New

Primary schemes of learning

Changes overview

Spring

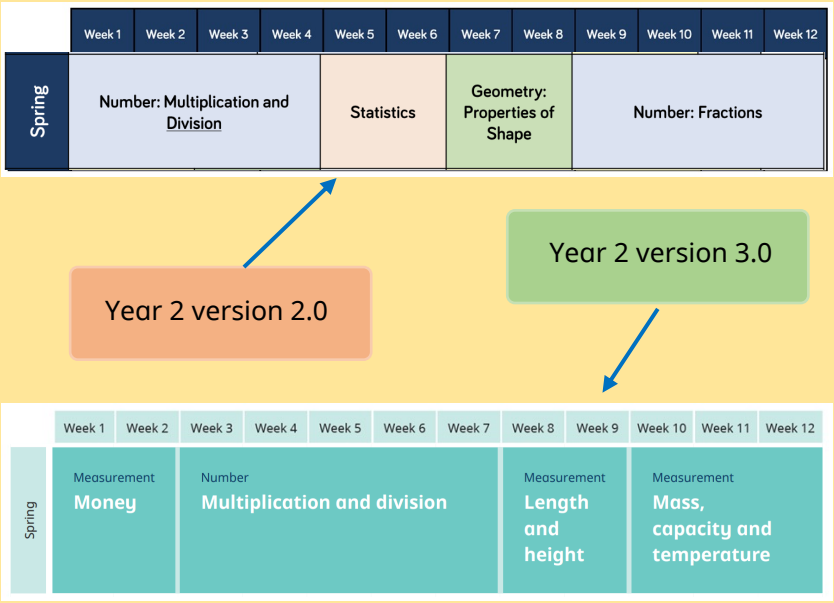
#MathsEveryoneCan

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 spring 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



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 Mass and volume	
Summer	Number Multiplication and division			Number Fractions		Geometry Position and direction	Number Place value (within 100)		Measurement Money	Measurement Time		Consolidation

The remaining blocks in the spring term are in the same order as version 2.0, enabling development of children's understanding and application of number.

Year 1 small steps (Spring)

Block 1 – Place value (within 20)

Current scheme steps
Count forwards and backwards and write numbers to 20 in numerals and words
Numbers from 11 to 20
Tens and ones
Count one more and one less
Compare groups of objects
Compare numbers
Order groups of objects
Order numbers

New scheme steps
Count within 20
Understand 10
Understand 11, 12 and 13
Understand 14, 15, 16
Understand 17, 18, 19
Understand 20
1 more and 1 less
The number line to 20
Use a number line to 20
Estimate on a number line to 20
Compare numbers to 20
Order numbers to 20

The steps have been broken down further to allow greater exploration of the difficult 'teen' numbers.

Greater emphasis has been placed on the use of the number line.

Place value counters are not used in Year 1 to avoid the potential confusion of learning too many representations at once.

The learning builds on the understanding of 10, with numbers to 20 seen as one ten and some more. 20 is seen both as one more than 19 and as two tens.

The recommended time for learning this block has been increased from 2 weeks to 3 weeks.

Year 1 small steps (Spring)

Block 2 – Addition and subtraction (within 20)

Current scheme steps
Add by counting on
Find and make number bonds
Add by making 10
Subtraction - not crossing 10
Subtraction - crossing 10 (1)
Subtraction - crossing 10 (2)
Related facts
Compare number sentences

New scheme steps
Add by counting on within 20
Add ones using number bonds
Find and make number bonds to 20
Doubles
Near doubles
Subtract ones using number bonds
Subtraction – counting back
Subtraction – finding the difference
Related facts
Missing number problems

We've moved adding by making 10 to Year 2

The pace of learning has been slowed down with more steps added.

The use of doubles and near doubles has been made explicit.

The concept of the difference between two numbers is introduced for the first time, this had previously been in the autumn term.

Year 1 small steps (Spring)

Block 3 – Place value (within 50)

Current scheme steps	New scheme steps
Numbers to 50	Count from 20 to 50
Tens and ones	20, 30, 40 and 50
Represent numbers to 50	Count by making groups of tens
One more and one less	Groups of tens and ones
Compare objects within 50	Partition into tens and ones
Compare numbers within 50	The number line to 50
Order numbers within 50	Estimate on a number line to 50
Counts in 2s	1 more, 1 less
Count in 5s	

As more time had been spent securing the basics, the recommended time for learning this block has been decreased from 3 weeks to 2 weeks.

