St Mary's Catholic Primary School

Living and Learning Together – Shining in our Faith

Mathematics- Essential Knowledge 2025-26

Nursery, Reception and Year 1

Autumn 1		
Nursery	**Reception**	**Year 1**
	It's Me 1,2,3	**Place Value**
	Step 1 Find 1, 2 and 3	Step 1 Sort objects
	Step 2 Subitise 1, 2 and 3	Step 2 Count objects
	Step 3 Represent 1, 2 and 3	Step 3 Count objects from a larger group
	Step 4 1 more	Step 4 Represent objects
	Step 5 1 less	Step 5 Recognise numbers as words
	Step 6 Composition of 1, 2 and 3	Step 6 Count on from any number
		Step 7 1 more
	1,2,3,4,5	Step 8 Count backwards within 10
	Step 1 Find 4 and 5	Step 9 1 less
	Step 2 Subitise 4 and 5	Step 10 Compare groups by matching
	Step 3 Represent 4 and 5	Step 11 Fewer, more, same
	Step 4 1 more	Step 12 Less than, greater than, equal to
	Step 5 1 less	Step 13 Compare numbers
	Step 6 Composition of 4 and 5	Step 14 Order objects and numbers
	Step 7 Composition of 1–5	Step 15 The number line
	Alive in 5	**Place Value within 20**
	Step 1 Introduce zero	Step 1 Count within 20
	Step 2 Find 0 to 5	Step 2 Understand 10
	Step 3 Subitise 0 to 5	Step 3 Understand 11, 12 and 13
	Step 4 Represent 0 to 5	Step 4 Understand 14, 15 and 16
	Step 5 1 more	Step 5 Understand 17, 18 and 19
	Step 6 1 less	Step 6 Understand 20
	Step 7 Composition	Step 7 1 more and 1 less
	Step 8 Conceptual subitising to 5	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 Order numbers to 20
		Year 1 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
Autumn 2		
Nursery	**Reception**	**Year 1**
		Addition and Subtraction
Comparison 1 More than and fewer than	**Growing 6,7,8**	Step 1 Introduce parts and wholes
Step 1 collect objects to compare	Step 1 Find 6, 7 and 8	Step 2 Part-whole model
Step 2 Make simple comparisons of amounts	Step 2 Represent 6, 7 and 8	Step 3 Write number sentences
Step 3 look for collections of large and small amounts	Step 3 1 more	Step 4 Fact families – addition facts
Step 4 compare and talk about large and small amounts	Step 4 1 less	Step 5 Number bonds within 10
Step 5 Make large and small collections	Step 5 Composition of 6, 7 and 8	Step 6 Systematic number bonds within 10
Step 6 make collections the same	Step 6 Make pairs – odd and even	Step 7 Number bonds to 10
	Step 7 Double to 8 (find a double)	Step 8 Addition – add together
Counting 1 – Hear and say number names	Step 8 Double to 8 (make a double)	Step9 Addition – add more
Step 1 Hear some number names	Step 9 Combine two groups	Step 10 Addition problems
Step 2 Join in and say some number names	Step 10 Conceptual subitising	Step 11 Find a part
Step 3 Model saying number names in order		Step 12 Subtraction – find a part
Step 4 Join in stable order counting forwards	**Bridging 9, 10**	Step 13 Fact families – the eight facts
Step 5 Join in stable order counting backwards	Step 1 Find 9 and 10	Step 14 Subtraction – take away/cross out (How many left?)
Pattern 1	Step 2 Compare numbers to 10	Step 15 Take away (How many left?)
Step 1 Listen to repeats in songs and stories	Step 3 Represent 9 and 10	Step 16 Subtraction on a number line
Step 2 start to join in songs with repeats	Step 4 Conceptual subitising to 10	
Step 3 start to join in with repeats from stories	Step 5 1 more	**Time**
Step 4 clap along to songs	Step 6 1 less	Step 1 Before and after

