



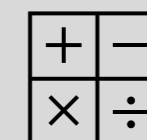
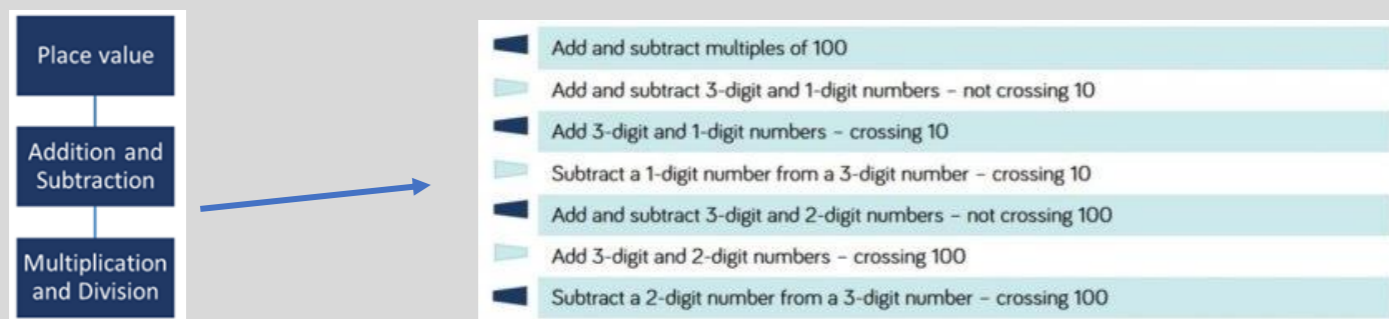
Whole School Maths Planning Yr 1 - 6

The Daily Teaching input - White Rose Maths

The fundamental idea behind our curriculum design is to support pupils to be able to perform simpler tasks so they can then move on to perform more complex tasks. For example, we cannot expect pupils to add two numbers together before they understand what each individual number represents.

This gives rise to a sequence of 'blocks' of maths that you will see in each year group. Within each of these blocks we then have 'small steps' which are again sequenced in order of difficulty and dependency.

Each step builds carefully from the previous step, building on pupils' prior knowledge to develop new skills, with nothing left out. We want pupils to become fluent in the fundamentals of mathematics, to be able to reason and to solve problems. Our curriculum embraces these National Curriculum aims, and provides guidance to help pupils to become Visualisers (CPA), Describers (language) and Experimenters (problem solving)



Daily Fluency Practice - Target Your Maths

Fluency sessions, are short, snappy sessions, which allow children to retrieve previously taught knowledge in order to rehearse concepts.

Fluency also means automatic recall of key facts.

These are the facts which children should be able to recall at the end of each year group. Quick and efficient recall of facts enables our children to move between contexts, to make links and solve problems.

As a school we make time daily for children to practice fluency. We use the 'Target Your Maths' books in KS2 and Hamilton Maths in KS1.

Year 1

White Rose Maths Units of Work Daily 45 minutes

Fluency Daily 15 minutes

Year 1 Autumn												
1	2	3	4	5	6	7	8	9	10	11	12	
Number and place value				Addition and subtraction				Geometry	Number and place value		Consolidation	
Place Value within 10				Addition and subtraction within 10				Shape Recognise 2D and 3D shapes	Place Value within 20		Consolidation	
Year 1 Spring												
1	2	3	4	5	6	7	8	9	10	11	12	
Addition and subtraction				Number and place value				Measurement		Measurement		Consolidation
Addition and subtraction within 20				Place value within 50 Multiples of 2, 5 and 10				Measure units of length and height		Measure units of mass and capacity		Consolidation
Year 1 Summer												
1	2	3	4	5	6	7	8	9	10	11	12	
Multiplication and Division			Fractions			Geometry	Number and place value		Measurement	Measurement		Consolidation
Introduction to multiplication and division			Fractions Introduction to Fractions, Halves and quarters			Position & direction Turns	Place Value within 100		Money coins and notes	Time Sequence events, on hour and half hour, days/ weeks / months		Consolidation

