

Mathematics at St Alban's CE Aided Primary (v06/23)

Intention	
<p>At St. Alban's, we strive for all pupils to leave our school being numerate with good number sense and a wide range of reasoning and problem-solving skills that can be applied to all areas of the curriculum. We understand these terms to mean the following:</p> <p>Numerate: having a good basic knowledge of arithmetic; able to understand and work with numbers.</p> <p>Number Sense: being able to use known number facts to derive unknowns and manipulate numbers and the number system to a specific end.</p> <p>Reasoning: to think mathematically, using what you already know to work out things you don't yet know.</p> <p>Problem-Solving: a general approach to solving a problem where the same general strategy can be applied to solving a variety of different problems.</p> <p>The skills pupils learn in Maths should not be and are not exclusive to the subject of Mathematics; these are life-long skills that allow individuals to reach their full potential in any walk of life. Our pupils will carry the skills and strategies they will learn in their Maths lessons for the rest of their lives.</p>	
Pupil approach:	Learning journey structure/steps
<p>Working as mathematicians, pupils will:</p> <ul style="list-style-type: none"> • Have a wide range of mental strategies to apply to calculations with increasingly large numbers. • Demonstrate clear written strategies for performing more complex calculations by applying these listed in the Written Calculation Policy. • Secure effective problem-solving and reasoning strategies that can be applied in and outside the classroom in a wide variety of settings. • Be able to use heuristics in their approach to problem-solving and reasoning. • Develop and demonstrate reliance and tenacity as they become increasingly independent learners. • Learn and recall a wide range of age-appropriate number facts e.g. number bonds, times tables and related division facts, 	<p>The Mathematics learning journey follows the White Rose Maths small-step mastery curriculum, the foundation of which is built on: putting number first; depth before breadth; Working together; fluency, reasoning and problem-solving; and the use of the CPA approach to progression. All lessons must have an opportunity for modelling and practice (I, We You approach) with a focus on short inputs in favour of opportunities for independent work by pupil. The learning journey should begin and end with a pupil assessment of knowledge and skills (Assessments A and B) and be planned according to each class. One step does not necessarily equate to 1 lesson; teacher discretion should be used.</p>
Teaching approach: non-negotiables for teachers	Key resources/documents for planning
<p>Every maths lesson should contain:</p> <ul style="list-style-type: none"> • An oral and mental task linked to prior learning. This does not have to be recorded in books; whiteboards, number fans, practical tasks, etc can be used depending on the age and ability of the pupils. • Reasoning and problem-solving to be a clear part of the majority of Maths lessons being taught alongside skills required. • A wide range of opportunities to embed fluency of skills recalling past and current learning. • A clear and relevant learning objective. • A time for independent / guided work where skills and RPS can be demonstrated and applied. • Opportunities for every pupil to be move forward and deepen their learning through challenge and stretch. • Differentiated consolidation tasks to be provided for children who may not be making as much progress to ensure key skills are embedded before the end of each teaching unit (approximately 1 week). • Keep working walls up to date displaying only information relevant to the unit being taught. • Use the Written Calculation Policy to ensure correct methods are taught age appropriately. • Flashbacks to be used daily for retrieval practice. <p>Maths lessons may, but do not have to, follow a traditional 3 part format. Staggered starts, low threshold high ceiling tasks, investigations and practical lessons should all be used in the teaching of Mathematics.</p>	<p>The following documents and resources can be found in the 'MATHS- Current' folder on StaffShare:</p> <ul style="list-style-type: none"> • White Rose Maths Overview (EYFS-Y6) • Written Calculation Policy (YR-6) • HIAS Number Facts Documentation (Y1-6) • NCETM Teaching for Mastery (Y1-6) • Progression Maps – All Strands (Y1-6) <p>Resources</p> <ul style="list-style-type: none"> • Pick and Dip Cards (Y1-6) • Convince Me Cards (1-6+) <p>Online Resources (including paid for subscriptions)</p> <ul style="list-style-type: none"> • Classroom Secrets • White Rose Maths • MathsBot • NRICH • Corebett Maths Primary

Implementation: Year R Yearly Overview and Small Steps Curriculum

Year R Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me!			It's Me 1 2 3!			Light and Dark			Consolidation	
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation				
Summer	To 20 and Beyond			First Then Now			Find My Pattern			On The Move				

Year R Small Steps Curriculum – Autumn

Week 1	Week 2	Week 3		Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<p>Getting to Know You</p> <p>Opportunities for settling in, introducing the areas of provision and getting to know the children.</p> <p>Key times of day, class routines. Exploring the continuous provision inside and out. Where do things belong? Positional language.</p>			Phase	Just Like Me!			It's Me 1 2 3!			Light and Dark		
			Number	Match and Sort Compare Amounts			Representing 1, 2 & 3 Comparing 1, 2 & 3 Composition of 1, 2 & 3			Representing Numbers to 5. One More and Less.		
			Measure, Shape and Spatial Thinking	Compare Size, Mass & Capacity Exploring Pattern			Circles and Triangles Positional Language			Shapes with 4 Sides. Time		