Step 5 make line patters with own sequences	Step 7 Composition to 10	Step 2 Days of the week
Step 6 choose blocks to build roads and towers	Step 8 Bonds to 10 (2 parts)	Step 3 Months of the year
Counting 2	Step 9 Make arrangements of 10	Step 4 Hours, minutes and seconds
Step 1 Model saying 1,2, and 3 in play	Step 10 Bonds to 10 (3 parts)	Step 5 Tell the time to the hour
Step 2 Copy the sequence 1,2,3	Step 11 Doubles to 10 (find a double)	Step 6 Tell the time to the half hour
Step 3 Copy fingers to represent 1,2,3	Step 12 Doubles to 10 (make a double)	
Step 4 Begin to count actions		
Step 5 say number names in order	**Matching and Sorting**	
Step 6 begin to recognise that anything can be counted.	Step 1 Match objects	
	Step 2 Match pictures and objects	
Subitising 1 I can see	Step 3 Identify a set	
Step 1 Notice images in books	Step 4 Sort objects to a type	
Step 2 respond to I see 1,2,3	Step 5 Explore sorting techniques	
Step 3 Recognise I see 1,2,3	Step 6 Create sorting rules	
Step 4 Copy I see 1,2,3	Step 7 Compare amounts	
Step 5 Point to 1,2,3		
Step 6 Recognise 1,2,3 in well known tales.		
Spring 1		
Nursery	**Reception**	**Year 1**
Pattern 2	**Talk about Measures and Pattern**	**Addition and Subtraction within 20**
Step 1 join in with repeated actions in songs	Step 1 Compare size	Step 1 Add by counting on within 20
Step 2 join in with repeats in songs and stories	Step 2 Compare mass	Step 2 Add ones using number bonds
Step 3 sing some refrains independently	Step 3 Compare capacity	Step 3 Find and make number bonds to 20
Step 4 have a sense of daily routines	Step 4 Explore simple patterns	Step 4 Doubles
Step 5 say what happens next	Step 5 Copy and continue simple patterns	Step 5 Near doubles
Step 6 make arrangements in art	Step 6 Create simple patterns	Step 6 Subtract ones using number bonds
		Step 7 Subtraction – counting back
Subitising 2	**How Many ?**	Step 8 Subtraction – finding the difference
Step 1 Copy fingers to show 1	Step 1 Add more	Step 9 Related facts
Step 2 Copy fingers to show 2	Step 2 How many did I add?	Step 10 Missing number problems
Step 3 Copy fingers to show 3	Step 3 Take away	
Step 4 Show 1 finger when seeing 1 item in stories	Step 4 How many did I take away?	**Position and Direction**
Step 5 Show 2 or 3 fingers when seeing 2 or 3 items		Step 1 Describe turns
Step 6 Show 1,2,3 on fingers when asked	**Circles and Triangles**	Step 2 Describe position – left and right

	Step 1 Identify and name circles and triangles	Step 3 Describe position – forwards and backwards
Shape, Space and Measure 1	Step 2 Compare circles and triangles	Step 4 Describe position – above and below
Step 1 Explore and lay with shapes	Step 3 Shapes in the environment	Step 5 Ordinal numbers
Step 2 Show interest in simple differences between shapes	Step 4 Describe position	
Step 3 put shapes and blocks into position		
Step 4 select shapes for reasons	**Shapes with 4 sides**	
Step 5 begin to explore and describe natural shapes and objects	Step 1 Identify and name shapes with 4 sides	
Step 6 find and collect objects for a purpose	Step 2 Combine shapes with 4 sides	
	Step 3 Shapes in the environment	
Shape, Space and Measure 2	Step 4 My day and night	
Step 1 Respond to a simple language of position		
Step 2 arrange the blocks in a chosen position	**Explore 3d shape**	
Step 3 Select shapes for a space	Step 1 Recognise and name 3-D shapes	
Step 4 Recognise when 2 objects are the same shape	Step 2 Find 2-D shapes within 3-D shapes	
Step 5 Explore and describe shapes and objects	Step 3 Use 3-D shapes for tasks	
Step 6 Sort shapes and objects into simple categories	Step 4 3-D shapes in the environment	
	Step 5 Identify more complex patterns	
Shape, Space and Measure 3	Step 6 Copy and continue patterns	
Step 1 Explore shape resources	Step 7 Patterns in the environment	
Step 2 Explore more complex inset jigsaws		
Step 3 talk about simple position		
Step 4 move into simple positions		
Step 5 move through positions		
Step 6 follow simple small-world routes		
Spring 2		
Nursery	**Reception**	**Year 1**
Shape, Space and Measure 4	**Explore 3D shape**	**Multiplication and Division**
Step 1 Match Simple shapes	Step 1 Recognise and name 3-D shapes	Step 1 Count in 2s
Step 2 Push some shapes and blocks together	Step 2 Find 2-D shapes within 3-D shapes	Step 2 Count in 10s
Step 3 Make simple Arrangements	Step 3 Use 3-D shapes for tasks	Step 3 Count in 5s
Step 4 Talk about arrangements	Step 4 3-D shapes in the environment	Step 4 Recognise equal groups
Step 5 Follow simple routes outside	Step 5 Identify more complex patterns	Step 5 Add equal groups
Step 6 Follow toys around a simple route	Step 6 Copy and continue patterns	Step 6 Make arrays