- Counting to 100 and counting back
- Number bonds within 10 including $a + b + c = d$, the effect of adding zero and missing number calculations
- Reordering to find tens and some more e.g. $4 + 5 + 6 =$
- Doubles within 10 including subtraction e.g. $6 - 3 = 3$ and missing numbers e.g. $6 - \square = 3$
- Structured subitisation on tens frame to 20

Year 2

White Rose Maths Units of Work Daily 45 minutes

Fluency Daily 15 minutes

Year 2 Autumn											
1	2	3	4	5	6	7	8	9	10	11	12
Number and place value			Addition and subtraction					Measurement		Multiplication & division	
Place Value to 100			<u>Add and subtract</u> 2 digit and ones, 2 digit and tens 2 digit and 2 digit, 3 single digit numbers					<u>Money - Recognise</u> £ and p Use different combinations of coins		<u>Multiplication</u> 2, 5 and 10 tables	
Year 2 Spring											
1	2	3	4	5	6	7	8	9	10	11	12
Multiplication & division		Statistics		Geometry			Fractions			Measurement	Consolidation
<u>Division</u> 2, 5 and 10 tables		<u>Statistics</u>		<u>Shape</u> Identify and describe the properties of 2D and 3D shapes			<u>Fractions</u> Recognise and write 1/3, 1/4, 2/4, 3/4.			<u>Measure</u> Choose and use appropriate standard units of length	Consolidation
Year 2 Summer											
1	2	3	4	5	6	7	8	9	10	11	12
Geometry			Problem Solving		Measurement			Measurement		Investigations	
<u>Position and movement</u> patterns and sequences rotations and right angles turns			<u>Problem solving and efficient methods</u>		<u>Time</u> Tell the time to 5 minutes, Compare and sequence time, hrs in a day, mins in an hour			<u>Measurement</u> Choose and use appropriate standard units of mass, capacity and temperature		<u>Investigations</u>	

- Addition and subtraction facts to 20
- Multiplication and division facts 2, 5 and 10 x tables
- Multiplication facts for 3 x tables
- Number of minutes in an hour; number of hours in a day
- Coin recognition up to £2
- Doubles to 20

Year 3

White Rose Maths Units of Work Daily 45 minutes

Target Your Maths – Fluency Daily 15 minutes

Year 3 Autumn											
1	2	3	4	5	6	7	8	9	10	11	12
Number and place value			Addition and subtraction					Multiplication and division			Consolidation
Place Value to 1,000			Add and subtract mentally, 3 digit and ones, 3 digit and tens, 3 digit and hundreds, Formal methods					Multiplication and division facts for 3,4 and 8 tables			
Year 3 Spring											
1	2	3	4	5	6	7	8	9	10	11	12
Multiplication and division			Measurement	Statistics		Measurement		Fractions			Consolidation
Multiplication and division 2digit by1 digit, mental and formal methods			Money Add & subtract	Statistics Interpret and present bar charts, pictograms and tables		Measurement Add and subtract lengths Find perimeter of 2D shapes		Fractions Count in tenths, Unit and non unit fractions			
Year 3 Summer											
1	2	3	4	5	6	7	8	9	10	11	12
Fractions			Measurement			Geometry		Measurement			Consolidation
Fractions equivalence and compare fractions, Add and subtract same denominator within a whole			Time to the minute, Roman numerals, 12 and 24 hr clock duration of events			Shape Identify angles and lines, Draw 2D and make 3D shapes		Measurement Add and subtract Mass and capacity units			

