New

Primary schemes of learning

Changes overview

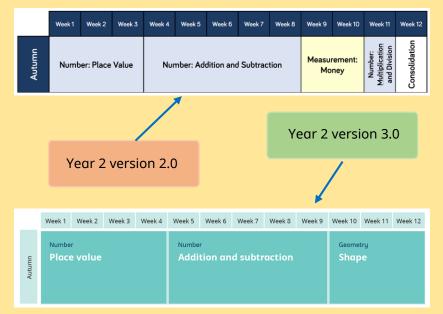**Autumn**

White Rose Maths

#MathsEveryoneCan

Introduction

Welcome to version 3.0 of the White Rose Maths primary schemes of learning! We have listened to your feedback and taken into account other national developments over the last few years to produce an even bigger and even better set or resources to support your teaching. In particular we have made progression even clearer, including more direct revisiting of previous years' work to close gaps caused by the pandemic and to align even more closer with the DFE's ready-to-progress criteria.

This document sets out the key changes to the steps in the Autumn term of our schemes. For each year group, we look at
- any changes of the blocks, such as order and timings.
- the changes to each individual block, directly comparing the steps in version 2.0 and the steps in version 3.0
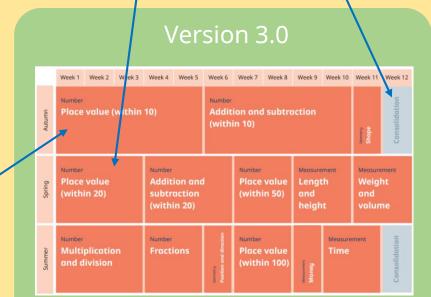
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction					Measurement: Money		Number: Multiplication and Division	Consolidation

Year 2 version 2.0

Year 2 version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value				Number Addition and subtraction					Geometry Shape		

White Rose Maths

Year 1 overview

Version 2.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)				Number: Addition and Subtraction (within 10)					Geometry: Shape	Number: Place Value (within 20)	
Spring	Consolidation	Number: Addition and Subtraction (within 20)			Number: Place Value (within 50)			Measurement: Length and Height		Measurement: Weight and Volume		Consolidation
Summer	Consolidation	Number: Multiplication and Division			Number: Fractions		Geometry: Position and Direction	Number: Place Value (within 100)		Measurement: Money	Measurement: Time	

Numbers to 20 has been moved to the Spring term and the consolidation block has been moved from Spring to Autumn to support all children to keep up from the start.

Version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value (within 10)					Number Addition and subtraction (within 10)					Geometry Shape	Consolidation
Spring	Number Place value (within 20)			Number Addition and subtraction (within 20)			Number Place value (within 50)		Measurement Length and height		Measurement Weight and volume	
Summer	Number Multiplication and division			Number Fractions		Geometry Position and direction	Number Place value (within 100)		Measurement Money	Measurement Time		Consolidation

The first place value block is now 5 weeks long instead of 4 in order to ensure a deep understanding of this crucial aspect of children's learning.

White Rose Maths

Year 1 small steps (Autumn)

Block 1 – Place value (within 10)

Current scheme steps	New scheme steps
Sort objects	Sort objects
Count objects	Count objects
Represent objects	Count objects from a larger group
Count, read and write forwards from any number	Represent objects
Count, read and write backwards from any number	Recognise numbers as words
Count one more	Count on from any number
Count one less	1 more
One to one correspondence	Count backwards within 10
Compare groups	1 less
Introduce <, > and = symbols	Compare groups by matching
Compare numbers	Fewer, more, same
Order groups of objects	Less than, greater than, equal to
Order numbers	Compare numbers
Ordinal numbers (1st, 2nd, 3rd)	Order objects and numbers
The number line	The number line

The recommended time for learning this block has been increased from 4 weeks to 5 weeks.

Counting objects from a larger group has been added.

Steps on counting forwards are now next to each other, before the steps on counting backwards.