	Step 7 Patterns in the environment	Step 7 Make doubles
Counting 3		Step 8 Make equal groups – grouping
Step 1 make actions when counting words		Step 9 Make equal groups – sharing
Step 2 Move fingers when saying counting words	**Sharing and Grouping**	
Step 3 Count out up to 3 objects from rhymes	Step 1 Explore sharing	**Fractions**
Step 4 Notice number symbols as labels	Step 2 Sharing	Step 1 Recognise a half of an object or a shape
Step 5 Label amounts as 1 and not 1	Step 3 Explore grouping	Step 2 Find a half of an object or a shape
Step 6 label amounts as 1,2,3	Step 4 Grouping	Step 3 Recognise a half of a quantity
	Step 5 Even and odd sharing	Step 4 Find a half of a quantity
Counting 4	Step 6 Play with and build doubles	Step 5 Recognise a quarter of an object or a shape
Step 1 Choose a group to count		Step 6 Find a quarter of an object or a shape
Step 2 Take out 2 from a group	**Visualise, Map and build**	Step 7 Recognise a quarter of a quantity
Step 3 Take out 3 from a group	Step 1 Identify units of repeating patterns	Step 8 Find a quarter of a quantity
Step 4 Give others 2 items	Step 2 Create own pattern rules	
Step 5 Give others 3 items	Step 3 Explore own pattern rules	
Step 6 Count 3 objects with one-to-one correspondence.	Step 4 Replicate and build scenes and constructions	
	Step 5 Visualise from different positions	
Subitising 3	Step 6 Describe positions	
Step 1 become familiar with dot patterns	Step 7 Give instructions to build	
Step 2 Say when there is 1 dot	Step 8 Explore mapping	
Step 3 Say when there are 2 dots	Step 9 Represent maps with models	
Step 4 Recognise 1 and 2 different arrangements	Step 10 Create own maps from familiar places	
Step 5 say where there are 3 dots	Step 11 Create own maps and plans from story situations	
Step 6 Recognise 1,2,3 in different arrangements		
Summer 1		
Nursery	**Reception**	**Year 1**
Shape, Space and Measure 5	**Manipulate, decompose and compose**	**Shape**
Step 1 Complete shape matched puzzles	Step 1 Select shapes for a purpose	Step 1 Recognise a half of an object or a shape
Step 2 complete jigsaw puzzles	Step 2 Rotate shapes	Step 2 Find a half of an object or a shape
Step 3 Match objects to pictures	Step 3 Manipulate shapes	Step 3 Recognise a half of a quantity
Step 4 match objects to shadows	Step 4 Explain shape arrangements	Step 4 Find a half of a quantity
Step 5 explore objects and small world from different positions	Step 5 Compose shapes	Step 5 Recognise a quarter of an object or a shape

Step 6 make simple routes in small world with lines and curves	Step 6 Decompose shapes	Step 6 Find a quarter of an object or a shape
	Step 7 Copy 2-D shape pictures	Step 7 Recognise a quarter of a quantity
Comparison 2	Step 8 Find 2-D shapes within 3-D shapes	Step 8 Find a quarter of a quantity
Step 1 notice when two collections are the same		
Step 2 make collections of small objects the same	**Length, Height and Time**	**Length and Height**
Step 3 Make collection of large objects	Step 1 Explore length	Step 1 Compare lengths and heights
Step 4 Recognise two collections are the same using large and small objects	Step 2 Compare length	Step 2 Measure length using objects
Step 5 Make collections the same using large and small objects	Step 3 Explore height	Step 3 Measure length in centimetres
Step 6 sort and talk about their own collections	Step 4 Compare height	Step 4 Add and subtract length and height
	Step 5 Talk about time	
Pattern 4	Step 6 Order and sequence time	
Step 1 Join in fully with sequences and songs		
Step 2 Sing rhymes independently		
Step 3 Lead sequences and songs		
Step 4 Read on in familiar repeating stories		
Step 5 Copy art-based simple patterns		
Step 6 Explore own line and repeating patterns in art		
Counting 5		
Step 1 sing rhymes to 5 and join in with movements		
Step 2 Move props to 5		
Step 3 Move props back from 5		
Step 4 Show fingers to 5		
Step 5 begin to count 5 objects with one-to-one correspondence		
Step 6 Match numeral quantities when acting out songs		
Summer 2		
Nursery	**Reception**	**Year 1**
Pattern 5	**Mass and Capacity**	**Mass and Volume**
Step 1 sing their own songs independently	Step 1 Compare mass	Step 1 Heavier and lighter
Step 2clap in time to a beat	Step 2 Find a balance	Step 2 Measure mass
Step 3make and talk about movement	Step 3 Explore capacity	Step 3 Compare mass