Year R Small Steps Curriculum – Spring

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Phase	Alive in 5!			Growing 6, 7, 8			Building 9 & 10		
Number	Introducing zero Comparing numbers to 5 Composition of 4 & 5			6, 7 & 8 Combining 2 amounts Making pairs			Counting to 9 & 10 Comparing numbers to 10 Bonds to 10		
Measure, Shape and Spatial Thinking	Compare Mass (2) Compare Capacity (2)			Length & Height Time			3d-shapes Patterns		

Year R Small Steps Curriculum – Summer

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Phase	To 20 and Beyond			First Then Now			Find my Pattern			On the Move		
Number	Building Numbers Beyond 10 Counting Patterns Beyond 10			Adding More Taking Away			Doubling Sharing & Grouping Even & Odd			Deepening Understanding Patterns and Relationships		
Spatial Thinking	Spatial Reasoning (1) Match, Rotate, Manipulate			Spatial Reasoning (2) Compose and Decompose			Spatial Reasoning (3) Visualise and Build			Spatial Reasoning (4) Mapping		

How has learning in the EYFS equipped children for the National Curriculum?

Statutory framework for the EYFS (from Sep 2021)

ELG: Number

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Implementation: Year 1 Yearly Overview and Small Steps Curriculum

Year 1 Yearly Overview

	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

Year 1 Small Steps Curriculum - Autumn

Block 1: Place value	
Step 1	Sort objects
Step 2	Count objects
Step 3	Count objects from a larger group
Step 4	4 Represent objects
Step 5	Recognise numbers as words
Step 6	Count on from any number
Step 7	1 more
Step 8	Count backwards within 10
Step 9	1 less
Step 10	Compare groups by matching
Step 11	Fewer, more, same
Step 12	Less than, greater than, equal to
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	The number line

Block 2: Addition and subtraction	
Step 1	Introduce parts and wholes
Step 2	Part-whole model
Step 3	Write number sentences
Step 4	Fact families – addition facts
Step 5	Number bonds within 10
Step 6	Systematic number bonds within 10
Step 7	Number bonds to 10
Step 8	Addition – add together
Step 9	Addition – add more
Step 10	Addition problems
Step 11	Find a part
Step 12	Subtraction – find a part
Step 13	Fact families – the eight facts
Step 14	Subtraction – take away/cross out
Step 15	Take away (How many left?)
Step 16	Subtraction on a number line
Step 17	Add or subtract 1 or 2

Block 3: Shape	
Step 1	Recognise and name 3-D shapes
Step 2	Sort 3-D shapes
Step 3	Recognise and name 2-D shapes
Step 4	Sort 2-D shapes
Step 5	Patterns with 2-D and 3-D shapes

Year 1 Small Steps Curriculum - Spring

Block 1: Place value (within 20)

Step 1	Count within 20
Step 2	Understand 10
Step 3	Understand 11, 12 and 13
Step 4	Understand 14, 15 and 16
Step 5	Understand 17, 18 and 19
Step 6	Understand 20
Step 7	1 more and 1 less
Step 8	The number line to 20
Step 9	Use a number line to 20
Step 10	Estimate on a number line to 20
Step 11	Compare numbers to 20
Step 12	12 Order numbers to 20

Block 2: Add and sub (within 20)

Step 1	Add by counting on within 20
Step 2	Add ones using number bonds
Step 3	Find and make number bonds to 20
Step 4	Doubles

Step 5	Near doubles
Step 6	Subtract ones using number bonds
Step 7	Subtraction – counting back
Step 8	Subtraction – finding the difference
Step 9	Related facts
Step 10	Step 10 Missing number problems

Block 3: Place value (within 50)

Step 1	Count from 20 to 50
Step 2	20, 30, 40 and 50
Step 3	Count by making groups of tens
Step 4	Groups of tens and ones
Step 5	Partition into tens and ones
Step 6	The number line to 50
Step 7	Estimate on a number line to 50
Step 8	1 more, 1 less

Block 4: Length and height

Step 1	Compare lengths and heights
Step 2	Measure length using objects
Step 3	Measure length in centimetres

Block 5: Mass and volume

Step 1	Heavier and lighter
Step 2	Measure Mass
Step 3	Compare mass
Step 4	Full and empty
Step 5	Compare volume
Step 6	Measure capacity
Step 7	Compare capacity

Year 1 Small Steps Curriculum - Summer

Block 1: Multiplication and Division

Step 1	Count in 2s
Step 2	Count in 10s
Step 3	Count in 5s
Step 4	Recognise equal groups
Step 5	Add equal groups
Step 6	Make arrays
Step 7	Make doubles
Step 8	Make equal groups – grouping
Step 9	Make equal groups – sharing

Block 2: Fractions

Step 1	Recognise a half of an object or shape
Step 2	Find a half of an object or a shape
Step 3	Recognise a half of a quantity
Step 4	Find a half of a quantity
Step 5	Recognise a quarter of an object or a shape
Step 6	Find a quarter of an object or a shape
Step 7	Recognise a quarter of a quantity
Step 8	Find a quarter of a quantity