Counting in 2s and 5s have been moved to the multiplication and division block

Groups of 10 have been given more prominence to support the idea of partitioning.

Greater emphasis has been placed on the use of the number line.

Year 1 small steps (Spring)

Block 4 – Length and Height

Current scheme steps	New scheme steps
Compare lengths & heights	Compare lengths and heights
Measure length (1)	Measure length using objects
Measure length (2)	Measure length in centimetres

No changes to this block.

Year 1 small steps (Spring)

Block 4 – Mass and Volume

Current scheme steps	New scheme steps
Introducing weight and mass	Heavier and lighter
Measure mass	Measure mass
Compare mass	Compare mass
Introduce capacity and volume	Full and empty
Measure capacity	Compare volume
Compare capacity	Measure capacity
	Compare capacity

The block has been renamed Mass and Volume (from Weight and Volume) to emphasise correct language.

Some steps have been made easier to support early understanding of these concepts.

An extra step has been added on the ideas of full and empty (including nearly full and nearly empty) to support comprehension of capacity.

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

The two multiplication and division blocks from autumn and spring have been brought together as one cohesive 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**					Geometry **Shape**		
Spring	Measurement **Money**			Number **Multiplication and division**					Measurement **Length and height**		Measurement **Mass, capacity and temperature**	
Summer	Number **Fractions**			Measurement **Time**			**Statistics**		Geometry **Position and direction**		Consolidation	

The Money block has been moved from autumn to spring.

Two of the measurement blocks have been brought forward from summer to spring, with Fractions and Statistics moved to later in the year.

Year 2 small steps (Spring)

Block 1 – Money

Current scheme steps	New scheme steps
Count money - pence	Count money - pence
Count money - pounds (notes and coins)	Count money - pounds (notes and coins)
Count money - notes and coins	Count money - pounds and pence
Select money	Choose notes and coins
Make the same amount	Make the same amount
Compare money	Compare amounts of money
Find the total	Calculate with money
Find the difference	Make a pound
Find change	Find change
Two-step problems	Two-step problems

Early calculations with money have been simplified and will involve pounds only or pence only.

There is much more emphasis on the value of one pound as 100 pence, with an explicit step on making one pound and change being found only from one pound.

Number bonds to 100 are reinforced and the use of the number line is revisited to support calculations.

Year 2 small steps (Spring)

Block 2 – Multiplication and division

Current scheme steps
Recognise equal groups
Make equal groups
Add equal groups
Multiplication sentences using the x symbol
Multiplication sentences from pictures
Use arrays
2 times-table
5 times-table
10 times-table
Make equal groups – sharing
Make equal groups – grouping
Divide by 2
Odd and even numbers
Divide by 5
Divide by 10

New scheme steps
Recognise equal groups
Make equal groups
Add equal groups
Introduce the multiplication symbol
Multiplication sentences
Use arrays
Make equal groups – grouping
Make equal groups – sharing
The 2 times-table
Divide by 2
Doubling and halving
Odd and even numbers
The 10 times-table
Divide by 10
The 5 times-table
Divide by 5
The 5 and 10 times-tables

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 earlier will help children to gain greater success.

Steps relating to each of the key times-tables for Year 2 have been grouped together to support development of understanding and fluency of factual knowledge.

A new step has been added to emphasise the connection between the 5- and 10 times-tables.

Year 2 small steps (Spring)

Block 3 – Length and height

Current scheme steps	New scheme steps
Measure length (cm)	Measure in centimetres
Measure length (m)	Measure in metres
Compare lengths	Compare lengths and heights
Order lengths	Order lengths and heights
Four operations with lengths	Four operations with lengths and heights

There are very few changes to the content of this block. In the second step, the focus is kept on the metre, with questions on mixed units removed.

Year 2 small steps (Spring)

Block 4 – Mass, capacity and temperature

Current scheme steps
Compare mass
Measure mass in grams
Measure mass in kilograms
Compare volume
Millilitres
Litres
Temperature

New scheme steps
Compare mass
Measure in grams
Measure in kilograms
Four operations with mass
Compare volume and capacity
Measure in millilitres
Measure in litres
Four operations with volume and capacity
Temperature

Extra steps have been added so children can practise their skills using the four operations of arithmetic in the contexts of mass, capacity and temperature.