Greater emphasis placed on language.

Ordinal numbers has been moved to the position and direction block.

White Rose Maths

Year 1 small steps (Autumn)

Block 2 – Addition and subtraction (within 10)

Current scheme steps	New scheme steps
Parts and wholes activity (groups of objects)	Introduce parts and wholes
Part-whole model	Part-whole model
Addition symbol	Write number sentences
Fact families - addition facts	Fact families - addition facts
Find number bonds for numbers within 10	Number bonds within 10
Systematic methods for number bonds within 10	Systematic number bonds within 10
Number bonds to 10	Number bonds to 10
Addition - adding together	Addition - add together
Addition - adding more	Addition - add more
Addition - using bonds	Addition problems
Finding a part	Find a part
Subtraction - find a part	Subtraction - find a part
Fact families - the 8 facts	Fact families - the eight facts
Subtraction - taking away - crossing out	Subtraction - take away/crossing out (How many left?)
Subtraction - taking away - using the symbol	Subtraction - take away (How many left?)
Subtraction – counting back	Subtraction on a number line
	Add or subtract 1 or 2

We have added more emphasis on the ideas of parts and wholes.

The pace of learning has been slowed down with the symbols for addition and subtraction introduced slightly later to keep the earlier focus on the structure and understanding of the operations.

Greater emphasis placed on problem solving with addition.

A small step on adding or subtracting 1 or 2 has been added.

White Rose Maths

Year 1 small steps (Autumn)

Block 3 – Shape

Current scheme steps	New scheme steps
Recognise and name 3-D shapes	Recognise and name 3-D shapes
Sort 3-D shapes	Sort 3-D shapes
Recognise and name 2-D shapes	Recognise and name 2-D shapes
Sort 2-D shapes	Sort 2-D shapes
Patterns with 2-D and 3-D shapes	Patterns with 2-D and 3-D shapes

No changes to this block

White Rose Maths

Year 2 overview

Version 2.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction					Measurement: Money		Number: Multiplication and Division	Consolidation
Spring	Number: Multiplication and Division			Statistics		Geometry: Properties of Shape		Number: Fractions				
Summer	Measurement: Length and Height		Geometry: Position and Direction	Consolidation and problem solving		Measurement: Time		Measurement: Mass, Capacity and Temperature				Consolidation

Shape has been moved from spring to autumn and given an extra week. This means that multiplication and division is now later and can be taught together rather than split over two terms.

Version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value				Number Addition and subtraction						Geometry Shape	
Spring	Measurement Money		Number Multiplication and division					Measurement Length and height		Measurement Mass, capacity and temperature		
Summer	Statistics		Number Fractions		Geometry Position and direction			Problem solving		Measurement Time		

Place value has been given an additional week.

The money block has been moved from autumn to spring

White Rose Maths

Year 2 small steps (Autumn)

Block 1 – Place value

Current scheme steps
Count objects to 100 and read and write numbers in numerals and words
Represent numbers to 100
Tens and ones with a part-whole model
Tens and ones using addition
Use a place value chart
Compare objects
Compare numbers
Order objects and numbers
Count in 2s 5s 10s
Count in 3s

New scheme steps
Numbers to 20
Count objects to 100 by making 10s
Recognise tens and ones
Use a place value chart
Partition numbers to 100
Write numbers to 100 in words
Flexibly partition numbers to 100
Write numbers to 100 in expanded form
10s on the number line to 100
10s and 1s on the number line to 100
Estimate numbers on a number line
Compare objects
Compare numbers
Order objects and numbers
Count in 2s, 5s and 10s
Count in 3s

The recommended time for learning this block has been increased from 3 weeks to 4 weeks.

Consolidation of Year 1 material on the numbers to 100 is more explicit, and broken down into a greater number of steps.

There is increased emphasis on partitioning and flexibility in representing numbers in different forms. This will support coming material on addition and subtraction.

