 1-digit number **(MD-4)**	9) Divide with remainders **(MD-4)** 10) Efficient division **(MD-4)** 11) Solve problems with multiplication and division **(MD-3) (MD-4)** 12) Mini assessment (end of unit assessment)	1) Multiply a unit fraction by an integer 2) Multiply a non-unit fraction by an integer 3) Multiply mixed numbers by an integer 4) Calculate a fraction of a quantity **(F-1)**	5) Fraction of an amount **(F-1)** 6) Find the whole **(F-1)** 7) Using fractions as operators **(F-1)** 8) Mini assessment (End of unit assessment)	1) Decimals up to 2 decimal places **(NPV-2)** 2) Equivalent fractions and decimals (tenths) **(F-3)** 3) Equivalent fractions and decimals (hundredths) **(F-3)** 4) Equivalent fractions and decimals **(F-3)** 5) Thousands as fractions **(F-3)**
Vocabulary (Year group specific)	Short division Decimals Product	Short division Decimals Product	Short division Decimals Product	Mixed numbers Fifths Integer	Mixed numbers Fifths Integer	Thousandths Percent %
Previous years' Vocabulary	Factor pairs Derived facts Distributive law Formal written layout Remainders Dividend Divisor Quotient Operations	Factor pairs Derived facts Distributive law Formal written layout Remainders Dividend Divisor Quotient Operations	Factor pairs Derived facts Distributive law Formal written layout Remainders Dividend Divisor Quotient Operations	Convert Proper fractions Improper fractions Decimal Equivalence Hundredth Unit fractions Non-unit fractions	Convert Proper fractions Improper fractions Decimal Equivalence Hundredth Unit fractions Non-unit fractions	Decimal equivalence Hundredths

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Decimals and percentages**	**Decimals and percentages**	**Measurement: Perimeter and area**	**Measurement: Perimeter and area**	**Statistics**	**Statistics**
Lesson objectives (Small steps)	6) Thousands as decimals (**NPV-2)** 7) Thousandths on a place value chart **(NPV-3)** 8) Order and compare decimals (same number of decimal places) **(NPV-3)** 9) Order and compare any decimals with up to 3 decimal places **(NPV-3)** 10) Round to the nearest whole number **(NPV-3)**	11) Round to 1 decimal place **(NPV-3)** 12) Understand percentages 13) Percentages as fractions 14) Percentages as decimals 15) Equivalent fractions, decimals and percentages **(F-3)** Mini assessment (end of unit assessment)	1) Perimeter of rectangles 2) Perimeter of rectilinear shapes 3) Perimeter of polygons	4) Area of rectangles **(G-2)** 5) Area of Compound Shapes **(G-2)** 6) Estimates area **(G-2)** 7) Mini assessment (end of unit assessment)	1) Draw line graphs **(NPV-4)** 2) Read and interpret line graphs **(NPV-4)** 3) Read and interpret tables	4) Two-way tables 5) Read and interpret tables 6) Mini assessment (end of unit assessment) **Last two units have far fewer small steps than those that preceded them; therefore, units can be covered at a slower pace of time, or this time can be used for those that overrun.**
Vocabulary (Year group specific)	Thousandths Percent %	Thousandths Percent %	Composite rectilinear shape Irregular shapes Square centimetres Square metres	Composite rectilinear shape Irregular shapes Square centimetres Square metres	Timetables Two-way tables	Timetables Two-way tables
Previous years' Vocabulary	Decimal equivalence Hundredths	Decimal equivalence Hundredths	Rectilinear figure Area Kilometres	Rectilinear figure Area Kilometres	Line graph Discrete data Continuous data Comparison problem Sum problem Difference problem Calculate Interpret	Line graph Discrete data Continuous data Comparison problem Sum problem Difference problem Calculate Interpret

Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Geometry: Properties of shapes**	**Geometry: Properties of shapes**	**Geometry: Properties of shapes**	**Geometry: Position and direction**	**Geometry: Position and direction**	**Number: Decimals**
Lesson objectives (Small steps)	1) Understand and use degrees **(G-1)** 2) Classify angles **(G-1)** 3) Estimate angles **(G-1)** 4) Measure angles up to 180 **(G-1)**	5) Draw lines and angles accurately **(G-1)** 6) Calculate angles around a point **(G-1)** 7) Calculate angles on straight line **(G-1)**	8) Lengths and angles in shapes 9) Regular and irregular polygons 10) 3D shapes 11) Mini assessment (End of unit assessment)	1) Read and plot coordinates 2)Problem solving with coordinates 3) Translation	4) Translation with coordinates 5) Lines of symmetry 6) Reflection in horizontal and vertical lines	1) Use known facts to add and subtract decimals within 1 2) Complements to 1 3) Add and subtract decimals across 1 4) Add decimals with the same number of decimals places
Vocabulary (Year group specific)	Reflex angles Degrees One whole turn Angles on straight line Angles around a point Regular polygon Irregular polygon Vertically opposite Missing angles	Reflex angles Degrees One whole turn Angles on straight line Angles around a point Regular polygon Irregular polygon Vertically opposite Missing angles	Reflex angles Degrees One whole turn Angles on straight line Angles around a point Regular polygon Irregular polygon Vertically opposite Missing angles	Reflection Axis	Reflection Axis	Thousandths Complements Exchanging
Previous years' Vocabulary	Acute angle Obtuse angle Geometric shapes Quadrilaterals Trapezium Rhombus Parallelogram Kite	Acute angle Obtuse angle Geometric shapes Quadrilaterals Trapezium Rhombus Parallelogram Kite	Acute angle Obtuse angle Geometric shapes Quadrilaterals Trapezium Rhombus Parallelogram Kite	Co-ordinates First quadrant Translation Grid Plot Polygon	Co-ordinates First quadrant Translation Grid Plot Polygon	Decimal equivalence Hundredths

Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Units	**Number: Decimals**	**Number: Decimals**	**Number: Negative Numbers**	**Measurement: Converting units**	**Measurement: Converting units**	**Geometry: Volume**	**Consolidation week**
Lesson objectives (Small steps)	5) Subtract decimals with the same number of decimal places 6) Add decimals with a different number of decimal places 7) Subtract decimals with a different number of decimal places 8) Efficient strategies for adding and subtracting decimals	9) Decimal sequences 10) Multiply by 10, 100 and 1,000 **(MD-1)** 11) Divide by 10, 100 and 1,000 **(MD-1)** 12) Multiply and divide decimals – missing values 13) Mini assessment (End of unit assessment)	1) Understand negative numbers 2) Count through zero in 1s 3) Count through zero in multiples 4) Compare and order negative numbers 5) Find the difference	1) Kilograms and kilometres **(NPV-6)** 2) Milligrams and millilitres **(NPV-6)** 3) Convert units of length	4) Convert between metric and imperial units 5) Convert units of time **(NPV-6)** 6) Calculate with timetables 7) Mini assessment/problem solving (End of unit assessment)	1) Cubic centimetres 2) Compare volume 3) Estimate volume 4) Estimate capacity 5) Mini assessment/problem solving (End of unit assessment)	These weeks to act as buffer for any units that needed to be extended due to AFL. This is also to be used as a reflection of assessment week to address any gaps in knowledge children have within the current year's curriculum, and to revisit and consolidate learning from the year. Once these are devised, they can be added to the overview.
Vocabulary (Year group specific)	Thousandths Complements Exchanging	Thousandths Complements Exchanging	Consolidate language taught previously. Refer below	Decimal notation Scaling Metric units Imperial units Inches Pounds Pints	Decimal notation Scaling Metric units Imperial units Inches Pounds Pints Timetables	Volume Cubic centimetre	
Previous years' Vocabulary	Decimal equivalence Hundredths	Decimal equivalence Hundredths	Negative numbers Multiples Compare and order Difference	Consolidate metric units language already learnt from previous years	Consolidate metric units language already learnt from previous years	Consolidate metric units already learnt from previous years	