Building on their understanding of number lines, children use scales to 100, divided into 2, 5 and 10 equal parts.

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

The order of the blocks in the spring and summer terms has been changed to help alignment for mixed age classes.

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

Year 3 small steps (Spring)

Block 1 – Multiplication and division B

Current scheme steps
Comparing statements
Related calculations
Multiply 2-digits by 1-digit (1)
Multiply 2-digits by 1-digit (2)
Divide 2-digits by 1-digit (1)
Divide 2-digits by 1-digit (2)
Divide 2-digits by 1-digit (3)
Scaling
How many ways?

New scheme steps
Multiples of 10
Related calculations
Reasoning about multiplication
Multiply a 2-digit number by a 1-digit number – no exchange
Multiply a 2-digit number by a 1-digit number – with exchange
Link multiplication and division
Divide a 2-digit number by a 1-digit number – no exchange
Divide a 2-digit number by a 1-digit number – flexible partitioning
Divide a 2-digit number by a 1-digit number – with reminders
Scaling
How many ways?

A new step on multiplying by multiples of 10 starts the block to support later multiplication by 2-digit numbers.

Another new step helps children to see the link between multiplication and division.

The emphasis is on understanding the structure and relationships in the calculations through the use of expanded methods. Formal written methods are not introduced unit Year 4 (for multiplication) and Year 5 (for division).

Year 3 small steps (Spring)

Block 2 – Length and perimeter

Current scheme steps
Measure length
Equivalent lengths (m and cm)
Equivalent lengths (mm and cm)
Compare lengths
Add lengths
Subtract lengths
Measure perimeter
Calculate perimeter

New scheme steps
Measure in metres and centimetres
Measure in millimetres
Measure in centimetres and millimetres
Metres, centimetres and millimetres
Equivalent lengths (metres and centimetres)
Equivalent lengths (centimetres and millimetres)
Compare lengths
Add lengths
Subtract lengths
What is perimeter?
Measure perimeter
Calculate perimeter

We've broken down the skill of measuring into even smaller steps to support children's understanding of using different units, and combinations of units.

We've also split the concept of perimeter into three distinct steps from two.

A new step is included to support children to choose the appropriate unit of measure in different contexts.

Year 3 small steps (Spring)

Block 3 – Fractions A

Current scheme steps	New scheme steps
Making the whole	Understand the denominators of unit fractions
Tenths	Compare and order unit fractions
Fractions on a number line	Understand the numerators of non-unit fractions
Equivalent fractions (1)	Understand the whole
Equivalent fractions (2)	Compare and order non-unit fractions
Equivalent fractions (3)	Fractions and scales
Compare fractions	Fractions on a number line
Order fractions	Count in fractions on a number line
	Equivalent fractions on a number line
	Equivalent fractions as bar models

We have removed the explicit review of Year 2 fractions and split the Year 3 fractions content into two blocks. This focuses on developing understanding of fractions and recognising the same fraction can be represented in many different ways.

This slower and detailed progression of fractions goes right back to first principles, closely examining the roles of the denominator and numerator, and their relationship to the whole.

Year 3 small steps (Spring)

Block 4 – Mass and capacity

Current scheme steps
Measure mass (1)
Measure mass (2)
Compare mass
Add and subtract mass
Measure capacity (1)
Measure capacity (2)
Compare capacity
Add and subtract capacity

New scheme steps
Use scales
Measure mass in grams
Measure mass in kilograms and grams
Equivalent masses (kilograms and grams)
Compare mass
Add and subtract mass
Measure capacity and volume in millilitres
Measure capacity and volume in litres and millilitres
Equivalent capacities and volumes (litres and millilitres)
Compare capacity and volume
Add and subtract capacity and volume

The new step on using scales begins with a focus on dividing 100 into 2/4/5/10 parts, starting with number lines and moving to include context.

Measuring in single units (grams or millilitres) is considered before moving on to mixed units (e.g. grams and kilograms).

The distinction between volume and capacity is explicitly reviewed.