More use is made of the number line as a key representation, including to support comparing numbers.

White Rose Maths

Year 2 small steps (Autumn)

Block 2 – Addition and subtraction

Current scheme steps
Fact families - addition and subtraction bonds to 20
Check calculations
Compare number sentences
Related facts
Bonds to 100 (tens)
Add and subtract 1s
10 more and 10 less
Add and subtract 10s
Add a 2-digit and 1-digit number - crossing ten
Subtract a 1-digit number from a 2-digit number
Add two 2-digit numbers - not crossing ten
Add two 2-digit numbers - crossing ten
Subtract a 2-digit number from a 2-digit number
Subtract a 2-digit number from a 2-digit number
Bonds to 100 (tens and ones)
Add three 1-digit numbers

New scheme steps
Bonds to 10
Fact families – addition and subtraction bonds within 20
Related facts
Bonds to 100 (tens)
Add and subtract 1s
Add by making 10
Add three 1-digit numbers
Add to the next 10
Add across a 10
Subtract across 10
Subtract from a 10
Subtract a 1-digit number from a 2-digit number (across a 10)
10 more, 10 less
Add and subtract 10s
Add two 2-digit numbers (not across a 10)
Add two 2-digit numbers (across a 10)
Subtract two 2-digit numbers (not across a 10)
Subtract two 2-digit numbers (across a 10)
Mixed addition and subtraction
Compare number sentences
Missing number problems

The key concepts in this block have been broken down into even smaller steps to support learning and to more easily identify exactly where any intervention is needed. Closing these gaps early on will help children to gain greater success.

Steps relating to each of addition and subtraction are grouped together more to support development of understanding of each concept.

The column methods for addition and subtraction have been moved to Year 3.

Adding by making 10 now features in Year 2 having been moved here from Year 1. This is supported by its own step and a related next step which explores adding to the next 10

Year 2 small steps (Autumn)

Block 3 – Shape

Current scheme steps
Recognise 2-D and 3-D shapes
Count sides on 2-D shapes
Count vertices on 2-D shapes
Draw 2-D shapes
Lines of symmetry
Sort 2-D shapes
Make patterns with 2-D shapes
Count faces on 3-D shapes
Count edges on 3-D shapes
Count vertices on 3-D shapes
Sort 3-D shapes
Make patterns with 3-D shapes

New scheme steps
Recognise 2-D and 3-D shapes
Count sides on 2-D shapes
Count vertices on 2-D shapes
Draw 2-D shapes
Lines of symmetry on shapes
Use lines of symmetry to complete shapes
Sort 2-D shapes
Count faces on 3-D shapes
Count edges on 3-D shapes
Count vertices on 3-D shapes
Sort 3-D shapes
Make patterns with 2-D and 3-D shapes

More time is invested in line symmetry as this has been split into two steps to explore the different skills of identifying a line of symmetry and completing a shape given one "half" and the line of symmetry in more detail.

The steps on making patterns with 2-D and 3-D shapes have been combined as they cover the same skill. Both repeating(ABABAB) and symmetric (ABCBA and ABCCBA) patterns are explored.

White Rose Maths

Year 3 overview

Version 2.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction					Number: Multiplication and Division			
Spring	Number: Multiplication and Division		Measurement: Money	Statistics	Measurement: Length and Perimeter		Number: Fractions		Consolidation			
Summer	Number: Fractions		Measurement: Time		Geometry: Properties of Shape	Measurement: Mass and Capacity		Consolidation				

No changes have been made to the blocks in the autumn term.

Version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value			Number Addition and subtraction					Number Multiplication and division A			
Spring	Number Multiplication and division B			Measurement Length and perimeter			Number Fractions A			Measurement Mass and capacity		
Summer	Number Fractions B		Measurement Money		Measurement Time			Geometry Shape		Statistics		Consolidation

The order of some of the other blocks has been changed to help alignment for mixed age classes.

