

New

Primary schemes of
learning

Changes overview

Summer

White
Rose
Maths

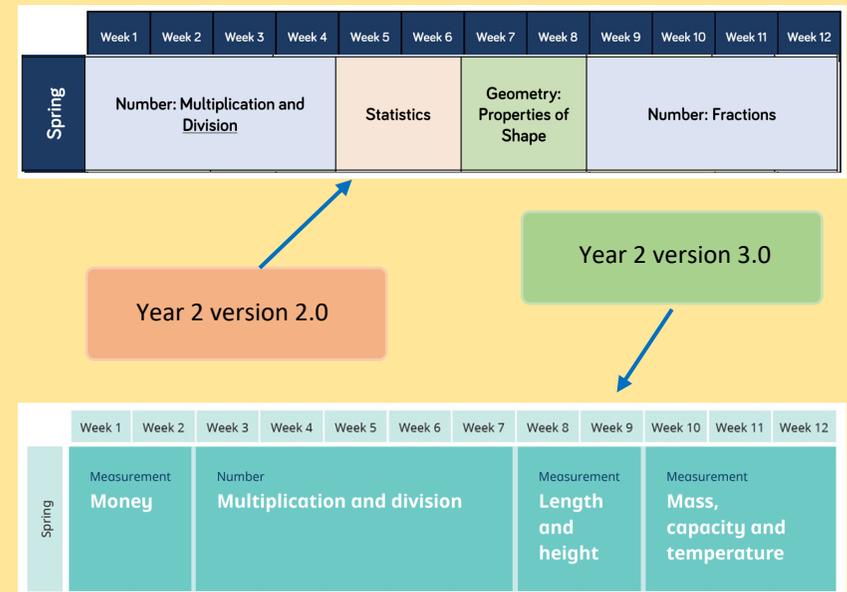
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Introduction

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 of 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 closely with the DFE's ready-to-progress criteria.

This document sets out the key changes to the steps in the summer 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			

The Summer term blocks are very similar in structure and order to version 2.0

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 consolidation block has been moved to the end of the year. This allows more flexibility for teachers to respond to identified areas of need.

Year 1 small steps (Summer)

Block 1 – Multiplication and division

Current scheme steps	New scheme steps
Count in 10s	Count in 2s
Make equal groups	Count in 10s
Add equal groups	Count in 5s
Make arrays	Recognise equal groups
Make doubles	Add equal groups
Make equal groups - grouping	Make arrays
Make equal groups - sharing	Make doubles
	Make equal groups - grouping
	Make equal groups - sharing

There are no significant changes to this block

Year 1 small steps (Summer)

Block 2 – Fractions

Current scheme steps	New scheme steps
Find a half (1)	Recognise a half of an object or a shape
Find a half (2)	Find a half of an object or a shape
Find a quarter (1)	Recognise a half of a quantity
Find a quarter (2)	Find a half of a quantity
	Recognise a quarter of an object or a shape
	Find a quarter of an object or a shape
	Recognise a quarter of a quantity
	Find a quarter of a quantity

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

There is more emphasis on equal parts that may be visually different e.g. three counters in a line are the same as three counters separated.

Year 1 small steps (Summer)

Block 3 – Position and direction

Current scheme steps	New scheme steps
Describe turns	Describe turns
Describe position (1)	Describe position – left and right
Describe position (2)	Describe position – forwards and backwards
	Describe position – above and below
	Ordinal numbers

The steps have been broken down further to make progression easier.

Year 1 small steps (Summer)

Block 4 – Place value (within 100)

Current scheme steps	New scheme steps
Counting forwards and backwards within 100	Count from 50 to 100
Partitioning numbers	Tens to 100
Comparing number (1)	Partition into tens and ones
Comparing numbers (2)	The number line to 100
Ordering numbers	1 more, 1 less
One more, one less	Compare numbers with the same number of tens
	Compare any two numbers

The steps have been broken down further to allow greater exploration of multiples of 10

An extra step has been added on the use of the number line.

Some steps have been renamed to clarify their purpose.

Year 1 small steps (Summer)

Block 5 – Money

Current scheme steps	New scheme steps
Recognising coins	Unitising
Recognising notes	Recognise coins
Counting in coins	Recognise notes
	Count in coins

An extra step has been added to introduce the idea of unitising before looking at the values of coins. This is supported using pre-money counters.

