

# Year 5 Maths Long Term Overview Version 3.0

# <u>Rationale</u>

This overview is designed to run alongside the White Rose Schemes of Learning (Version 3.0) found <u>here</u>. 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 <u>DFE ready to progress criteria</u> 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.

# Currently only Autumn and Spring term on document

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)	<ol> <li>1) Mental strategies</li> <li>2) Add whole numbers with more than four digits</li> <li>3) Subtract whole numbers with more than four digits</li> <li>4) Round to check answers</li> </ol>	<ul> <li>5) Inverse operations</li> <li>6) Multi-step addition and subtraction problems</li> <li>7) Compare calculations</li> <li>8) Find missing numbers</li> <li>9) Mini assessment (end of unit assessment)</li> </ul>	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)	<ol> <li>Find fractions         equivalent to a unit         fraction (F-2)</li> <li>Find fractions         equivalent to a non-         unit fraction (F-2)</li> <li>Recognise         equivalent fractions (F-         2)</li> <li>Convert improper         fractions to mixed         numbers (F-2)</li> </ol>	<ul> <li>5) Convert mixed numbers to improper fractions (F-2)</li> <li>6) Compare fractions less than 1 (F-2)</li> <li>7) Order fractions less than 1 (F-2)</li> <li>8) Compare and order fractions greater than 1 (F-2)</li> <li>9) Add and subtract fractions with the same denominator</li> </ul>	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	<ul> <li>14) Subtract fractions</li> <li>15) Subtract from a mixed number</li> <li>16) Subtract from a mixed number – breaking the whole</li> <li>17) Subtract mixed numbers</li> <li>18) Mini assessment (end of unit assessment)</li> </ul>	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)	<ol> <li>Multiply up to a 4-digit number by a 1-digit number (MD-3)</li> <li>Multiply a 2-digit number by a 2-digit number (area model) (MD-3)</li> <li>Multiply a 2-digit number by a 2-digit number (MD-3)</li> <li>Multiply a 3-digit number by a 2-digit number (MD-3)</li> </ol>	<ul> <li>5) Multiply a 4-digit number</li> <li>by a 2-digit number (MD-3)</li> <li>6) Solve problems with multiplication (MD-3)</li> <li>7) Short division (MD-4)</li> <li>8) Divide a 4-digit number</li> <li>by a 1-digit number (MD-4)</li> </ul>	<ul> <li>9) Divide with remainders</li> <li>(MD-4)</li> <li>10) Efficient division (MD-4)</li> <li>11) Solve problems with multiplication and division (MD-3) (MD-4)</li> <li>12) Mini assessment (end of unit assessment)</li> </ul>	<ol> <li>1) Multiply a unit fraction by an integer</li> <li>2) Multiply a non-unit fraction by an integer</li> <li>3) Multiply mixed numbers by an integer</li> <li>4) Calculate a fraction of a quantity (F-1)</li> </ol>	<ul> <li>5) Fraction of an amount (F-1)</li> <li>6) Find the whole (F-1)</li> <li>7) Using fractions as operators (F-1)</li> <li>8) Mini assessment (End of unit assessment)</li> </ul>	<ol> <li>Decimals up to 2 decimal places (NPV-2)</li> <li>Equivalent fractions and decimals (tenths) (F-3)</li> <li>Equivalent fractions and decimals (hundredths) (F-3)</li> <li>Equivalent fractions and decimals (F-3)</li> <li>Thousands as fractions (F-3)</li> </ol>
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)	<ul> <li>6) Thousands as decimals</li> <li>(NPV-2)</li> <li>7) Thousandths on a place value chart (NPV-3)</li> <li>8) Order and compare decimals (same number of decimal places) (NPV-3)</li> <li>9) Order and compare any decimals with up to 3 decimal places (NPV-3)</li> <li>10) Round to the nearest whole number (NPV-3)</li> </ul>	<ul> <li>11) Round to 1 decimal place (NPV-3)</li> <li>12) Understand percentages</li> <li>13) Percentages as fractions</li> <li>14) Percentages as decimals</li> <li>15) Equivalent fractions, decimals and percentages (F-3)</li> <li>Mini assessment (end of unit assessment)</li> </ul>	<ol> <li>Perimeter of rectangles</li> <li>Perimeter of rectilinear shapes</li> <li>Perimeter of polygons</li> </ol>	<ul> <li>4) Area of rectangles (G-2)</li> <li>5) Area of Compound Shapes (G-2)</li> <li>6) Estimates area (G-2)</li> <li>7) Mini assessment (end of unit assessment)</li> </ul>	<ol> <li>Draw line graphs (NPV-4)</li> <li>Read and interpret line graphs (NPV-4)</li> <li>Read and interpret tables</li> </ol>	<ul> <li>4) Two-way tables</li> <li>5) Read and interpret tables</li> <li>6) Mini assessment (end of unit assessment)</li> <li>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.</li> </ul>
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