TERM 1	TERM 2	TERM 3
Block1 NUMBER 2-3 Numbers 4 Place Value 1 8 Finding 10, 100 More/Less	Block1 NUMBER 5 Place Value 2 9 Counting in 1s, 10s, 100s 10 Counting (1)	Block1 NUMBER 6 Place Value 3 7 Ordering Numbers 11 Counting (2)
Block2 ADDITION AND SUBTRACTION 12 Mental 1/2 (HTU 1/2 1s) 13 Mental 1/2 (HTU 1/2 10s) 14 Mental 1/2 (HTU 1/2 100s) 16 Using Known 1/2 Facts (1)	Block2 ADDITION AND SUBTRACTION 15 1/2 Multiples of 10, 100 21 Mental Strategies (1/2) 2 25 Written Method (1) 2 27 Written Method (2) 2	Block2 ADDITION AND SUBTRACTION 18 Using Known 1/2 Facts (3) 23 Mental Strategies (1/2) 4 29 Checking Answers – Written 1/2
Block3 MULTIPLICATION AND DIVISION 33 Multiplication Facts Review 1 34 Multiplication Facts For 3 40 Multiplying by Multiples of Ten 1 43 Dividing Multiples of Ten 1	Block3 MULTIPLICATION AND DIVISION 36 Multiplication Facts Review 2 42 Multiplying by Multiples of Ten 3 45 Dividing Multiples of Ten 3	Block3 MULTIPLICATION AND DIVISION 39 Multiplication Facts Review 3 48 Written Method (3) 3 52 Written Method (4) 3 55 Word Problems (3/4) Facts
Block4 MEASUREMENT 74-75 Measuring Length 1 80 Metric Units 1 85 1/2 of Length	Block4 MEASUREMENT 72 Measuring Weight 81 Metric Units 2 86 1/2 of Weight	Block4 MEASUREMENT 73 Measuring Capacity 87 1/2 of Capacity 101 Measures Problems 2
Block5 STATISTICS 118-119 Presenting Data – Pictograms 120-121 Interpreting Pictograms	Block5 STATISTICS 122-123 Presenting Data – Bar Charts 124-125 Interpreting Bar Charts 1	Block5 STATISTICS 126-127 Interpreting Bar Charts 2 128-129 Using Tables
Block6 ADDITION AND SUBTRACTION 20 Mental Strategies (1/2) 1 24 Written Method (1) 1 26 Written Method (2) 1	Block6 ADDITION AND SUBTRACTION 17 Using Known 1/2 Facts (2) 22 Mental Strategies (1/2) 3 28 Estimating Answers – Written 1/2 32 Addition Pyramids	Block6 ADDITION AND SUBTRACTION 19 1/2 Near Multiples of 10/100 30 Missing Number Problems (1/2) 31 Word Problems 1/2 117 Magic Squares – Puzzles

Year 4

White Rose Maths Units of Work Daily 45 minutes

Target Your Maths – Fluency Daily 15 minutes

Year 4 Autumn													
1	2	3	4	5	6	7	8	9	10	11	12		
Number and place value				Addition and subtraction				Measurement	Multiplication and division				
<u>Place Value</u> - 4 digits				<u>Addition and subtraction</u> 4 digits using mental and formal methods				<u>Perimeter of rectilinear</u>	<u>Multiplication and division.</u> tables to 12 x 12. multiply and divide by 1. multiply by 0. multiply together 3 numbers				Consolidation
Year 4 Spring													
1	2	3	4	5	6	7	8	9	10	11	12		
Multiplication and division				Measurement	Fractions				Decimals				
<u>Multiplication and division.</u> factor pairs, formal methods 2 and 3 digit by 1 digit				<u>Area of rectilinear shapes</u>	<u>Fractions.</u> Count in hundredths, show equivalent fractions, add and subtract fractions, find fraction of amounts				<u>Decimals</u> recognise tenths and hundredths, divide 2 digits by 10 and 100				Consolidation
Year 4 Summer													
1	2	3	4	5	6	7	8	9	10	11	12		
Decimals		Measurement		Measurement	Statistics		Geometry			Geometry			
<u>Decimals</u> Round decimals to 1dp, recognise 1/4, 1/2 & 3/4		<u>Money</u> Estimate, calculate and compare		<u>Time,</u> convert hr to min, 12 to 24 hr	<u>Statistics,</u> discrete and continuous data		<u>Properties of shape.</u> Identify and compare angles, classify shapes, lines of symmetry			<u>Position & direction.</u> Co-ordinates and translations		Consolidation	

