Year 6 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 fully editable, so topics or assessment weeks can be moved around or lengthened/shortened if necessary to accommodate different term lengths or to provide more weeks for SATS-based revision. These overviews ensure that all of the Y6 curriculum is covered before the SATS, however, assessment may indicate that more or less time needs to be attributed to certain topics. 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: addition, subtraction, multiplication, division.**	**Number: addition, subtraction, multiplication, division.**	**Number: addition, subtraction, multiplication, division.**	**Number: addition, subtraction, multiplication, division.**	**Number: addition, subtraction, multiplication, division.**
Lesson objectives (Small steps)	1) Numbers to a 1,000,000 **(NPV-2)** 2) Numbers to 10,000,000 **(NPV-2)** 3) Read and write numbers to 10,000,000 **(NPV-2)** 4) Power of 10	5) Number line to 10,000,000 **(NPV-2)** 6) Compare and order any integers **(NPV-3)** 7) Round any integer **(NPV-3)** 8) Negative numbers **(NPV-3)** 9) Mini-assessment/ consolidation	1) Add and subtract integers 2) Common factors 3) Common multiples 4) Rules of divisibility	5) Primes to 100 6) Square and cube numbers 7) Multiply up to a 4-digit number by a 2-digit number 8) Solve problems with multiplication	9) Short division 10) Division using factors 11) Introduction to long division **Only 3 small steps for these two weeks to give time for teaching of long division**	12) Long division with remainders 13) Solve problems with division 14) Solve multi-step problems **Only 3 small steps for these two weeks to give time for teaching of long division**	15) Order of operations 16) Mental calculation and estimation 17) Reason with know facts 18) Mini assessment/ consolidation
Vocabulary (Year group specific)	Calculate intervals Integer Millions Ten Million	Calculate intervals Integer Millions Ten Million Negative numbers	Multi-digit number Long multiplication Divisibility	Multi-digit number Long multiplication	Multi-digit number Factors Long division	Multi-digit number Factors Long division	Multi-digit number Factors Long division
Previous years' Vocabulary	Powers of Rounding Ten Thousand One Hundred Thousand Integer	Powers of Rounding Ten Thousand One Hundred Thousand Integer	Multiples Factors Short division Remainders Decimals Product Operations Integers	Multiples Factors Short division Prime numbers Square Numbers Cube Numbers Remainders Decimals Product Operations Integers	Multiples Factors Short division Remainders Decimals Dividend Divisor Quotient Operations Integers	Multiples Factors Remainders Decimals Product Dividend Divisor Quotient Operations Integers	Multiples Factors Short division Remainders Decimals Product Dividend Divisor Quotient Operations

Autumn 2	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**
Units	**Number: Fractions A**	**Number: Fractions A**	**Number: Fractions B**	**Number: Fractions B**	**Assessment week/consolidation week**	**Measurement: converting units**	**Consolidation week**
Lesson objectives (Small steps)	1) Equivalent fractions and simplifying **(F-1)** 2) Equivalent fractions on a number line **(F-1)** 3) Compare and order (denominator) **(F-2/3)** 4) Compare and order (numerator) **(F-2/3)**	5) Add and subtract simple fractions 6) Add and subtract any two fractions 7) Add mixed numbers 8) Subtract mixed numbers 9) Multi-step problems	1) Multiply fractions by integers 2) Multiply fractions by fractions 3) Divide a fraction by an integer 4) Divide any fraction by an integer	5) Mixed questions with fractions 6) Fraction of an amount 7) Fraction of an amount – find the whole 8) End of unit assessment	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 or to extend Fractions B **This week may want to be moved to week 3 to break up the fractions units**	1) Metric measures 2) Convert metric measures 3) Calculate with metric measures 4) Miles and kilometres 5) Imperial measures 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) **May also wish to extend the converting units week**
Vocabulary (Year group specific)	Factors Integer	Factors Integer	Factors Integer	Factors Integer		Conversion Miles Formulae	
Previous years Vocabulary	Fifth thousandths Convert Proper fractions Improper fractions Mixed numbers Equivalent fractions Multiples Simplifying Complements	Fifth thousandths Convert Proper fractions Improper fraction Mixed numbers Equivalent fractions Multiples Simplifying Complements	fifth thousandths convert proper fractions Improper fractions mixed numbers Equivalent fractions multiples Simplifying Complements	Fifth thousandths Convert Proper fractions Improper fractions Mixed numbers Equivalent fractions Multiples Simplifying Complements		Decimal notation Scaling Metric units Imperial units Inches Pounds Pints	