Year 4 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 : Length and Perimeter		Number: Multiplication and Division		
Spring	Number: Multiplication and Division			Measurement: Area	Number: Fractions				Number: Decimals			Consolidation
Summer	Number: Decimals		Measurement : Money		Measurement : Time		Statistics	Geometry: Properties of Shape		Geometry: Position and Direction		Consolidation

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 Area	Number Multiplication and division A			Consolidation
Spring	Number Multiplication and division B			Measurement Length and perimeter		Number Fractions				Number Decimals A		
Summer	Number Decimals B		Measurement Money		Measurement Time		Consolidation	Geometry Shape		Statistics	Geometry Position and direction	

Length and perimeter is now included in the spring term instead of Area.

Year 4 small steps (Spring)

Block 1 – Multiplication and division B

Current scheme steps
Factor pairs
Efficient multiplication
Multiply by 10
Multiply by 100
Divide by 10
Divide by 100
Written methods
Multiply 2-digits by 1-digit
Multiply 3-digits by 1-digit
Divide 2-digits by 1-digit (1)
Divide 2-digits by 1-digit (2)
Divide 3-digits by 1-digit
Correspondence problems
Efficient multiplication

New scheme steps
Factor pairs
Use factor pairs
Multiply by 10
Multiply by 100
Divide by 10
Divide by 100
Related facts – multiplication and division
Informal written methods for multiplication
Multiply a 2-digit number by a 1-digit number
Multiply a 3-digit number by a 1-digit number
Divide a 2-digit number by a 1-digit number (1)
Divide a 2-digit number by a 1-digit number (2)
Divide a 3-digit number by a 1-digit number
Correspondence problems
Efficient multiplication

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 this block where understanding of this is needed to support the formal method of short multiplication. This is now new content for Year 4

There is an extra step on looking at factors, as this supports both multiplication and division.

The study of division is extended to include the tables learnt in the autumn term, but the formal method is still not introduced until Year5

Year 4 small steps (Spring)

Block 2 – Length and perimeter

Current scheme steps
Kilometres
Perimeter on a grid
Perimeter of a rectangle
Perimeter of a rectilinear shape

New scheme steps
Measure in kilometres and metres
Equivalent lengths (kilometres and metres)
Perimeter on a grid
Perimeter of a rectangle
Perimeter of rectilinear shapes
Find missing lengths in rectilinear shapes
Calculate the perimeter of rectilinear shapes
Perimeter of regular polygons
Perimeter of polygons

We've developed a more detailed and in-depth focus on length and perimeter.

There are a series of new steps exploring polygons and their perimeter, in line with RTP criteria.

Year 4 small steps (Spring)

Block 3 – Fractions

Current scheme steps
What is a fraction?
Equivalent fractions (1)
Equivalent fractions (2)
Fractions greater than 1
Count in fractions
Add 2 or more fractions
Subtract 2 fractions
Subtract from whole amounts
Calculate fractions of a quantity
Problem solving – calculate quantities

New scheme steps
Understand the whole
Count beyond 1
Partition a mixed number
Number lines with mixed numbers
Compare and order mixed numbers
Understand improper fractions
Convert mixed numbers to improper fractions
Convert improper fractions to mixed numbers
Equivalent fractions on a number line
Equivalent fraction families
Add two or more fractions
Add fractions and mixed numbers
Subtract two fractions
Subtract from whole amounts
Subtract from mixed numbers

We've provided a much slower pace with fractions by splitting concepts into smaller steps to ensure children can build their understanding better.

In line with RTP, we have included the study of mixed numbers, which is revisited in Year 5

To keep the learning focused, the explicit study of fractions of quantities has been moved to Year 5, although this can be explored in the context of division if desired.

Year 4 small steps (Spring)

Block 4 – Decimals A

Current scheme steps	New scheme steps
Recognise tenths and hundredths	Tenths as fractions
Tenths as decimals	Tenths as decimals
Tenths on a place value gird	Tenths on a place value chart
Tenths on a number line	Tenths on a number line
Divide 1-digit by 10	Divide a 1-digit number by 10
Divide 2-digits by 10	Divide a 2-digit number by 10
Hundredths	Hundredths as fractions
Hundredths as decimals	Hundredths as decimals
Hundredths on a place value grid	Hundredths on a place value chart
Divide 1 or 2-digits by 100	Divide a 1 or 2-digit number by 100

There is a more gradual introduction to decimals, with tenths explored in detail before hundredths are introduced a little later than previously.