Step 4 talk about objects in patterns and arrangements	Step 4 Compare capacity	Step 4 Full and empty
Step 5 Copy AB patterns with support		Step 5 Compare volume
Step 6 Continue AB patterns with support.	**To 20 and beyond**	Step 6 Measure capacity
	Step 1 Build numbers beyond 10 (10–13)	Step 7 Compare capacity
Subitising 4	Step 2 Continue patterns beyond 10 (10–13)	
Step 1 Make dot patterns	Step 3 Build numbers beyond 10 (14–20)	**Place Value within 100**
Step 2 Be introduced to subitising games	Step 4 Continue patterns beyond 10 (14–20)	Step 1 Count from 50 to 100
Step 3 Play subitising games	Step 5 Verbal counting beyond 20	Step 2 Tens to 100
Step 4 Copy sets of sounds	Step 6 Verbal	Step 3 Partition into tens and ones
Step 5 listen to and represent sounds on fingers		Step 4 The number line to 100
Step 6 listen to and represent sounds with resources	**Make Connections**	Step 5 1 more, 1 less
	Step 1 Deepen understanding	Step 6 Compare numbers with the same number of tens
Pattern 6	Step 2 Patterns and relationships	Step 7 Compare any two numbers
Step 1 Create AB patterns		
Step 2 Create own AB patterns		**Money**
Step 3 Notice an error in a pattern		Step 1 Unitising
Step 4 Build constructions with simple enclosures		Step 2 Recognise coins
Step 5 copy simple repeated constructions		Step 3 Recognise notes
Step 6 Begin to sequence some events		Step 4 Count in coins
Counting 6		
Step 1 Count out and up to 5 objects from a larger group		
Step 2 Explore counting to 5 in different ways		
Step 3 Verbally count a given number		
Step 4 label objects with numerals		
Step 5 Independently show fingers to 5		
Step 6 Begin to make marks to represent quantities.		
Comparison 3		
Step 1 Compare up to 5 different objects		
Step 2 compare by matching		
Step 3 Make the same set by matching		
Step 4 Match by type		

Step 5 Recognise attributes of objects		
Step 6 Begin to sort some objects to a type		

Year 2, Year 3

Autumn 1	
Year 2	**Year 3**
Place value	**Place Value**
Step 1 Numbers to 20	Step 1 Represent numbers to 100
Step 2 Count objects to 100 by making 10s	Step 2 Partition numbers to 100
Step 3 Recognise tens and ones	Step 3 Number line to 100
Step 4 Use a place value chart	Step 4 Hundreds
Step 5 Partition numbers to 100	Step 5 Represent numbers to 1,000
Step 6 Write numbers to 100 in words	Step 6 Partition numbers to 1,000
Step 7 Flexibly partition numbers to 100	Step 7 Flexible partitioning of numbers to 1,000
Step 8 Write numbers to 100 in expanded form	Step 8 Hundreds, tens and ones
Step 9 10s on the number line to 100	Step 9 Find 1, 10 or 100 more or less
Step 10 10s and 1s on the number line to 100	Step 10 Number line to 1,000
Step 11 Estimate numbers on a number line	Step 11 Estimate on a number line to 1,000
Step 12 Compare objects	Step 12 Compare numbers to 1,000
Step 13 Compare numbers	Step 13 Order numbers to 1,000
Step 14 Order objects and numbers	Step 14 Count in 50s
Step 15 Count in 2s, 5s and 10s	
Step 16 Count in 3s	
Addition and Subtraction	**Addition and Subtraction**
Step 1 Bonds to 10	Step 1 Apply number bonds within 10
Step 2 Fact families - addition and subtraction bonds within 20	Step 2 Add and subtract 1s
Step 3 Related facts	Step 3 Add and subtract 10s
Step 4 Bonds to 100 (tens)	Step 5 Spot the pattern
Step 5 Add and subtract 1s	Step 4 Add and subtract 100s
Step 6 Add by making 10	Step 6 Add 1s across a 10
Step 7 Add three 1-digit numbers	Step 7 Add 10s across a 100
Step 8 Add to the next 10	Step 8 Subtract 1s across a100
Step 9 Add across a 10	Step 9 Subtract 10s across a 100