Spring 1	Week 1	Week 2	Week 3	Week 2	Week 5	Week 6
Units	**Number: Ratio**	**Number: Ratio**	**Number: Algebra**	**Number: Algebra**	**Number: Decimals**	**Number: Decimals**
Lesson objectives (Small steps)	1) Add or multiply? **(MD-3)** 2) Using ratio language **(MD-3)** 3) Introducing the ratio symbol **(MD-3)** 4) Ratio and fractions **(MD-3)** 5) Scale drawing **(MD-3)**	6) Use scale factors **(MD-3)** 7) Similar shapes **(MD-3)** 8) Ratio problems **(MD-3)** 9) Proportion problems **(MD-3)** 10) Recipes End of unit assessment	1) 1-step function machines 2) 2-step function machines 3) Form expressions 4) Substitution 5) Formulae	6) Form equations 7) Solve 1-step equations 8) Solve 2-step equations 9) Find pairs of values **(MD-4)** 10) Solve Problems with two unknows **(MD-4)** End of unit assessment	1) Place value within 1 2) Place value – integers and decimals 3) Round decimals 4) Add and subtract decimals 5) Multiply by 10, 100 and 1000	6) Divide by 10, 100 and 1000 7) Multiply decimals by integers 8) Divide decimals by integers 9) Multiply and divide decimals in context End of unit assessment
Vocabulary (Year group specific)	Relative size Missing values Integer multiplication Percentages Scale factor Unequal sharing and grouping.	Relative size Missing values Integer multiplication Percentages Scale factor Unequal sharing and grouping.	Formulae Linear number sequences Algebraically Equation Unknowns Combinations Variables	Formulae Linear number sequences Algebraically Equation Unknowns Combinations Variables	Consolidate Y5 language	Consolidate Y5 language
Previous years' Vocabulary	N/A	N/A	N/A	N/A	Fifth Thousandths Mixed numbers Per cent % Factors Integer Complements	Fifth Thousandths Mixed numbers Per cent % Factors Integer Complements

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Number: Fractions, decimals and percentages**	**Number: Fractions, decimals and percentages**	**Measurement: Area, perimeter and volume.**	**Measurement: Area, perimeter and volume.** **Statistics**	**Statistics**	**Geometry: Properties of shape.**
Lesson objectives (Small steps)	1) Decimal and fraction equivalents 2) Fractions as division 3) Understand percentages 4) Fractions to percentages 5) Equivalent fractions, decimals and percentages	6) Order fractions, decimals and percentages 7) Percentage of an amount – one step 8) Percentage of an amount – multi-step 9) Percentages - missing values End of unit assessment	1) Shapes – same area **(G-1)** 2) Area and perimeter **(G-1)** 3) Area of a triangle – counting squares **(G-1)** 4) Area of a right-angle triangle **(G-1)** 5) Area of any triangle **(G-1)**	6) Area of parallelogram **(G-1)** 7) Volume – counting cubes 8) Volume of a cuboid End of unit assessment **<u>Statistics</u>** 1) Line graphs 2) Dual bar charts	3) Read and interpret pie charts 4) Pie charts with percentages 5) Draw pie charts 6) The mean End of unit assessment	1) Measure and classify angles **(G-1)** 2) Calculate angles **(G-1)** 3) Vertically opposite angles **(G-1)** 4) Angles in a triangle **(G-1)** 5) Angles in a triangle – special cases **(G-1)**
Vocabulary (Year group specific)	Consolidate Y5 language	Consolidate Y5 language	Formulae	Formulae Parallelograms Cubic metres Cubic millimetres Cubic kilometres	Pie chart Mean	Dimensions
Previous years' Vocabulary	Fifth Thousandths Mixed numbers Per cent % Factors Integer Complements	Fifth Thousandths Mixed numbers Per cent % Factors Integer Complements	Scaling Composite rectilinear shape Irregular shapes Square centimetres Square metres	Cubic centimetres	Timetable Two-way tables	Vertically opposite angles Reflex angles Missing angles Degrees One whole turn Angles on straight line Angles around a point Parallelograms Regular polygon Irregular polygon Quadrilateral Dimensions Net

Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Geometry: Properties of shape.**	**Geometry: Position and direction.**	**SATS Revision**	**SATS Revision**	**SATS Week**	**Themed projects, consolidation and problem solving**
Lesson objectives (Small steps)	6) Angles in a triangle – missing angles **(G-1)** 7) Angles in quadrilaterals **(G-1)** 8) Angles in polygons **(G-1)** 9) Circles 10) Draw shapes accurately **(G-1)** 11) Nets of 3-D shapes **(G-1)** **Six small steps here so additional lesson may be needed or combining of two small steps** End of unit assessment	1) The first quadrant 2) Read and plot points in four quadrants 3) Solve problems with coordinates 4) Translations 5) Reflections End of unit assessment				These weeks are to be used as a reflection on the year and an opportunity for concepts to be revisited and extended in preparation for KS3. They can also be used to embed aspects of reasoning and problem solving and carry out any transitional maths projects. These can be filled in/updated as the year progresses or once the SATS assessments have taken place.
Vocabulary (Year group specific)	Radius Diameter Circumference Dimensions	Four quadrants Co-ordinate plane				
Previous years' Vocabulary	Vertically opposite angles Reflex angles Missing angles Degrees One whole turn Angles on straight line Angles around a point Parallelograms Regular polygon Irregular polygon Quadrilateral Dimensions Net	Reflection Axis				

Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Units	**Themed projects, consolidation and problem solving**					
Lesson objectives (Small steps)	These weeks are to be used as a reflection on the year and an opportunity for concepts to be revisited and extended in preparation for KS3. They can also be used to embed aspects of reasoning and problem solving and carry out any transitional maths projects. These can be filled in/updated as the year progresses or once the SATS assessments have taken place.					
Vocabulary (Year group specific)						
Previous years' Vocabulary						