Block 3: Position and direction

Step 1	Describe turns
Step 2	Describe position – left and right
Step 3	Describe position – forwards and backwards
Step 4	Describe position – above and below
Step 5	Ordinal numbers

Block 4: Place value (within 100)

Step 1	Count from 50 to 100
Step 2	Tens to 100
Step 3	Partition into tens and ones
Step 4	The number line to 100
Step 5	1 more, 1 less
Step 6	Compare numbers (same 10s)
Step 7	Compare any two numbers

Block 5: Money

Step 1	Unitising
Step 2	Recognise coins
Step 3	Recognise notes
Step 4	Count in coins

Block 6: Time

Step 1	Before and after
Step 2	Days of the week
Step 3	Months of the year
Step 4	Hours, minutes and seconds
Step 5	Tell the time to the hour
Step 6	Tell the time to the half hour

Implementation: Year 2 Yearly Overview and Small Steps Curriculum

Year 2 Yearly Overview

	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		

Year 2 Small Steps Curriculum - Autumn

Block 1: Place Value	
Step 1	Numbers to 20
Step 2	Count objects to 100 by making 10s
Step 3	Recognise tens and ones
Step 4	Use a place value chart
Step 5	Partition numbers to 100
Step 6	Write numbers to 100 in words
Step 7	Flexibly partition numbers to 100
Step 8	Write numbers to 100 in expanded form
Step 9	10s on the number line to 100
Step 10	10s and 1s on the number line to 100
Step 11	Estimate numbers on a number line
Step 12	Compare objects
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	Count in 2s, 5s and 10s
Step 16	Count in 3s

Block 2: Addition and Subtraction	
Step 1	Bonds to 10
Step 2	Fact families - + and - bonds within 20
Step 3	Related facts
Step 4	Bonds to 100 (tens)
Step 5	Add and subtract 1s
Step 6	Add by making 10
Step 7	Add three 1-digit numbers
Step 8	Add to the next 10
Step 9	Add across a 10
Step 10	Subtract across 10
Step 11	Subtract from a 10
Step 12	Subtract 1-digit from 2-digits (across 10)
Step 13	10 more, 10 less
Step 14	Add and subtract 10s
Step 15	Add two 2-digit numbers (not across a 10)
Step 16	Add two 2-digit numbers (across a 10)
Step 17	Subtract two 2-digit numbers (not across a 10)

Step 18	Subtract two 2-digit numbers (across a 10)
Step 19	Mixed addition and subtraction
Step 20	Compare number sentences
Step 21	Missing number problems
Block 3: Shape	
Step 1	Recognise 2-D and 3-D shapes
Step 2	Count sides on 2-D shapes
Step 3	Count vertices on 2-D shapes
Step 4	Draw 2-D shapes
Step 5	Lines of symmetry on shapes
Step 6	Use lines of symmetry to complete shapes
Step 7	Sort 2-D shapes
Step 8	Count faces on 3-D shapes
Step 9	Count edges on 3-D shapes
Step 10	Count vertices on 3-D shapes
Step 11	Sort 3-D shapes
Step 12	Make patterns with 2-D and 3-D shapes

Year 2 Small Steps Curriculum - Spring

Block 1: Money	
Step 1	Count money – pence
Step 2	Count money – pounds (notes and coins)
Step 3	Count money – pounds and pence
Step 4	Choose notes and coins
Step 5	Make the same amount
Step 6	Compare amounts of money
Step 7	Calculate with money
Step 8	Make a pound
Step 9	Find change
Step 10	Two-step problems

Block 2: Multiplication and Division	
Step 1	Recognise equal groups
Step 2	Make equal groups
Step 3	Add equal groups
Step 4	Introduce the multiplication symbol
Step 5	Multiplication sentences
Step 6	Use arrays
Step 7	Make equal groups – grouping
Step 8	Make equal groups – sharing
Step 9	The 2 times-table
Step 10	Divide by 2
Step 11	Doubling and halving
Step 12	Odd and even numbers
Step 13	The 10 times-table
Step 14	Divide by 10
Step 15	The 5 times-table
Step 16	Divide by 5
Step 17	The 5 and 10 times-tables

Block 3: Length and Height	
Step 1	Measure in centimetres
Step 2	Measure in metres
Step 3	Compare lengths and heights
Step 4	Order lengths and heights
Step 5	Four operations with lengths and heights
Block 4: Mass, Capacity and Temp	
Step 1	Compare mass
Step 2	Measure in grams
Step 3	Measure in kilograms
Step 4	Four operations with mass
Step 5	Compare volume and capacity
Step 6	Measure in millilitres
Step 7	Measure in litres
Step 8	Four operations with volume and capacity
Step 9	Temperature