TERM 1	TERM 2	TERM 3
Block 1 NUMBER 2-3 Numbers 4 Place Value 6 Counting On 1 8 Add/Subtract 10, 100, 1000	Block 1 NUMBER 5 Ordering Numbers 7 Counting On 2 10 Rounding 1	Block 1 NUMBER 9 Negative Numbers 11 Rounding 2 12-13 Roman Numerals
Block 2 ADDITION AND SUBTRACTION 14 Using 1/2 Facts 1 16 Mental 1/2 of Multiples of 10, 100, 1000 17 Mental 1/2 of Two 2-Digit Numbers 30 Addition Pyramids	Block 2 ADDITION AND SUBTRACTION 15 Using 1/2 Facts 2 18 Mental Strategies (1/2) 1 23 Written Method (1) 2 25 Written Method (2) 2	Block 2 ADDITION AND SUBTRACTION 20 Mental Strategies (1/2) 3 26 Written Method (1/2) 1 28 Estimating and Checking Answers
Block 3 CALCULATIONS (1, 2, 3, 4) 22 Written Method (1) 1 24 Written Method (2) 1 32 Multiplication Facts Review 1 33 Multiplication Facts For 6	Block 3 MULTIPLICATION AND DIVISION 36 Multiplication Facts Review 2 37 Multiplication Facts For 11 49 Written Method (3) 2 52 Written Method (4) 3	Block 3 MULTIPLICATION AND DIVISION 39 Multiplication Facts Review 3 43 Using Partitioning to Multiply 2 44 Using Partitioning to Divide
Block 4 FRACTIONS 64 Equivalent Fractions 65 Counting in Fractions 66 Tenths and Hundredths 67 Fractions of Quantities 1	Block 4 FRACTIONS 74 Decimal Fractions (1, 2) 75 Dividing a 2-Digit Number by 10, 100 76-77 Decimals – Money and Measures	Block 4 FRACTIONS 71 1/2 of Fractions 2 79 Rounding Decimals 80 Ordering Decimals 81 Decimals on Number Lines
Block 5 MEASUREMENT 104-105 12-Hour and 24-Hour Clocks 106 Units of Time 1 108 Time Problems 1	Block 5 MEASUREMENT 85 Metric Units of Length 2 86 Metric Units of Weight 2 87 Metric Units of Capacity 2 88 Measuring Weight	Block 5 MEASUREMENT 89 Measuring Capacity 91 Measures Problems 2 98 Measures – Mental Calculations 103 Money Problems (Mental) 2
Block 6 GEOMETRY 110-111 Two-Dimensional Shapes 112 Triangles	Block 6 GEOMETRY 113 Quadrilaterals 116 Symmetry 1 120 Co-ordinates 1 122 Position and Direction	Block 6 GEOMETRY 115 Drawing 2-D Shapes 117 Symmetry 2 121 Co-ordinates 2 123 Translations

Year 5

White Rose Maths Units of Work Daily 45 minutes

Target Your Maths – Fluency Daily 15 minutes

Year 5 Autumn												
1	2	3	4	5	6	7	8	9	10	11	12	
Number and place value			Addition and subtraction			Statistics		Multiplication and division		Measurement		Consolidation
Place Value - up to 6 digit			Addition and subtraction, mentally formally 4 digit			Statistics, line graphs and tables		Multiplication and division, $\times \div 10, 100 \text{ \& } 1000$, prime square and cube numbers		Perimeter & area, Perimeter of composite shapes, area of rectangles.		
Year 5 Spring												
1	2	3	4	5	6	7	8	9	10	11	12	
Multiplication and division			Fractions						Decimals			Consolidation
Multiplication and division formal methods, multiply 4digit by 1 digit and 2 digit, divide 4 digit by 1 digit			Fractions Mixed fractions and improper fractions, Add and subtract fractions, multiply fractions by whole numbers, Read and write decimals as fractions						Decimals and Percentages compare to 3d.p. recognise and understand per cent			
Year 5 Summer												
1	2	3	4	5	6	7	8	9	10	11	12	
Decimals			Geometry			Geometry	Measurement		Measurement		Consolidation	
Decimals multiply and divide numbers by 10, 100 & 1,000 Use 4 operations to solve measurement problems			Properties of shapes and angles degrees in straight line and about a circle, regular and irregular polygons			Position & movement reflection and translation	Measurement, converting units imperial measurements		Measurement volume			