White Rose Maths

Year 3 small steps (Autumn)

Block 1 – Place value

Current scheme steps
Hundreds
Representing numbers to 1000
100s, 10s and 1s (1)
100s, 10s and 1s (2)
Number line to 1000
Find 1/10/100 more or less
Compare objects to 1000
Compare numbers to 1000
Order numbers
Count in 50s

New scheme steps
Represent numbers to 100
Partition numbers to 100
Number line to 100
Hundreds
Represent numbers to 1,000
Partition numbers to 1,000
Flexible partitioning of numbers to 1000
Hundreds, tens and ones
Find 1, 10 or 100 more or less
Number line to 1,000
Estimating on a number line to 1,000
Compare numbers to 1,000
Order numbers to 1,000
Count in 50s

The first three steps review children's learning of numbers to 100 from key stage 1 to ensure they are ready to move onto numbers to 1,000.

Greater emphasis is placed on the different ways of partitioning numbers to 1,000 and the place value of each of the digits in the numbers.

There is more emphasis on the use of the number line to deepen understanding of the relative position of numbers in the linear number system.

White Rose Maths

Year 3 small steps (Autumn)

Block 2 – Addition and subtraction

Current scheme steps
Add and subtract multiples of 100
Add and subtract 3-digit and 1-digit numbers
Add 3-digit and 1-digit numbers – crossing 10
Subtract a 1-digit number from a 3-digit number
Add and subtract 3-digit and 2-digit numbers
Add 3-digit and 2-digit numbers – crossing 100
Subtract a 2-digit number from a 3-digit number
Add and subtract 100s
Spot the pattern – making it explicit
Add and subtract a 2-digit and 3-digit numbers
Add a 2-digit and 3-digit numbers – crossing 10 or 100
Subtract a 2-digit number from a 3-digit number
Add two 3-digit numbers – not crossing 10 or 100
Add two 3-digit numbers – crossing 10 or 100
Subtract a 3-digit number from a 3-digit number
Subtract a 3-digit number from a 3-digit number
Estimate answers to calculations
Check answers

New scheme steps
Apply number bonds within 10
Add and subtract 1s
Add and subtract 10s
Add and subtract 100s
Spot the pattern
Add 1s across a 10
Add 10s across a 100
Subtract 1s across a 10
Subtract 10s across a 100
Make connections
Add two numbers (no exchange)
Subtract two numbers (no exchange)
Add two numbers (across a 10)
Add two numbers (across a 100)
Subtract two numbers (across a 10)
Subtract two numbers (across a 100)
Add 2-digit and 3-digit numbers
Subtract a 2-digit number from a 3-digit number
Complements to 100
Estimate answers
Inverse operations
Make decisions

Children now learn to use the formal column methods of addition and subtraction for the first time. To support them to do this fluently, several steps are included to ensure they have the mental skills to perform the calculations and to prevent cognitive overload when working on these.

The formal methods are introduced slowly and carefully looking at calculations without exchanges before bringing in exchange, linking to the mental methods covered earlier in the block.

Complements to 100 are explicitly explored in a new step.

The final step of the block encourages children to consider both the choice of operation when solving a problem, and what method would be most efficient so that they do not apply the formal method even when it is inappropriate to do so.

White Rose Maths

Year 3 small steps (Autumn)

Block 3 – Multiplication and division A

Current scheme steps
Multiplication - equal groups
Multiply by 3
Divide by 3
The 3 times-table
Multiply by 4
Divide by 4
The 4 times-table
Multiply by 8
Divide by 8
The 8 times-table

New scheme steps
Multiplication - equal groups
Use arrays
Multiples of 2
Multiples of 5 and 10
Sharing and grouping
Multiply by 3
Divide by 3
The 3 times-table
Multiply by 4
Divide by 4
The 4 times-table
Multiply by 8
Divide by 8
The 8 times-table
The 2, 4 and 8 times-tables

Before moving on the new times tables for Year 3, more time is spent on revisiting and reinforcing the structure of multiplication and division, using arrays and developing children's understanding of sharing and grouping.