Year 2 Small Steps Curriculum - Summer

Block 1: Fractions

Step 1	Introduction to parts and whole
Step 2	Equal and unequal parts
Step 3	Recognise a half
Step 4	Find a half
Step 5	Recognise a quarter
Step 6	Find a quarter
Step 7	Recognise a third
Step 8	Find a third
Step 9	Find the whole
Step 10	Unit fractions
Step 11	Non-unit fractions
Step 12	Recognise the equivalence of a half and two-quarters
Step 13	Recognise three-quarters
Step 14	Find three-quarters
Step 15	Count in fractions up to a whole

Block 2: Time

Step 1	O'clock and half past
Step 2	Quarter past and quarter to
Step 3	Tell the time past the hour
Step 4	Tell the time to the hour
Step 5	Tell the time to 5 minutes
Step 6	Minutes in an hour
Step 7	Hours in a day

Block 3: Statistics

Step 1	Make tally charts
Step 2	Tables
Step 3	Block diagrams
Step 4	Draw pictograms (1–1)
Step 5	Interpret pictograms (1–1)
Step 6	Draw pictograms (2, 5 and 10)
Step 7	Interpret pictograms (2, 5 and 10)

Block 3: Position and Direction

Step 1	Language of position
Step 2	Describe movement
Step 3	Describe turns
Step 4	Describe movement and turns
Step 5	Shape patterns with turns

Consolidation

Implementation: Year 3 Yearly Overview and Small Steps Curriculum

Year 3 Yearly Overview

	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 Curriculum - Autumn

Block 1: Place Value

Step 1	Represent numbers to 100
Step 2	Partition numbers to 100
Step 3	Number line to 100
Step 4	Hundreds
Step 5	Represent numbers to 1,000
Step 6	Partition numbers to 1,000
Step 7	Flexible partitioning of numbers to 1,000
Step 8	Hundreds, tens and ones
Step 9	Find 1, 10 or 100 more or less
Step 10	Number line to 1,000
Step 11	Estimate on a number line to 1,000
Step 12	Compare numbers to 1,000
Step 13	Order numbers to 1,000
Step 14	Count in 50s

Block 2: Addition and Subtraction

Step 1	Apply number bonds within 10
Step 2	Add and subtract 1s
Step 3	Add and subtract 10s

Step 4	Add and subtract 100s
Step 5	Spot the pattern
Step 6	Add 1s across a 10
Step 7	Add 10s across a 100
Step 8	Subtract 1s across a 10
Step 9	Subtract 10s across a 100
Step 10	Make connections
Step 11	Add two numbers (no exchange)
Step 12	Subtract two numbers (no exchange)
Step 13	Add two numbers (across a 10)
Step 14	Add two numbers (across a 100)
Step 15	Subtract two numbers (across a 10)
Step 16	Subtract two numbers (across a 100)
Step 17	Add 2-digit and 3-digit numbers
Step 18	Subtract a 2-digit number from a 3-digit number
Step 19	Complements to 100
Step 20	Estimate answers
Step 21	Inverse operations
Step 22	Make decisions

Block 3: Multiplication and Division A

Step 1	Multiplication – equal groups
Step 2	Use arrays
Step 3	Multiples of 2
Step 4	Multiples of 5 and 10
Step 5	Sharing and grouping
Step 6	Multiply by 3
Step 7	Divide by 3
Step 8	The 3 times-table
Step 9	Multiply by 4
Step 10	Divide by 4
Step 11	The 4 times-table
Step 12	Multiply by 8
Step 13	Divide by 8
Step 14	The 8 times-table
Step 15	The 2, 4 and 8 times-tables

Year 3 Small Steps Curriculum - Spring

Block 1: Multiplication and Division

Step 1	Multiples of 10
Step 2	Related calculations
Step 3	Reasoning about multiplication
Step 4	Multiply a 2-digit number by a 1-digit number – no exchange
Step 5	Multiply a 2-digit number by a 1-digit number – with exchange
Step 6	Link multiplication and division
Step 7	Divide a 2-digit number by a 1-digit number – no exchange
Step 8	Divide a 2-digit number by a 1-digit number – flexible partitioning
Step 9	Divide a 2-digit number by a 1-digit number – with remainders
Step 10	Scaling
Step 11	How many ways?

Block 2: Length and Perimeter

Step 1	Measure in metres and centimetres
Step 2	Measure in millimetres
Step 3	Measure in cm and mm
Step 4	Metres, centimetres and millimetres
Step 5	Equivalent lengths (m and cm)

Step 6	Equivalent lengths (cm and mm)
Step 7	Compare lengths
Step 8	Add lengths
Step 9	Subtract lengths
Step 10	What is perimeter?
Step 11	Measure perimeter
Step 12	Calculate perimeter

Block 3: Fractions A

Step 1	Understand the denominators of unit fractions
Step 2	Compare and order unit fractions
Step 3	Understand the numerators of non-unit fractions
Step 4	Understand the whole
Step 5	Compare and order non-unit fractions
Step 6	Fractions and scales
Step 7	Fractions on a number line
Step 8	Count in fractions on a number line
Step 9	Equivalent fractions on a number line
Step 10	Equivalent fractions as bar models