Step 10 Subtract across 10	Step 10 Make connections
Step 11 Subtract from a 10	Step 11 Add two numbers (no exchange)
Step 12 Subtract a 1-digit number from a 2-digit number (across a 10)	Step 12 Subtract two numbers (no exchange)
Step 13 10 more, 10 less	Step 13 Add two numbers (across a 10)
Step 14 Add and subtract 10s	Step 14 Add two numbers (across a 100)
Step 15 Add two 2-digit numbers (not across a 10)	Step 15 Subtract two numbers (across a 10)
Step 16 Add two 2-digit numbers (across a 10)	Step 16 Subtract two numbers (across a 100)
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 problem	
Autumn 2	
Year 3	**Year 4**
Addition and Subtraction	**Addition and Subtraction**
Step 1 Bonds to 10	Step 1 Apply number bonds within 10
Step 2 Fact families - addition and subtraction bonds within 20	Step 2 Add and subtract 1s
Step 3 Related facts	Step 3 Add and subtract 10s
Step 4 Bonds to 100 (tens)	Step 5 Spot the pattern
Step 5 Add and subtract 1s	Step 4 Add and subtract 100s
Step 6 Add by making 10	Step 6 Add 1s across a 10
Step 7 Add three 1-digit numbers	Step 7 Add 10s across a 100
Step 8 Add to the next 10	Step 8 Subtract 1s across a100
Step 9 Add across a 10	Step 9 Subtract 10s across a 100
Step 10 Subtract across 10	Step 10 Make connections
Step 11 Subtract from a 10	Step 11 Add two numbers (no exchange)
Step 12 Subtract a 1-digit number from a 2-digit number (across a 10)	Step 12 Subtract two numbers (no exchange)
Step 13 10 more, 10 less	Step 13 Add two numbers (across a 10)
Step 14 Add and subtract 10s	Step 14 Add two numbers (across a 100)
Step 15 Add two 2-digit numbers (not across a 10)	Step 15 Subtract two numbers (across a 10)
Step 16 Add two 2-digit numbers (across a 10)	Step 16 Subtract two numbers (across a 100)
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 problem	
Statistics	**Statistics**
Step 1 Make tally charts	Step 1 Interpret pictograms
Step 2 Tables	Step 2 Draw pictograms
Step 3 Block diagrams	Step 3 Interpret bar charts
Step 4 Draw pictograms (1–1)	Step 4 Draw bar charts
Step 5 Interpret pictograms (1–1)	Step 5 Collect and represent data
Step 6 Draw pictograms (2, 5 and 10)	Step 6 Two-way tables
Step 7 Interpret pictograms (2, 5 and 10)	
Position and Direction	**Multiplication and Division A**
Step 1 Multiplication – equal groups	Step 1 Multiplication – equal groups
Step 2 Use arrays	Step 2 Use arrays
Step 3 Multiples of 2	Step 3 Multiples of 2
Step 4 Multiples of 5 and 10	Step 4 Multiples of 5 and 10
Step 5 Sharing and grouping	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 11 Multiply by 1 and 0
	Step 13 Divide by 8
	Step 14 The 8 times-table
Spring 1	
Year 2	**Year 3**
Time	**Time**
Step 1 O'clock and half past	Step 1 Roman numerals to 12
Step 2 Quarter past and quarter to	Step 2 Tell the time to 5 minutes
Step 3 Tell the time past the hour	Step 3 Tell the time to the minute
Step 4 Tell the time to the hour	Step 4 Read time on a digital clock
Step 5 Tell the time to 5 minutes	Step 5 Use am and pm