TERM 1	TERM 2	TERM 3
Block 1 NUMBER 2-3 Numbers 4 Ordering Numbers 5 Place Value of Digits 6 Counting in 100s, 1000s, 10 000s	Block 1 MULTIPLICATION AND DIVISION 26 Prime Numbers 30 Multiplication Facts 2 37 WrittenMethod 3 (2) 42 WrittenMethod 4 (2)	Block 1 MULTIPLICATION AND DIVISION 31 Multiplication Facts 3 43 WrittenMethod 4 (3) 46 Rounding Remainders 3 49 Missing Number/Word Problems
Block 2 MULTIPLICATION AND DIVISION 29 Multiplication Facts 1 36 WrittenMethod 3 (1) 41 Written Method 4 (1) 24 Multiples 25 Common Factors	Block 2 FRACTIONS 55 Comparing Fractions 2 57 Improper Fractions 59 1/2 of Fractions 2 62 Fraction Problems	Block 2 FRACTIONS 60 1/2 of Fractions 3 63 Multiplying Fractions 64 Fractions of Amounts
Block 3 FRACTIONS 53 Equivalent Fractions 54 Comparing Fractions 1 56 Mixed Numbers 58 1/2 of Fractions 1	Block 3 NUMBER 7 Rounding 8-9 Negative Numbers	Block 3 ADDITION AND SUBTRACTION 19 Using Rounding to Check 20 Number Problems 1/2 21 Multi-step Problems 1/2 109 Addition Pyramids – Puzzles
Block 4 ADDITION AND SUBTRACTION 12 Mental 1/2 (1) 14 Mental Strategies 1/2 15 Written Method 1 16 Written Method 2 23 Magic Squares – Puzzles	Block 4 ADDITION AND SUBTRACTION 13 Mental 1/2 (2) 17 Written Method 1/2 18 Using Rounding to Estimate 22 Arithmagons – Puzzles	Block 4 GEOMETRY 119 Properties of Rectangles 121 Diagonals and Quadrilaterals 126-127 Reflections 2 130-131 Translations 2
Block 5 GEOMETRY 110 Quarter, Half, Whole Turns 111 Comparing Angles 112-115 Measuring Angles	Block 5 GEOMETRY 116-117 Angles and Straight Lines 120 Constructing Quadrilaterals 124 Regular and Irregular Polygons	Block 5 NUMBER/MULT. AND DIVISION 10-11 Roman Numerals 27 Prime Factors 35 Square and Cube Numbers
Block 6 MULTIPLICATION AND DIVISION 32 Mental Strategies 3/4 33 3/4 by 10, 100, 1000 38 Long Multiplication 1 44 Rounding Remainders 1 47 Remainders as Fractions/Decimals	Block 6 MEASUREMENT 92-93 Area and Perimeter 2 98-99 Volume 86 Imperial Units 1	Block 6 MEASUREMENT 87 Imperial Units 2 94-95 Comparing Areas 96-97 Area-Scale Drawings