Block 4: Mass and Capacity

Step 1	Use scales
Step 2	Measure mass in grams
Step 3	Measure mass in kg and g
Step 4	Equivalent masses (kg and g)
Step 5	Compare mass
Step 6	Add and subtract mass
Step 7	Measure capacity and volume in l
Step 8	Measure capacity and volume in l and ml
Step 9	Equivalent capacities and volumes (l and ml)
Step 10	Compare capacity and volume
Step 11	Add and subtract capacity and volume

Year 3 Small Steps Curriculum - Summer

Block 1: Fractions B

Step 1	Add fractions
Step 2	Subtract fractions
Step 3	Partition the whole
Step 4	Unit fractions of a set of objects
Step 5	Non-unit fractions of a set of objects
Step 6	Reasoning with fractions of an amount

Block 2: Money

Step 1	Pounds and pence
Step 2	Convert pounds and pence
Step 3	Add money
Step 4	Subtract money
Step 5	Find change

Block 3: Time

Step 1	Roman numerals to 12
Step 2	Tell the time to 5 minutes
Step 3	Tell the time to the minute
Step 4	4 Read time on a digital clock
Step 5	Use am and pm
Step 6	Years, months and days
Step 7	Days and hours
Step 8	Hours and minutes – use start and end times
Step 9	Hours and minutes - use durations
Step 10	Minutes and seconds
Step 11	Units of time
Step 12	Solve problems with time

Block 4: Shape

Step 1	Turns and angles
Step 2	Right angles
Step 3	Compare angles
Step 4	Measure and draw accurately
Step 5	Horizontal and vertical
Step 6	Parallel and perpendicular
Step 7	Recognise and describe 2-D shapes
Step 8	Draw polygons
Step 9	Recognise and describe 3-D shapes
Step 10	Make 3-D shapes

Block 5: Statistics

Step 1	Interpret pictograms
Step 2	Draw pictograms
Step 3	Interpret bar charts
Step 4	Draw bar charts
Step 5	Collect and represent data
Step 6	Two-way tables

Implementation: Year 4 Yearly Overview and Small Steps Curriculum

Year 4 Yearly Overview

	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 Curriculum - Autumn

Block 1:	
Step 1	Represent numbers to 1,000
Step 2	Partition numbers to 1,000
Step 3	Number line to 1,000
Step 4	Thousands
Step 5	Represent numbers to 10,000
Step 6	Partition numbers to 10,000
Step 7	Flexible partitioning of numbers to 10,000
Step 8	Find 1, 10, 100, 1,000 more or less
Step 9	Number line to 10,000
Step 10	Estimate on a number line to 10,000
Step 11	Compare numbers to 10,000
Step 12	Order numbers to 10,000
Step 13	Roman numerals
Step 14	Round to the nearest 10
Step 15	Round to the nearest 100
Step 16	Round to the nearest 1,000
Step 17	Round to the nearest 10, 100 or 1,000

Block 2: Addition and Subtraction	
Step 1	Add and subtract 1s, 10s, 100s and 1,000s
Step 2	Add up to two 4-digit numbers – no exchange
Step 3	Add two 4-digit numbers – one exchange
Step 4	Add two 4-digit numbers – > one exchange
Step 5	Subtract two 4-digit numbers – no exchange
Step 6	Subtract two 4-digit numbers – one exchange
Step 7	Subtract two 4-digit numbers – > one exchange
Step 8	Efficient subtraction
Step 9	Estimate answers
Step 10	Checking strategies
Block 3: Area	
Step 1	What is area?
Step 2	Count squares
Step 3	Make shapes
Step 4	Compare areas

Block 3: Multiplication and Division	
Step 1	Multiples of 3
Step 2	Multiply and divide by 6
Step 3	6 times-table and division facts
Step 4	Multiply and divide by 9
Step 5	9 times-table and division facts
Step 6	The 3, 6 and 9 times-tables
Step 7	Multiply and divide by 7
Step 8	7 times-table and division facts
Step 9	11 times-table and division facts
Step 10	12 times-table and division facts
Step 11	Multiply by 1 and 0
Step 12	Divide a number by 1 and itself
Step 13	Multiply three numbers

Year 4 Small Steps Curriculum - Spring

Block 1: Multiplications and Division B	
Step 1	Factor pairs
Step 2	Use factor pairs
Step 3	Multiply by 10
Step 4	Multiply by 100
Step 5	Divide by 10
Step 6	Divide by 100
Step 7	Related facts – multiplication and division
Step 8	Informal written methods for multiplication
Step 9	Multiply a 2-digit number by a 1-digit number
Step 10	Multiply a 3-digit number by a 1-digit number
Step 11	Divide a 2-digit number by a 1-digit number (1)
Step 12	Divide a 2-digit number by a 1-digit number (2)
Step 13	Divide a 3-digit number by a 1-digit number
Step 14	Correspondence problems
Step 15	Efficient multiplication