Year 1 small steps (Summer)

Block 6 – Time

Current scheme steps	New scheme steps
Before and after	Before and after
Dates	Days of the week
Time to the hour	Months of the year
Time to the half hour	Hours, minutes and seconds
Writing time	Tell the time to the hour
Comparing time	Tell the time to the half hour

Extra steps have been added to explore the names of the days of the week and units of time.

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

Fractions has been moved to later in the year, so the children are more ready for this challenging topic.

Time has been moved a little earlier to allow for formal coverage before SATs. It is also expected that time can be covered informally day-to-day during the whole year.

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					

Statistics has been moved to the end of the year.

Year 2 small steps (Summer)

Block 1 – Fractions

Current scheme steps	New scheme steps
Make equal parts	Introduction to parts and whole
Recognise a half	Equal and unequal parts
Find a half	Recognise a half
Recognise a quarter	Find a half
Find a quarter	Recognise a quarter
Recognise a third	Find a quarter
Find a third	Recognise a third
Unit fractions	Find a third
Non-unit fractions	Find the whole
Equivalence of a half and 2 quarters	Unit fractions
Find three quarters	Non-unit fractions
Count in fractions	Recognise the equivalence of a half and two-quarters
	Recognise three-quarters
	Find three-quarters
	Count in fractions up to a whole

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.

Extra steps have been added to help pupils to see the links between fractions and the whole.

Year 2 small steps (Summer)

Block 2 – Time

Current scheme steps	New scheme steps
O'clock and half past	O'clock and half past
Quarter past and quarter to	Quarter past and quarter to
Telling time to 5 minutes	Tell time past the hour
Hours and days	Tell time to the hour
Find durations of time	Tell the time to 5 minutes
Compare durations of time	Minutes in an hour
	Hours in a day

Extra steps have been added to provide greater focus, breaking down the development of telling the time to nearest 5 minutes.

There is also an extra step focusing on the fact that 1 hour is equal to 60 minutes.

Working out and comparing durations of time has been removed.

Year 2 small steps (Summer)

Block 3 – Statistics

Current scheme steps	New scheme steps
Make tally charts	Make tally charts
Draw pictograms (1-1)	Tables
Interpret pictograms (1-1)	Block diagrams
Draw pictograms (2, 5 and 10)	Draw pictograms (1-1)
Interpret pictograms (2, 5 and 10)	Interpret pictograms (1-1)
Block diagrams	Draw pictograms (2, 5 and 10)
	Interpret pictograms (2, 5 and 10)

An extra step has been added so children learn how to read information presented in tables.

The step on block diagrams has been amended to only look at 1-1 diagrams at this stage.

Year 2 small steps (Summer)

Block 4 – Position and direction

Current scheme steps	New scheme steps
Describe movement	Language of position
Describe turns	Describe movement
Describe movement and turns	Describe turns
Making patterns with shapes	Describe movement and turns
	Shape patterns with turns

An extra step has been added to revisit the language of position covered in Year 1 before moving on to use this language within movement and turns.

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 have 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 (Summer)

Block 1 – Fractions B

Current scheme steps	New scheme steps
Add fractions	Add fractions
Subtract fractions	Subtract fractions
Fractions of a set of objects (1)	Partition the whole
Fractions of a set of objects (2)	Unit fractions of a set of objects
Fractions of a set of objects (3)	Non-unit fractions of a set of objects
	Reasoning with fractions of an amount

The link between fractions and the whole has been given greater emphasis.

Some steps have been renamed to clarify their purpose.

Year 3 small steps (Summer)

Block 2 – Money

Current scheme steps	New scheme steps
Pounds and pence	Pounds and pence
Convert pounds and pence	Convert pounds and pence
Add money	Add money
Subtract money	Subtract money
Give change	Find change

No major changes to this block.

Year 3 small steps (Summer)

Block 3 – Time

Current scheme steps	New scheme steps
Months and years	Roman numerals to 12
Hours in the day	Tell the time to 5 minutes
Telling the time to 5 minutes	Tell the time to the minute
Telling the time to the minute	Read time on a digital clock
Using am and pm	Use am and pm
24-hour clock	Years, months and days
Finding the duration	Days and hours
Comparing durations	Hours and minutes – use start and end times
Start and end times	Hours and minutes – use durations
Measuring time in seconds	Minutes and seconds
	Units of time
	Solve problems with time

The 24-hour clock is not included in Year 3. Both digital and analogue 12-hour clocks are explored.

Roman numerals are explored to support reading clock faces with these.