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

Now that the steps on adding and subtracting fractions have been covered in the autumn term, there is a shorter block covering multiplication and division of fractions here in the spring.

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			Number Fractions A			
Spring	Number Multiplication and division B			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 previously in the autumn term are now taught in the spring.

Year 5 small steps (Spring)

Block 1 – Multiplication and division B

Current scheme steps
Multiply 4-digits by 1-digit
Multiply 2-digits (area model)
Multiply 2-digits by 2-digits
Multiply 3-digits by 2-digits
Multiply 4-digits by 2-digits
Divide 4-digits by 1-digit
Divide with remainders

New scheme steps
Multiply up to a 4-digit number by a 1-digit number
Multiply a 2-digit number by a 2-digit number (area model)
Multiply a 2-digit number by a 2-digit number
Multiply a 3-digit number by a 2-digit number
Multiply a 4-digit number by a 2-digit number
Solve problems with multiplication
Short division
Divide a 4-digit number by a 1-digit number
Divide with remainders
Efficient division
Solve problems with multiplication and division

Progression in multiplication has been slowed. with steps building to greater amounts of digits from revision of previous learning.

There is more explicit problem solving so children can practice their skills in practical contexts.

As the formal method of division is introduced for the first time, this has been split into more steps to give time to develop understanding.

Year 5 small steps (Spring)

Block 2 – Fractions B

Current scheme steps
Multiply unit fractions by an integer
Multiply non-unit fractions by an integer
Multiply mixed numbers by integers
Fraction of an amount
Using fractions as operators

New scheme steps
Multiply a unit fraction by an integer
Multiply a non-unit fraction by an integer
Multiply a mixed number by an integer
Calculate a fraction of a quantity
Fraction of an amount
Find the whole
Use fractions as operators

The step on fractions of amounts has been split into three to allow for more gradual learning and deeper understanding.

Year 5 small steps (Spring)

Block 3 – Decimals and Percentages

Current scheme steps
Decimals up to 2 d.p.
Decimals as fractions (1)
Decimals as fractions (2)
Understand thousandths
Thousandths as decimals
Rounding decimals
Understand percentages
Percentages as fractions and decimals
Equivalent FDP

New scheme steps
Decimals up to 2 decimal places
Equivalent fractions and decimals (tenths)
Equivalent fractions and decimals (hundredths)
Equivalent fractions and decimals
Thousandths as fractions
Thousandths as decimals
Thousandths on a place value chart
Order and compare decimals (same number of decimal places)
Order and compare any decimals with up to 3 decimal places
Round to the nearest whole number
Round to 1 decimal place
Understand percentages
Percentages as fractions
Percentages as decimals
Equivalent fractions, decimals and percentages

Progression in this block has been slowed with revision of previous learning embedded before moving on to thousandths. Three weeks are now allocated, compared to two in the previous scheme.

The rounding element has also been split into two steps, so children can explore rounding to the nearest whole before rounding to one decimal place.

Year 5 small steps (Spring)

Block 4 – Perimeter and area

Current scheme steps
Measure perimeter
Calculate perimeter
Area of rectangles
Area of compound shapes
Area of irregular shapes

New scheme steps
Perimeter of rectangles
Perimeter of rectilinear shapes
Perimeter of polygons
Area of rectangles
Area of compound shapes
Estimate area

An extra step has been included to build on the Year 4 learning on perimeter of polygons.

The last step has been renamed to avoid the misconception that previous shapes covered (such as rectangles) are regular.

Year 5 small steps (Spring)

Block 5 – Statistics

Current scheme steps
Draw line graphs
Read and interpret line graphs
Use line graphs to solve problems
Read and interpret tables
Two-way tables
Timetables

New scheme steps
Draw line graphs
Read and interpret line graphs
Read and interpret tables
Two-way tables
Read and interpret timetables

The two steps relating to the interpretation of line graphs have been combined.

The step on timetables has been simplified to focus on reading and interpreting only. Calculating with timetables has moved to the summer block Converting units.