Step 6 Minutes in an hour	Step 6 Years, months and days
Step 7 Hours in a day	Step 7 Days and hours
	Step 8 Hours and minutes – use start and end times
Multiplication and Division	**Multiplication and Division B**
Step 1 Recognise equal	Step 1 Multiples of 10
Step 2 Make equal groups	Step 2 Related calculations
Step 3 Add equal groups	Step 3 Reasoning about multiplication
Step 4 Introduce the multiplication symbol	Step 4 Multiply a 2-digit number by a 1-digit number – no exchange
Step 5 Multiplication sentences	Step 5 Multiply a 2-digit number by a 1-digit number – with exchange
Step 6 Use arrays	Step 6 Link multiplication and division
Step 7 Make equal groups – grouping	Step 7 Divide a 2-digit number by a 1-digit number – no exchange
Step 8 Make equal groups – sharing	Step 8 Divide a 2-digit number by a 1-digit number – flexible partitioning
Step 9 The 2 times-table	Step 9 Divide a 2-digit number by a 1-digit number – with remainders
Step 10 Divide by 2	Step 10 Scaling
Step 11 Doubling and halving	Step 11 How many ways?
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	
Spring 2	
Year 2	**Year 3**
Fractions	**Fractions**
Step 1 Introduction to parts and whole	**Fractions A**
Step 2 Equal and unequal parts	Step 1 Understand the denominators of unit fractions
Step 3 Recognise a half	Step 2 Compare and order unit fractions
Step 4 Find a half	Step 3 Understand the numerators of non-unit fractions
Step 5 Recognise a quarter	Step 4 Understand the whole
Step 6 Find a quarter	Step 5 Compare and order non-unit fractions
Step 7 Recognise a third	Step 6 Fractions and scales
Step 8 Find a third	Step 7 Fractions on a number line
Step 9 Find the whole	Step 8 Count in fractions on a number line
Step 10 Unit fractions	Step 9 Equivalent fractions on a number line
Step 11 Non-unit fractions	Step 10 Equivalent fractions as bar models

Step 12 Recognise the equivalence of a half and two-quarters	**Fraction B**
Step 13 Recognise three-quarters	Step 1 Add fractions
Step 14 Find three-quarters	Step 2 Subtract fractions
Step 15 Count in fractions up to a whole	Step 3 Partition the whole
	Step 4 Unit fractions of a set of objects
Summer 1	
Year 2	**Year 3**
Shape	**Shape**
Step 1 Introduction to parts and whole	Step 1 Turns and angles
Step 2 Equal and unequal parts	Step 2 Right angles
Step 3 Recognise a half	Step 3 Compare angles
Step 4 Find a half	Step 4 Measure and draw accurately
Step 5 Recognise a quarter	Step 5 Horizontal and vertical
Step 6 Find a quarter	Step 6 Parallel and perpendicular
Step 7 Recognise a third	Step 7 Recognise and describe 2-D shapes
Step 8 Find a third	Step 8 Draw polygons
Step 9 Find the whole	Step 9 Recognise and describe 3-D shapes
Step 10 Unit fractions	Step 10 Make 3-D shapes
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	
Length and Height	**Length and Perimeter**
Step 1 Measure in centimetres	Step 1 Measure in metres and centimetres
Step 2 Measure in metres	Step 2 Measure in millimetres
Step 3 Compare lengths and heights	Step 3 Measure in centimetres and millimetres
Step 4 Order lengths and heights	Step 4 Metres, centimetres and millimetres
Step 5 Four operations with lengths and heights	Step 5 Equivalent lengths (metres and centimetres)
	Step 6 Equivalent lengths (centimetres and millimetres)
	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
Summer 2	
Mass and Volume	**Mass and Capacity**
Step 1 Compare mass	Step 1 Use scales
Step 2 Measure in grams	Step 2 Measure mass in grams
Step 3 Measure in kilograms	Step 3 Measure mass in kilograms and grams
Step 4 Four operations with mass	Step 4 Equivalent masses (kilograms and grams)
Step 5 Compare volume and capacity	Step 5 Compare mass
Step 6 Measure in millilitres	Step 6 Add and subtract mass
Step 7 Measure in litres	Step 7 Measure capacity and volume in millilitres
Step 8 Four operations with volume and capacity	Step 8 Measure capacity and volume in litres and millilitres
Step 9 Temperature	Step 9 Equivalent capacities and volumes (litres and millilitres)
	Step 10 Compare capacity and volume
	Step 11 Add and subtract capacity and volume
Money	**Money**
Step 1 Count money – pence	Step 1 Pounds and pence
Step 2 Count money – pounds (notes and coins)	Step 2 Convert pounds and pence
Step 3 Count money – pounds and pence	Step 3 Add money
Step 4 Choose notes and coins	Step 4 Subtract money
Step 5 Make the same amount	Step 5 Find change
Step 6 Compare amounts of money	
Step 7 Calculate with money	
Step 8 Make a pound	