Year 6

White Rose Maths Units of Work Daily 45 minutes

Target Your Maths – Fluency Daily 15 minutes

Year 6 Autumn												
1	2	3	4	5	6	7	8	9	10	11	12	
Number and place value		4 Operations				Fractions				Geometry	Consolidation	
Place Value - up to 7 digit		Addition, subtraction, multiplication and division Formal method - multiply & divide 4 digit by 2 digit				Fractions Add, subtract, multiply and divide fractions, order and compare fractions				Position & direction, co-ordinates & translation		
Year 6 Spring												
1	2	3	4	5	6	7	8	9	10	11	12	
Decimals		Percentages		Algebra		Measurement	Measurement		Ratio		Consolidation	
Decimals multiply 2d.p. by whole numbers, x ÷ by 10,100 & 1,000		Percentages equivalences between FDP, Calculate percentage of amounts		Algebra use simple formulae, missing number problems, equations with 2 unknowns		Measurement converting units to 3 d.p.	Perimeter, area & volume, area of parallelograms, triangles, volume of cubes and cuboids		Ratio			
Year 6 Summer												
1	2	3	4	5	6	7	8	9	10	11	12	
Geometry		Problem solving			Statistics		Investigations					Consolidation
Properties of shape, draw 2D shapes, find missing angles		Problem solving			Statistics, Identify parts of a circle, construct pie charts and line graphs		Investigations					

TERM 1			TERM 2			TERM 3		
Block 1 NUMBER 2-3 Numbers 4 Ordering Numbers 5 Place Value of Digits	Block 1 NUMBER 6 Rounding 7 Negative Numbers 1 35 Common Factors and Prime Numbers	Block 1 NUMBER/MEASUREMENT 8 Negative Numbers 2 94-95 1/2 Negative Numbers 9 Magic Squares						
Block 2 CALCULATIONS (1, 2, 3, 4) 10 Written Method 1/2 26 Multiplication Facts 1 11 Short Multiplication 1 16 Short Division 1	Block 2 CALCULATIONS (1, 2, 3, 4) 28 Multiplication Facts 3 14 Long Multiplication 2 18 Long Division 1 23 Checking Answers 155 Multiplication Pyramids	Block 2 CALCULATIONS (1, 2, 3, 4) 29 Multiplication Facts 4 15 Short/Long Multiplication 20 Short/Long Division 25 Rounding Up or Down 37 Using Brackets						
Block 3 FRACTIONS 49 Fractions and Decimal Equivalents 50 Decimal Fractions 51 Rounding Decimals 1 53 3/4 Decimals by 10, 100 56-57 Multiplication of Decimals	Block 3 FRACTIONS 52 Rounding Decimals 2 54 3/4 Decimals by 10, 100, 1000 (1) 58 Division of Decimals 1 60 Remainders as Decimals	Block 3 FRACTIONS 55 3/4 Decimals by 10, 100, 1000 (2) 59 Division of Decimals 2 61 Remainders as Decimals/Fractions 66 Fractions/Percentages of Amounts						
Block 4 GEOMETRY 112 Estimating Angles 113 Angles in Triangles/Quadrilaterals 114-115 Missing Angles	Block 4 MEASUREMENT/STATISTICS 93 Reading Scales 108 Word Problems – Converting Units 2 144-145 Conversion Graphs – Currencies	Block 4 GEOMETRY 116 Regular Polygons 120-121 Constructing 2-D Shapes 126-127 Building 3-D Shapes 129 Circles 2						
Block 5 CALCULATIONS (1, 2, 3, 4) 30-31 Mental Strategies 12 Short Multiplication 2 17 Short Division 2	Block 5 GEOMETRY 118-119 Constructing Triangles 124-125 Three-dimensional Shapes 128 Circles 1	Block 5 ALGEBRA 84 Equations With Unknown Variables 85 Finding All Possible Outcomes 88 Number Sequences 3 89 Number Sequences 4						
Block 6 MEASUREMENT 90-91 Metric Units 105 Word Problems – Measures 106 Word Problems – Decimal Notation	Block 6 ALGEBRA 80-81 Missing Number Problems 2 82-83 Using A Formula 87 Number Sequences 2	Block 6 MEASUREMENT 100-101 Area of Triangles/Parallelograms 104 Comparing Volumes 110 Multi-step Problems – Measures 2 111 Practical Measurement Problems						