The word 'multiple' is emphasised.

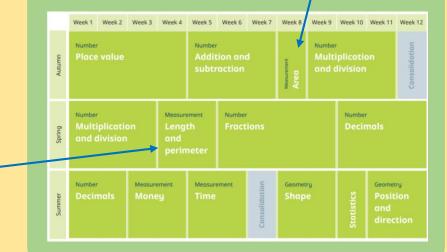A new step is included to explicitly make the links between the 2, 4 and 8 times-tables

White Rose Maths

Year 4 overview

Version 2.0

Area has been moved to the Autumn term. This now precedes the multiplication and division block as at this stage children are exploring the idea of area (by counting squares) rather than the formula, so multiplication facts are not a pre-requisite.

Version 3.0

Length and perimeter has been moved to the Spring term.

White Rose Maths

Year 4 small steps (Autumn)

Block 1 – Place value

Current scheme steps
Round to the nearest 10
Round to the nearest 100
Count in 1000s
1000s, 100s, 10s and 1s
Partitioning
Number line to 10,000
1,000 more or less
Compare numbers
Order numbers
Round to the nearest 1000
Count in 25s
Negative numbers
Roman numerals

New scheme steps
Represent numbers to 1,000
Partition numbers to 1,000
Number line to 1,000
Thousands
Represent numbers to 10,000
Partition numbers to 10,000
Flexible partitioning of numbers to 10,000
Find 1, 10, 100, 1,000 more or less
Number line to 10,000
Estimate on a number line to 10,000
Compare numbers to 10,000
Order numbers to 10,000
Roman numerals
Round to the nearest 10
Round to the nearest 100
Round to the nearest 1,000
Round to the nearest 10, 100 or 1,000

The steps on rounding have been put together at the end of the block rather than interspersed as present. This, together with the final extra step which explores rounding to different degrees of accuracy, will allow a more focused look at the concept of rounding.

The block starts with revision of the numbers to 1,000 studied in Year 3 to make sure these are secure before moving to 4-digit numbers.

The study of negative numbers has been moved to Year 5 where it can be explored in greater depth rather than a single step.

White Rose Maths

Year 4 small steps (Autumn)

Block 2 – Addition and subtraction

Current scheme steps	New scheme steps
Add and subtract 1s, 10s, 100s and 1,000s	Add and subtract 1s, 10s, 100s and 1,000s
Add two 4-digit numbers - no exchange	Add up to two 4-digit numbers - no exchange
Add two 4-digit numbers - one exchange	Add two 4-digit numbers - one exchange
Add two 4-digit numbers	Add two 4-digit numbers– more than one exchange
Subtract two 4-digit numbers - no exchange	Subtract two 4-digit numbers - no exchange
Subtract two 4-digit numbers - one exchange	Subtract two 4-digit numbers - one exchange
Subtract two 4-digit numbers	Subtract two 4-digit numbers – more than one exchange
Efficient Subtraction	Efficient subtraction
Estimate answers	Estimate answers
Checking strategies	Checking strategies

There is a more gradual introduction to the addition and subtraction of numbers with four digits, with consideration of numbers with fewer digits revisited first in the steps.

There is more explicit consideration of cases were there are no tens and no hundreds when subtracting to support the difficulties sometimes encountered by children when exchanging in calculations like these.

White Rose Maths

Year 4 small steps (Autumn)

Block 3 – Area

Current scheme steps
What is area?
Counting squares
Make shapes
Compare area

New scheme steps
What is area?
Counting squares
Make shapes
Compare area

Note that this block now precedes the multiplication and division block. At this stage children are exploring the idea of area (by counting squares) rather than the formula, so multiplication facts are not a pre-requisite.