Block 2: Length and Perimeter	
Step 1	Measure in kilometres and metres
Step 2	Equivalent lengths (kilometres and metres)
Step 3	Perimeter on a grid
Step 4	Perimeter of a rectangle
Step 5	Perimeter of rectilinear shapes
Step 6	Find missing lengths in rectilinear shapes
Step 7	Calculate perimeter of rectilinear shapes
Step 8	Perimeter of regular polygons
Step 9	Perimeter of polygons
Block 3: Fractions	
Step 1	Understand the whole
Step 2	Count beyond 1
Step 3	Partition a mixed number
Step 4	Number lines with mixed numbers
Step 5	Compare and order mixed numbers
Step 6	Understand improper fractions
Step 7	Convert mixed numbers to improper fractions

Step 8	Equivalent fractions on a number line
Step 9	Equivalent fraction families
Step 10	Add two or more fractions
Step 11	Add fractions and mixed numbers
Step 12	Subtract two fractions
Step 13	Subtract from whole amounts
Step 14	Subtract from mixed numbers
Step 15	Equivalent fraction families
Block 4: Decimals	
Step 1	Tenths as fractions
Step 2	Tenths as decimals
Step 3	Tenths on a place value chart
Step 4	Tenths on a number line
Step 5	Divide a 1-digit number by 10
Step 6	Divide a 2-digit number by 10
Step 7	Hundredths as fractions
Step 8	Hundredths as decimals
Step 9	Hundredths on a place value chart
Step 10	Divide a 1- or 2-digit number by 100

Year 4 Small Steps Curriculum - Summer

Block 1: Decimals B

Step 1 Make a whole with tenths

Step 2 Make a whole with hundredths

Step 3 Partition decimals

Step 4 Flexibly partition decimals

Step 5 Compare decimals

Step 6 Order decimals

Step 7 Round to the nearest whole number

Step 8 Halves and quarters as decimals

Block 2: Money

Step 1 Write money using decimals

Step 2 Convert between pounds and pence

Step 3 Compare amounts of money

Step 4 Estimate with money

Step 5 Calculate with money

Step 6 Solve problems with money

Block 3: Time

Step 1 Years, months, weeks and days

Step 2 Hours, minutes and seconds

Step 3 Convert between analogue and digital times

Step 4 Convert to the 24-hour clock

Step 5 Convert from the 24-hour clock

Block 4: Shape

Step 1 Understand angles as turns

Step 2 Identify angles

Step 3 Compare and order angles

Step 4 Triangles

Step 5 Quadrilaterals

Step 6 Polygons

Step 7 Lines of symmetry

Step 8 Complete a symmetric figure

Block 5: Statistics

Step 1 Interpret charts

Step 2 Comparison, sum and difference

Step 3 Interpret line graphs

Step 4 Draw line graphs

Block 6: Position and Direction

Step 1 Describe position using coordinates

Step 2 Plot coordinates

Step 3 Draw 2-D shapes on a grid

Step 4 Translate on a grid

Step 5 Describe translation on a grid

Implementation: Year 5 Yearly Overview and Small Steps Curriculum

Year 5 Yearly Overview

	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 Curriculum - Autumn

Block 1: Place Value	
Step 1	Roman numerals to 1,000
Step 2	Numbers to 10,000
Step 3	Numbers to 100,000
Step 4	Numbers to 1,000,000
Step 5	Read and write numbers to 1,000,000
Step 6	Powers of 10
Step 7	10/100/1,000/10,000/100,000 more or less
Step 8	Partition numbers to 1,000,000
Step 9	Number line to 1,000,000
Step 10	Compare and order numbers to 100,000
Step 11	Compare and order numbers to 1,000,000
Step 12	Round to the nearest 10, 100 or 1,000
Step 13	Round within 100,000
Step 14	Round within 1,000,000
Block 2: Addition and Subtraction	
Step 1	Mental strategies
Step 2	Add whole numbers with more than four digits

Step 3	Subtract whole numbers with more than 4 digits
Step 4	Round to check answers
Step 5	Inverse operations (addition and subtraction)
Step 6	Multi-step addition and subtraction problems
Step 7	Compare calculations
Step 8	Find missing numbers
Block 3: Multiplication and Division A	
Step 1	Multiples
Step 2	Common multiples
Step 3	Factors
Step 4	Common factors
Step 5	Prime numbers
Step 6	Square numbers
Step 7	Cube numbers
Step 8	Multiply by 10, 100 and 1,000
Step 9	Divide by 10, 100 and 1,000
Step 10	Multiples of 10, 100 and 1,000

Block 4: Fractions A	
Step 1	Find fractions equivalent to a unit fraction
Step 2	Find fractions equivalent to a non-unit fraction
Step 3	Recognise equivalent fractions
Step 4	Convert improper fractions to mixed numbers
Step 5	Convert mixed numbers to improper fractions
Step 6	Compare fractions less than 1
Step 7	Order fractions less than 1
Step 8	Compare and order fractions greater than 1
Step 9	Add and subtract fractions with the same denominator
Step 10	Add fractions within 1
Step 11	Add fractions with total greater than 1
Step 12	Add to a mixed number
Step 13	Add two mixed numbers
Step 14	Subtract fractions
Step 15	Subtract from a mixed number
Step 16	Subtract from a mixed number – breaking the whole
Step 17	Subtract two mixed numbers