More emphasis is placed on the different units of time and the relationships between them.

Year 3 small steps (Summer)

Block 4 – Shape

Current scheme steps	New scheme steps
Turns and angles	Turns and angles
Right angles in shapes	Right angles
Compare angles	Compare angles
Draw accurately	Measure and draw accurately
Horizontal and vertical	Horizontal and vertical
Parallel and perpendicular	Parallel and perpendicular
Recognise and describe 2-D shapes	Recognise and describe 2-D shapes
Recognise and describe 3-D shapes	Draw polygons
Make 3-D shapes	Recognise and describe 3-D shapes
	Make 3-D shapes

The new step on **drawing polygons** will reinforce shape names and provide more practice with accurate drawing.

Year 3 small steps (Summer)

Block 5 – Statistics

Current scheme steps	New scheme steps
Pictograms	Interpret pictograms
Bar Charts	Draw pictograms
Tables	Interpret bar charts
	Draw bar charts
	Collect and represent data
	Two-way tables

The steps have been split to provide greater focus and more opportunity to practise the different skills covered.

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			

Most blocks are in the same order as version 2, with some minor changes to line up 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			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				

Year 4 small steps (Summer)

Block 1 – Decimals B

Current scheme steps	New scheme steps
Make a whole	Make a whole with tenths
Write decimals	Make a whole with hundredths
Compare decimals	Partition decimals
Order decimals	Flexibly partition decimals
Round decimals	Compare decimals
Halves and quarters	Order decimals
	Round to the nearest whole number
	Halves and quarters as decimals

The steps have been broken down further to allow greater exploration of tenths and hundredths separately and to support progression.

Year 4 small steps (Summer)

Block 2 – Money

Current scheme steps	New scheme steps
Pounds and pence	Write money using decimals
Ordering money	Convert between pounds and pence
Estimating money	Compare amounts of money
Four operations	Estimate with money
	Calculate with money
	Solve problems with money

We've developed a **more detailed** and in-depth focus on working with money, especially when working with both notes and coins.

Year 4 small steps (Summer)

Block 3 – Time

Current scheme steps	New scheme steps
Hours, minutes and seconds	Years, months, weeks and days
Years, months, weeks and days	Hours, minutes and seconds
Analogue to digital – 12 hour	Convert between analogue and digital times
Analogue to digital – 24 hour	Convert to the 24 hour clock
	Convert from the 24 hour clock

We've provided a much **slower pace** for converting between 12-hour and 24-hour clock times.

Year 4 small steps (Summer)

Block 4 – Shape

Current scheme steps	New scheme steps
Identify angles	Understand angles as turns
Compare and order angles	Identify angles
Triangles	Compare and order angles
Quadrilaterals	Triangles
Lines of symmetry	Quadrilaterals
Complete a symmetric figure	Polygons
	Lines of symmetry
	Complete a symmetric figure

The classification of angles is now based on **fractions of turn** rather than their size in degrees.

There is greater exploration of **polygons**, including understanding of the term **regular**.

Year 4 small steps (Summer)

Block 5 – Statistics

Current scheme steps	New scheme steps
Interpret charts	Interpret charts
Comparison, sum and difference	Comparison, sum and difference
Introducing line graphs	Interpret line graphs
Line graphs	Draw line graphs

No major changes to this block.

Year 4 small steps (Summer)

Block 6 – Position and direction

Current scheme steps	New scheme steps
Describe position	Describe position using coordinates
Draw on a grid	Plot coordinates
Move on a grid	Draw 2-D shapes on a grid
Describe movement on a grid	Translate on a grid
	Describe translation on a grid

There is a more **gradual introduction** to the use of coordinates. Before moving on to shapes.

Some steps have been renamed to emphasise **correct mathematical language**.

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 order of the blocks has changed to allow for easier alignment for mixed age classes.

There is a brand new block that introduces negative numbers for the first time.

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		

Year 5 small steps (Summer)

Block 1 – Shape

Current scheme steps	New scheme steps
Measure angles in degrees	Understand and use degrees
Measure with a protractor (1)	Classify angles
Measure with a protractor (2)	Estimate angles
Draw lines and angles accurately	Measure angles up to 180°
Calculating angles on a straight line	Draw lines and angles accurately
Calculating angles around a point	Calculate angles around a point
Calculating lengths and angles in shapes	Calculate angles on a straight line
Regular and irregular polygons	Lengths and angles in shapes
Reasoning about 3-D shapes	Regular and irregular polygons
	3-D shapes

Progression in the use of a protractor has been **slowed** with extra steps on classifying and estimating before measuring and drawing in order to support the use of the correct scale.