White Rose Maths

Year 4 small steps (Autumn)

Block 4 – Multiplication and division A

Current scheme steps
Multiply and divide by 6
6 times-table and division facts
Multiply and divide by 9
9 times-table and division facts
Multiply and divide by 7
7 times-table and division facts
11 and 12 times tables
Multiply by 1 and 0
Divide by 1 and itself
Multiply three numbers

New scheme steps
Multiples of 3
Multiply and divide by 6
6 times-table and division facts
Multiply and divide by 9
9 times-table and division facts
The 3, 6 and 9 times-tables
Multiply and divide by 7
7 times-table and division facts
11 times-table and division facts
12 times-table and division facts
Multiply by 1 and 0
Divide by 1 and itself
Multiply three numbers

Many steps have been swapped with the other multiplication and division block in Year 4 in the previous version of the schemes. For example, multiplication by 10 and 100 has been moved to the later block where understanding of this is needed to support the formal method of short multiplication.

Multiples of 3 are revisited before exploring the related 6 and 9 times-tables, and a step is included to look at the connections between these.

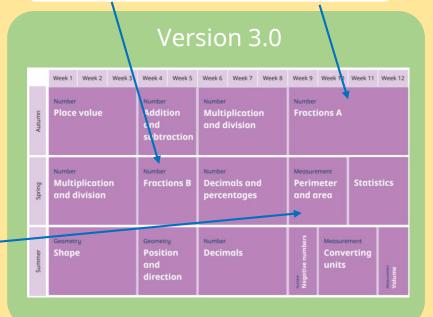The 11 and 12 times-tables and division facts have been given a step each.

White Rose Maths

Year 5 overview

Version 2.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction		Statistics		Number: Multiplication and Division			Measurement: Perimeter and Area	
Spring	Number: Multiplication and Division		Number: Fractions							Number: Decimals and Percentages		Consolidation
Summer	Consolidation	Number: Decimals			Geometry: Properties of Shape		Geometry: Position and Direction		Measurement: Converting Units		Measurement: Volume	

The six-week fractions block from the Spring term in version 2 of the schemes has been split into two; with the steps on adding and subtracting fractions moved to here in the Autumn term and the steps on multiplication and division of fractions in a separate block in the Spring term.

Version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value			Number Addition and subtraction		Number Multiplication and division			Number Fractions A			
Spring	Number Multiplication and division			Number Fractions B		Number Decimals and percentages			Measurement Perimeter and area		Statistics	
Summer	Geometry Shape			Geometry Position and direction		Number Decimals			Number Negative numbers	Measurement Converting units		Measurement Volume

The blocks on statistics and perimeter and area have been moved to later in the year.

White Rose Maths

Year 5 small steps (Autumn)

Block 1 – Place value

Current scheme steps
Numbers to 10 000
Round to the nearest 10, 100 or 1000
Numbers to 100 000
Compare and order numbers to 100 000
Round Numbers to 100 000
Numbers to a million
Counting in 10s, 100s…. 100 000s
Compare and order numbers to 1 000 000
Round numbers to 1 000 000
Negative numbers
Roman numerals to 1,000

New scheme steps
Roman numerals to 1,000
Numbers to 10,000
Numbers to 100,000
Numbers to 1,000,000
Read and write numbers to 1,000,000
Powers of 10
10/100/1,000/10,000/100,000 more or less
Partition numbers to 1,000,000
Number line to 1,000,000
Compare and order numbers to 100,000
Compare and order numbers to 1,000,000
Round to the nearest 10, 100 or 1,000
Round within 100,000
Round within 1,000,000

Roman numerals is now first to serve as a reminder of place value with smaller numbers, and comparing systems.

The steps have been grouped together by type rather than swapping back and fore. The structure of numbers of all the sizes is covered first, and later comparing and ordering numbers followed is explored before rounding.

There is new step specifically aimed and reading and writing numbers to 1 million.

Negative numbers are now covered in a separate short block later in the year.