Year 5 Small Steps Curriculum - Spring

Block 1: Multiplication and Division B

Step 1	Multiply up to a 4-digit number by a 1-digit number
Step 2	Multiply a 2-digit number by a 2-digit number (area model)
Step 3	Multiply a 2-digit number by a 2-digit number
Step 4	Multiply a 3-digit number by a 2-digit number
Step 5	Multiply a 4-digit number by a 2-digit number
Step 6	Solve problems with multiplication
Step 7	Short division
Step 8	Divide a 4-digit number by a 1-digit number
Step 9	Divide with remainders
Step 10	Efficient division
Step 11	Solve problems with multiplication and division

Block 2: Fractions

Step 1	Multiply a unit fraction by an integer
Step 2	Multiply a non-unit fraction by an integer
Step 3	Multiply a mixed number by an integer
Step 4	Calculate a fraction of a quantity
Step 5	Fraction of an amount

Step 6	Find the whole
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Step 7	Use fractions as operators
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Block 3: Decimals and Percentages

Step 1	Decimals up to 2 decimal places
Step 2	Equivalent fractions and decimals (tenths)
Step 3	Equivalent fractions and decimals (hundredths)
Step 4	Equivalent fractions and decimals
Step 5	Thousandths as fractions
Step 6	Thousandths as decimals
Step 7	Thousandths on a place value chart
Step 8	Order and compare decimals (same number of decimal places)
Step 9	Order and compare any decimals with up to 3 decimal places
Step 10	Round to the nearest whole number
Step 11	Round to 1 decimal place
Step 12	Understand percentages
Step 13	Percentages as fractions
Step 14	Percentages as decimals
Step 15	Equivalent fractions, decimals and percentages

Block 4: Perimeter and Area

Step 1	Perimeter of rectangles
Step 2	Perimeter of rectilinear shapes
Step 3	Perimeter of polygons
Step 4	Area of rectangles
Step 5	Area of compound shapes
Step 6	Estimate area

Block 5: Statistics

Step 1	Draw line graphs
Step 2	Read and interpret line graphs
Step 3	Read and interpret tables
Step 4	Two-way tables
Step 5	Read and interpret timetables

Year 5 Small Steps Curriculum - Summer

Block 1: Shape

Step 1 Understand and use degrees

Step 2 Classify angles

Step 3 Estimate angles

Step 4 Measure angles up to 180°

Step 5 Draw lines and angles accurately

Step 6 Calculate angles around a point

Step 7 Calculate angles on a straight line

Step 8 Lengths and angles in shapes

Step 9 Regular and irregular polygons

Step 10 3-D shapes

Block 2: Position and Direction

Step 1 Read and plot coordinates

Step 2 Problem solving with coordinates

Step 3 Translation

Step 4 Translation with coordinates

Step 5 Lines of symmetry

Step 6 Reflection in horizontal and vertical lines

Block 3: Decimals

Step 1 Use known facts to add and subtract decimals within 1

Step 2 Complements to 1

Step 3 Add and subtract decimals across 1

Step 4 Add decimals with the same number of decimal places

Step 5 Subtract decimals with the same number of decimal places

Step 6 Add decimals with different numbers of decimal places

Step 7 Subtract decimals with different numbers of decimal places

Step 8 Efficient strategies for adding and subtracting decimals

Step 9 Decimal sequences

Step 10 Multiply by 10, 100 and 1,000

Step 11 Divide by 10, 100 and 1,000

Step 12 Multiply and divide decimals – missing values

Block 4: Negative Numbers

Step 1 Understand negative numbers

Step 2 Count through zero in 1s

Step 3 Count through zero in multiples

Step 4 Compare and order negative numbers

Step 5 Find the difference

Block 5: Converting units

Step 1 Kilograms and kilometres

Step 2 Step 2 Millimetres and millilitres

Step 3 Step 3 Convert units of length

Step 4 Step 4 Convert between metric and imperial units

Step 5 Step 5 Convert units of time

Step 6 Step 6 Calculate with timetables

Block 6: Volume

Step 1 Cubic centimetres

Step 2 Compare volume

Step 3 Estimate volume

Step 4 Estimate Capacity

<p>Implementation: Year 6 Yearly Overview and Small Steps Curriculum</p>

Year 6 Yearly Overview

	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 A		Number Fractions B		Measurement Converting units
Spring	Ratio		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							

Year 6 Small Steps Curriculum - Autumn

Block 1: Place Value

Step 1	Numbers to 1,000,000
Step 2	Numbers to 10,000,000
Step 3	Read and write numbers to 10,000,000
Step 4	Powers of 10
Step 5	Number line to 10,000,000
Step 6	Compare and order any integers
Step 7	Round any integer
Step 8	Negative numbers

Block 2: All Four Operations

Step 1	Add and subtract integers
Step 2	Common factors
Step 3	Common multiples
Step 4	Rules of divisibility
Step 5	Primes to 100
Step 6	Square and cube numbers
Step 7	Multiply up to 4-digits by 2-digits
Step 8	Solve problems with multiplication
Step 9	Short division