Year 4, Year 5, Year 6

Autumn 1		
Year 4	**Year 5**	**Year 6**
Place Value	**Place Value**	**Place Value**
Step 1 Represent numbers to 1,000	Step 1 Roman numerals to 1,000	Step 1 Numbers to 1,000,000
Step 2 Partition numbers to 1,000	Step 2 Numbers to 10,000	Step 2 Numbers to 10,000,000

Step 3 Number line to 1,000	Step 3 Numbers to 100,000	Step 3 Read and write numbers to 10,000,000
Step 4 Thousands	Step 4 Numbers to 1,000,000	Step 4 Powers of 10
Step 5 Represent numbers to 10,000	Step 5 Read and write numbers to 1,000,000	Step 5 Number line to 10,000,000
Step 6 Partition numbers to 10,000	Step 6 Powers of 10	Step 6 Compare and order any integers
Step 7 Flexible partitioning of numbers to 10,000	Step 7 10/100/1,000/10,000/100,000 more or less	Step 7 Round any integer
	Step 8 Partition numbers to 1,000,000	Step 8 Negative numbers
Step 8 Find 1, 10, 100, 1,000 more or less	Step 9 Number line to 1,000,000	
Step 9 Number line to 10,000	Step 10 Compare and order numbers to 100,000	
Step 10 Estimate on a number line to 10,000	Step 11 Compare and order numbers to 1,000,000	
Step 11 Compare numbers to 10,000	Step 12 Round to the nearest 10, 100 or 1,000	
Step 12 Order numbers to 10,000	Step 13 Round within 100,000	
Step 13 Roman numerals	Step 14 Round within 1,000,000	
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		
Addition and Subtraction	**Addition and Subtraction**	**Four Operations**
Step 1 Add and subtract 1s, 10s, 100s and 1,000s	Step 1 Mental strategies	Step 1 Add and subtract integers
Step 2 Add up to two 4-digit numbers – no exchange	Step 2 Add whole numbers with more than four digits	Step 2 Common factors
Step 3 Add two 4-digit numbers – one exchange	Step 3 Subtract whole numbers with more than four digits	Step 3 Common multiples
Step 4 Add two 4-digit numbers – more than one exchange	Step 4 Round to check answers	Step 4 Rules of divisibility
Step 5 Subtract two 4-digit numbers – no exchange	Step 5 Inverse operations (addition and subtraction)	
Step 6 Subtract two 4-digit numbers – one exchange	Step 6 Multi-step addition and subtraction problems	Step 5 Primes to 100
Step 7 Subtract two 4-digit numbers – more than one exchange	Step 7 Compare calculations	Step 6 Square and cube numbers
Step 8 Efficient subtraction	Step 8 Find missing numbers	Step 7 Multiply up to a 4-digit number by a 2-digit number
Step 9 Estimate answers		Step 8 Solve problems with multiplication
Step 10 Checking strategies		Step 9 Short division
	Multiplication A	Step 10 Division using factors
	Step 1 Multiples	Step 11 Introduction to long division
	Step 2 Common multiples	Step 12 Long division with remainders
	Step 3 Factors	Step 13 Solve problems with division

	Step 4 Common factors	Step 14 Solve multi-step problems
	Step 5 Prime numbers	Step 15 Order of operations
	Step 6 Square numbers	Step 16 Mental calculations and estimation
	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	
Autumn 2		
Year 4	**Year 5**	**Year 6**
Multiplication A	**Multiplication A**	**Multiplication A**
Step 1 Multiplication – equal groups	Step 1 Multiples	Step 1 Add and subtract integers
Step 2 Use arrays Reinforcement of Year 3 objectives	Step 2 Common multiples	Step 2 Common factors
Step 1 Multiples of 3	Step 3 Factors	Step 3 Common multiples
Step 2 Multiply and divide by 6	Step 4 Common factors	Step 4 Rules of divisibility
Step 3 6 times-table and division facts	Step 5 Prime numbers	Step 5 Primes to 100
Step 4 Multiply and divide by 9	Step 6 Square numbers	Step 6 Square and cube numbers
Step 5 9 times-table and division facts	Step 7 Cube numbers	Step 7 Multiply up to a 4-digit number by a 2-digit number
Step 6 The 3, 6 and 9 times-tables	Step 8 Multiply by 10, 100 and 1,000	Step 8 Solve problems with multiplication
Step 7 Multiply and divide by 7	Step 9 Divide by 10, 100 and 1,000	Step 9 Short division
Step 8 7 times-table and division facts	Step 10 Multiples of 10, 100 and 1,000	Step 10 Division using factors
Step 9 11 times-table and division facts		Step 11 Introduction to long division
Step 10 12 times-table and division facts		Step 12 Long division with remainders
Step 11 Multiply by 1 and 0		Step 13 Solve problems with division
Step 12 Divide a number by 1 and itself		Step 14 Solve multi-step problems
Step 13 Multiply three numbers		Step 15 Order of operations
		Step 16 Mental calculations and estimation
Multiplication B		Step 17 Reason from known facts
Step 1 Factor pairs	**Multiplication and Division B**	**Algrebra**
	Step 1 Multiply up to a 4-digit number by a 1-digit number	Step 1 1-step function machines
	Step 2 Multiply a 2-digit number by a 2-digit number (area model)	Step 2 2-step function machines