White Rose Maths

Year 5 small steps (Autumn)

Block 2 – Addition and subtraction

Current scheme steps
Add whole numbers with more than 4 digits
Subtract whole numbers with more than 4-digits
Round to estimate and approximate
Inverse operations (addition and subtraction)
Multi-step addition and subtraction problems

New scheme steps
Mental strategies
Add whole numbers with more than four digits
Subtract whole numbers with more than four digits
Round to check answers
Inverse operations (addition and subtraction)
Multi-step addition and subtraction problems
Compare calculations
Find missing numbers

Mental strategies are revised first. This revision of key number relationships will support the use of formal methods in the upcoming steps.

Although the steps focus on numbers with more than four digits, the key learning sections begin with numbers with fewer digits as revision and to identify any gaps/need for intervention before moving on these more involved calculations.

The step building on the rounding learning from the place value block is now more explicitly focused on estimation to check answers.

Two new steps have been added to support the development of mental flexibility through using known facts to deduce, rather than work out, other facts.

White Rose Maths

Year 5 small steps (Autumn)

Block 3 – Multiplication and division A

Current scheme steps
Multiples
Factors
Common factors
Prime numbers
Square numbers
Cube numbers
Multiply by 10, 100 and 1,000
Divide by 10, 100 and 1,000
Multiples of 10, 100 and 1,000

New scheme steps
Multiples
Common multiples
Factors
Common factors
Prime numbers
Square numbers
Cube numbers
Multiply by 10, 100 and 1,000
Divide by 10, 100 and 1,000
Multiples of 10, 100 and 1,000

An extra step has been added in to focus on common multiples, mirroring the structure of the steps on factors.

There is another Year 5 block on multiplication and division, the first block in the Spring term. This second block focuses on the formal methods of multiplication and division and makes use of the times-tables facts and effect of multiplying by powers of 10 in this block.

White Rose Maths

Year 5 small steps (Autumn)

Block 4 – Fractions A

Current scheme steps	New scheme steps
Equivalent fractions	Find fractions equivalent to a unit fraction
Improper fractions to mixed numbers	Find fractions equivalent to a non-unit fraction
Mixed numbers to improper fractions	Recognise equivalent fractions
Number sequences	Convert improper fractions to mixed numbers
Compare and order fractions less than 1	Convert mixed numbers to improper fractions
Compare and order fractions greater than 1	Compare fractions less than 1
Add and subtract fractions	Order fractions less than 1
Add fractions within 1	Compare and order fractions greater than 1
Add 3 or more fractions	Add and subtract fractions with the same denominator
Add fractions	Add fractions within 1
Add mixed numbers	Add fractions with total greater than 1
Subtract fractions	Add to a mixed number
Subtract mixed numbers	Add two mixed numbers
Subtraction - breaking the whole	Subtract fractions
Subtract 2 mixed numbers	Subtract from a mixed number
	Subtract from a mixed number - breaking the whole
	Subtract two mixed numbers

More introductory work on equivalent fractions has been included.

Mental methods are emphasised alongside formal written methods.

Adding three or more fractions incorporated into other steps rather than treated separately.

The other Year 5 block on fractions is the second block in the Spring term.

White Rose Maths

Year 6 overview

Version 2.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition, Subtraction, Multiplication and Division				Number: Fractions					Geometry: Position and Direction
Spring	Number: Decimals		Number: Percentages		Number: Algebra		Measurement: Converting Units	Measurement: Perimeter, Area and Volume		Number: Ratio		Statistics
Summer	Geometry: Properties of Shape		Consolidation or SATs preparation		Consolidation, investigations and preparations for KS3							

The four-week fractions block has been split into two parts, one covering addition and subtraction and the other multiplication and division.

Converting units has been brought forward from the Spring term to reinforce multiplication and division by powers of 10 covered in the Four operations block.