There is an extra step on **3-D shapes** which includes recognising 2-D representations.

Year 5 small steps (Summer)

Block 2 – Position and direction

Current scheme steps	New scheme steps
Position in the first quadrant	Read and plot coordinates
Translation	Problem solving with coordinates
Translation with coordinates	Translation
Reflection	Translation with coordinates
Reflection with coordinates	Lines of symmetry
	Reflection in horizontal and vertical lines

The steps have been redeveloped to support **progression** and ensure that problems include those with and those without coordinate grids.

Year 5 small steps (Summer)

Block 3 – Decimals

Current scheme steps	New scheme steps
Adding decimals within 1	Use known facts to add and subtract decimals within 1
Subtracting decimals within 1	Complements to 1
Complements to 1	Add and subtract decimals across 1
Adding decimals - crossing the whole	Add decimals with the same number of decimal places
Adding decimals with the same number of decimal places	Subtract decimals with the same number of decimal places
Subtracting decimals with the same number of decimal places	Add decimals with different numbers of decimal places
Adding decimals with a different number of decimal places	Subtract decimals with different numbers of decimal places
Subtracting decimals with a different number of decimal places	Efficient strategies for adding and subtracting decimals
Adding and subtracting wholes and decimals	Decimal sequences
Decimal sequences	Multiply by 10, 100 and 1,000
Multiplying decimals by 10, 100 and 1,000	Divide by 10, 100 and 1,000
Dividing decimals by 10, 100 and 1,000	Multiply and divide decimals - missing values

Progression in this block has been **slowed** with learning built up from known facts before exploring more formal methods. Pupils will also explore whether mental methods, jottings or formal methods are most appropriate.

Year 5 small steps (Summer)

Block 4 – Negative numbers

Current scheme steps	New scheme steps
There is no corresponding block in version 2 of the schemes	Understand negative numbers
	Count through zero in 1s
	Count through zero in multiples
	Compare and order negative numbers
	Find the difference

This brand new block has been developed from the steps previously taught in Y4 and Y5 place value blocks. This potentially challenging topic has been broken down further to allow for in-depth study.

Year 5 small steps (Summer)

Block 5 – Converting units

Current scheme steps	New scheme steps
Kilograms and kilometres	Kilograms and kilometres
Millimetres and millilitres	Millimetres and millilitres
Metric units	Convert units of length
Imperial units	Convert between metric and imperial units
Converting units of time	Convert units of time
Timetables	Calculate with timetables

There are no major changes to this block, but some steps have been renamed to improve clarity.

Calculating with timetables is included here, building on from reading and interpreting timetables in the earlier statistics block.

Year 5 small steps (Summer)

Block 6 – Volume

Current scheme steps	New scheme steps
What is volume?	Cubic centimetres
Compare volume	Compare volume
Estimate volume	Estimate volume
Estimate capacity	Estimate capacity

There are no major changes to this block.

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							

There is time after SATs to consolidate and/or deepen key learning. Themed projects are available to support this.

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 two geometry blocks now follow on from each other, allowing for immediate reinforcement of key shape vocabulary.

Year 6 small steps (Summer)

Block 1 – Shape

Current scheme steps	New scheme steps
Measure with a protractor	Measure and classify angles
Introduce angles	Calculate angles
Calculate angles	Vertically opposite angles
Vertically opposite angles	Angles in a triangle
Angles in a triangle	Angles in a triangle – special cases
Angles in a triangle – special cases	Angles in a triangle – missing angles
Angles in a triangle – missing angles	Angles in quadrilaterals
Angles in special quadrilaterals	Angles in polygons
Angles in regular polygons	Circles
Draw shapes accurately	Draw shapes accurately
Draw nets of 3-D shapes	Nets of 3-D shapes

The step about circles has been moved from the statistics block to sit with the more similar steps in this block.

Some steps have been renamed to clarify their purpose and to ensure the correct use and understanding of mathematical language.

Year 6 small steps (Summer)

Block 2 – Position and direction

Current scheme steps	New scheme steps
The first quadrant	The first quadrant
Four quadrants	Read and plot points in four quadrants
Translations	Solve problems with coordinates
Reflections	Translations
	Reflections

An **extra step** has been added to allow for practice working with coordinates in all four quadrants before moving on to translations and reflections.