Step 10	Division using factors
Step 11	Introduction to long division
Step 12	Long division with remainders
Step 13	Solve problems with division
Step 14	Solve multi-step problems
Step 15	Order of operations
Step 16	Mental calculations and estimation
Step 17	Reason from known facts

Block 3: Fractions A

Step 1	fractions and simplifying
Step 2	Equivalent fractions on a number line
Step 3	Compare and order (denominator)
Step 4	Compare and order (numerator)
Step 5	Add and subtract simple fractions
Step 6	Add and subtract any two fractions
Step 7	Add mixed numbers
Step 8	Subtract mixed numbers
Step 9	Multi-step problems

Block 4: Fractions B

Step 1	Multiply fractions by integers
Step 2	Multiply fractions by fractions
Step 3	Divide a fraction by an integer
Step 4	Divide any fraction by an integer
Step 5	Mixed questions with fractions
Step 6	Fraction of an amount
Step 7	Fraction of an amount – find the whole

Block 5: Converting Units

Step 1	Metric measures
Step 2	Convert metric measures
Step 3	Calculate with metric measures
Step 4	Miles and kilometres
Step 5	Imperial measures

Year 6 Small Steps Curriculum - Spring

Block 1: Ratio

Step 1	Add or multiply?
Step 2	Use ratio language
Step 3	Introduction to the ratio symbol
Step 4	Ratio and fractions
Step 5	Scale drawing
Step 6	Use scale factors
Step 7	Similar shapes
Step 8	Ratio problems
Step 9	Proportion problems
Step 10	Recipes

Block 2: Algebra

Step 1	1-step function machines
Step 2	2-step function machines
Step 3	Form expressions
Step 4	Substitution
Step 5	Formulae
Step 6	Form equations
Step 7	Solve 1-step equations

Step 8 Solve 2-step equations

Step 9 Find pairs of values

Step 10 Solve problems with two unknowns

Block 3: Decimals

Step 1	Place value within 1
Step 2	Place value – integers and decimals
Step 3	Round decimals
Step 4	Add and subtract decimals
Step 5	Multiply by 10, 100 and 1,000
Step 6	Divide by 10, 100 and 1,000
Step 7	Multiply decimals by integers
Step 8	Divide decimals by integers
Step 9	Multiply and divide decimals in context

Block 4: FDP

Step 1	Decimal and fraction equivalents
Step 2	Fractions as division
Step 3	Understand percentages
Step 4	Fractions to percentages
Step 5	Equivalent FDP

Step 6 Order FDP

Step 7 Percentage of an amount – one step

Step 8 Percentage of an amount – multi-step

Step 9 Percentages – missing values

Block 5: APV

Step 1	Shapes – same area
Step 2	Area and perimeter
Step 3	Area of a triangle – counting squares
Step 4	Area of a right-angled triangle
Step 5	Area of any triangle
Step 6	Area of a parallelogram
Step 7	Volume – counting cubes
Step 8	Volume of a cuboid

Block 6: Statistics

Step 1	Line graphs
Step 2	Dual bar charts
Step 3	Read and interpret pie charts
Step 4	Pie charts with percentages
Step 5	Draw pie charts
Step 6	The mean

Year 6 Small Steps Curriculum - Summer

Block 1: Shape

Step 1	Measure and classify angles
Step 2	Calculate angles
Step 3	Vertically opposite angles
Step 4	Angles in a triangle
Step 5	Angles in a triangle – special cases
Step 6	Angles in a triangle – missing angles
Step 7	Angles in a quadrilateral
Step 8	Angles in polygons
Step 9	Circles
Step 10	Draw shapes accurately
Step 11	Nets of 3-D shapes

Block 2: Position and Direction

Step 1	The first quadrant
Step 2	Read and plot points in four quadrants
Step 3	Solve problems with coordinates
Step 4	Translations
Step 5	Reflections

What does ARE in Maths look like?

A pupil who would be considered working at ARE in Maths would be expected to be secure in most of the statutory requirements listed in the National Curriculum Mathematics Programme of Study (2014) and be consistently achieving a standardised score above 100 in half termly assessments where taken. Not all attainment targets would need to be secure, however, a 'best fit' approach should be taken. Where pupils are not yet able to access age-appropriate half termly assessments, consideration would need to be taken on the amount of support and scaffolding that child receives when making a judgement.

What does GD in Maths look like?

A pupil who would be considered working at a Greater Depth in Maths would be expected to be secure in all of the statutory requirements listed in the National Curriculum Mathematics Programme of Study (2014) and be consistently achieving a standardised score above 115 (110 in KS1 or KS2 SATs) in half termly assessments where taken. In addition, they should demonstrate through their written work and/or be able to explain how they were able to solve a specific problem. They would need to have a wide range of problem-solving strategies and be able to ask their own questions about what they have found out. A pupil working at GD would demonstrate secure number sense and be able to apply this to a wide range of mathematical concepts showing resilience and the ability to work systematically.