Version 3.0

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value		Number Four operations					Number Fractions A		Number Fractions B		Measurement Converting units
Spring	Number Ratio		Number Algebra		Number Decimals		Number Fractions, decimals and percentages		Measurement Area, perimeter and volume		Statistics	
Summer	Geometry Shape		Geometry Position and direction	Themed projects, consolidation and problem solving								

The block on position and direction has been moved to later in the year to help align Y5 and Y6 topics for mixed-age classes.

White Rose Maths

Year 6 small steps (Autumn)

Block 1 – Place value

Current scheme steps
Numbers to a million
Numbers to 10 million
Compare and order any number
Round any number
Negative numbers

New scheme steps
Numbers to 1,000,000
Numbers to 10,000,000
Read and write numbers to 10,000,000
Powers of 10
Number line to 10,000,000
Compare and order any integers
Round any integers
Negative numbers

There us more revision of numbers of the size children met in Year 5.

Place value charts are used more extensively to emphasise the structure of numbers in "groups of threes" – 1s, 10s, 100s followed by 1,000s, 10,000s and 100,000s

Multiplicative connections between numbers has more emphasis e.g. 100 times the size, one hundredth the size of…

Use of the number line has more emphasis, including dividing into 2,4, 5 and 10 sections.

White Rose Maths

Year 6 small steps (Autumn)

Block 2 – Addition, subtraction, multiplication and division

Current scheme steps	New scheme steps
Add and subtract integers	Add and subtract integers
Common factors	Common factors
Common multiples	Common multiples
Primes to 100	Rules of divisibility
Squares and cubes	Primes to 100
Multiply up to a 4-digit number by a 2-digit number	Square and cube numbers
Short division	Multiply up to a 4-digit number by a 2-digit number
Division using factors	Solve problems with multiplication
Long division (1)	Short division
Long division (2)	Division using factors
Long division (3)	Introduction to long division
Long division (4)	Long division with remainders
Order of operations	Solve problems with division
Mental calculations and estimation	Solve multi-step problems
Reason from known facts	Order of operations
	Mental calculations and estimation
	Reason from known facts

An explicit step has been included to check understanding of the rules of divisibility.

The progression in the block is now even clearer, for example the sequence of learning for long division has been improved.

More emphasis is placed on problem solving, including using the appropriate method for a calculation.

White Rose Maths

Year 6 small steps (Autumn)

Block 3 – Fractions A

Current scheme steps
Simplify fractions
Fractions on a number line
Compare and order (denominator)
Compare and order (numerator)
Add and subtract fractions (1)
Add and subtract fractions (2)
Add fractions
Subtract fractions
Mixed addition and subtraction

New scheme steps
Equivalent fractions and simplifying
Equivalent fractions on a number line
Compare and order (denominator)
Compare and order (numerator)
Add and subtract simple fractions
Add and subtract any two fractions
Add mixed numbers
Subtract mixed numbers
Multi-step problems

There is more introductory work on equivalent fractions before moving to simplifying.

The progression in the block is now even clearer, for example the sequence of learning for long division has been improved.

More emphasis is placed on problem solving, including using the appropriate method for a calculation.

White Rose Maths

Year 6 small steps (Autumn)

Block 4 – Fractions B

Current scheme steps
Multiply fractions by integers
Multiply fractions by fractions
Divide fractions by integers (1)
Divide fractions by integers (2)
Fraction of an amount
Fraction of an amount - find the whole

New scheme steps
Multiply fractions by integers
Multiply fractions by fractions
Divide a fraction by an integer
Divide any fraction by an integer
Mixed questions with fractions
Fraction of an amount
Fraction of an amount - find the whole

An extra step has been included with mixed questions to support children to identify the correct operation and correct method of solution.

White Rose Maths

Year 6 small steps (Autumn)

Block 5 – Converting units

Current scheme steps
Metric measures
Convert metric measures
Calculate with metric measures
Miles and kilometres
Imperial measures

New scheme steps
Metric measures
Convert metric measures
Calculate with metric measures
Miles and kilometres
Imperial measures

There are no major changes to the content of this block.

White Rose Maths