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 blocks on decimals and percentages have been adapted to emphasise the links between all of fractions, decimals and percentages.

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 blocks on ratio and algebra have been moved to earlier in the year to give more time to consolidate these new concepts.

Year 6 small steps (Spring)

Block 1 – Ratio

Current scheme steps
Using ratio language
Ratio and fractions
Introducing the ratio symbol
Calculating ratio
Using scale factors
Calculating scale factors
Ratio and proportion problems

New scheme steps
Add or multiply?
Using ratio language
Introduction to the ratio symbol
Ratio and fractions
Scale drawing
Using scale factors
Similar shapes
Ratio problems
Proportion problems
Recipes

Extra steps have been added to ease progression and help children see the difference between additive and multiplicative reasoning.

More emphasis is placed on language so children have understanding ratio and proportion in terms of “for every” and “in every”.

Year 6 small steps (Spring)

Block 2 – Algebra

Current scheme steps	New scheme steps
Find a rule - one step	1-step function machines
Find a rule - two step	2-step function machines
Forming expressions	Form expressions
Substitution	Substitution
Formulae	Formulae
Forming equations	Form equations
Solve simple one-step equations	Solve 1-step equations
Solve two-step equations	Solve 2-step equations
Find pairs of values	Find pairs of values
Enumerate possibilities	Solve problems with two unknowns

The opening steps have been focused to explore function machines more deeply, including working backwards. This strategy is then developed in the equations steps.

The progression in working with problems with two unknowns has been improved, with an emphasis on a bar modelling approach.

Year 6 small steps (Spring)

Block 3 – Decimals

Current scheme steps	New scheme steps
Three decimal places	Place value within 1
Multiply by 10, 100 and 1,000	Place value – integers and decimals
Divide by 10, 100 and 1,000	Round decimals
Multiply decimals by integers	Add and subtract decimals
Divide decimals by integers	Multiply by 10, 100 and 1,000
Division to solve problems	Divide by 10, 100 and 1,000
Decimals as fractions	Multiply decimals by integers
Fractions and decimals (1)	Divide decimals by integers
Fractions and decimals (2)	Multiply and divide decimals in context

The progression in this block has been slowed down with clearer development building from learning in earlier years.

Some steps have been moved into the next block, Fractions, decimals and percentages, to ensure decimals are secure before moving to equivalence.

Year 6 small steps (Spring)

Block 4 – Fractions, decimals and percentages

Current scheme steps
Fractions to percentages
Equivalent FDP
Order FDP
Percentage of an amount (1)
Percentage of an amount (2)
Percentages (missing values)

New scheme steps
Decimal and fraction equivalents
Fraction as division
Understand percentages
Fractions to percentages
Equivalent fractions, decimals and percentages
Order fractions, decimals and percentages
Percentage of an amount – one step
Percentage of an amount – multi-step
Percentages – missing values

This replaces the block on percentages in the previous version of the schemes. The focus is on understanding equivalence before using this to support calculations.

More emphasis is placed on representations, including number lines and bar models.

Year 6 small steps (Spring)

Block 5 – Perimeter, area and volume

Current scheme steps	New scheme steps
Shapes - same area	Shapes – same area
Area and perimeter	Area and perimeter
Area of a triangle (1)	Area of a triangle – counting squares
Area of a triangle (2)	Area of a right-angled triangle
Area of a triangle (3)	Area of any triangle
Area of a parallelogram	Area of a parallelogram
Volume - counting cubes	Volume – counting cubes
Volume of a cuboid	Volume of a cuboid

There are no significant changes to this block, but the steps involving the area of a triangle have been renamed to clarify their purpose.

Year 6 small steps (Spring)

Block 6 – Statistics

Current scheme steps
Read and interpret line graphs
Draw line graphs
Use line graphs to solve problems
Circles
Read and interpret pie charts
Pie charts with percentages
Draw pie charts
The mean

New scheme steps
Line graphs
Dual bar charts
Read and interpret pie charts
Pie charts with percentages
Draw pie charts
The mean

The steps on line graphs have been consolidated into one, as these have been covered in detail in earlier years.

An extra step has been added to explicitly explore dual bar charts.

The step on circles has been moved into the Shape block in the summer term, but some vocabulary will be needed when studying pie charts.