Step 2 Use factor pairs	Step 3 Multiply a 2-digit number by a 2-digit number	Step 3 Form expressions
Step 3 Multiply by 10	Step 4 Multiply a 3-digit number by a 2-digit number	Step 4 Substitution
Step 4 Multiply by 100	Step 5 Multiply a 4-digit number by a 2-digit number	Step 5 Formulae
Step 5 Divide by 10	Step 6 Solve problems with multiplication	Step 6 Form equations
Step 6 Divide by 100	Step 7 Short division	Step 7 Solve 1-step equations
Step 7 Related facts – multiplication and division	Step 8 Divide a 4-digit number by a 1-digit number	Step 8 Solve 2-step equations
Step 8 Informal written methods for multiplication	9 Divide with remainders	Step 9 Find pairs of values
Step 9 Multiply a 2-digit number by a 1-digit number	Step 10 Efficient division	Step 10 Solve problems with two unknowns
Step 10 Multiply a 3-digit number by a 1-digit number	Step 11 Solve problems with multiplication and division	**Ratio**
Step 11 Divide a 2-digit number by a 1-digit number 1		Step 1 Add or multiply?
Step 12 Divide a 2-digit number by a 1-digit number 2		Step 2 Use ratio language
Step 13 Divide a 3-digit number by a 1-digit number		Step 3 Introduction to the ratio symbol
Step 14 Correspondence problems		Step 4 Ratio and fractions
Step 15 Efficient multiplication		Step 5 Scale drawing
		Step 6 Use scale factors
		Step 7 Similar shapes
		Step 8 Ratio problems
Area	**Area and perimeter**	**Area and perimeter**
Step 1 What is area?	Step 1 Perimeter of rectangle	Step 1 Shapes – same area
Step 2 Count squares	Step 2 Perimeter of rectilinear shapes	Step 2 Area and perimeter
Step 3 Make shapes	Step 3 Perimeter of polygons	Step 3 Area of a triangle – counting squares
Step 4 Compare area	Step 4 Area of rectangles	Step 4 Area of a right-angled triangle
	Step 5 Area of compound shapes	Step 5 Area of any triangle
	Step 6 Estimate area	Step 6 Area of a parallelogram
	Cubic centimetres	Step 7 Volume – counting cubes
	Step 2 Compare volume	Step 8 Volume of a cuboid

	Step 3 Estimate volume	
	Step 4 Estimate capacity	
Spring 1		
Year 4	**Year 5**	**Year 6**
Fractions	**Fractions A**	**Fractions A**
Step 1 Understand the whole	Step 1 Find fractions equivalent to a unit fraction	Step 1 Equivalent fractions and simplifying
Step 2 Count beyond 1	Step 2 Find fractions equivalent to a non-unit fraction	Step 2 Equivalent fractions on a number line
Step 3 Partition a mixed number	Step 3 Recognise equivalent fractions	Step 3 Compare and order (denominator
Step 4 Number lines with mixed numbers	Step 4 Convert improper fractions to mixed numbers	Step 4 Compare and order (numerator)
Step 5 Compare and order mixed numbers	Step 5 Convert mixed numbers to improper fractions	Step 5 Add and subtract simple fractions
Step 6 Understand improper fractions	Step 6 Compare fractions less than 1	Step 6 Add and subtract any two fractions
Step 7 Convert mixed numbers to improper fractions	Step 7 Order fractions less than 1	Step 7 Add mixed numbers
Step 8 Convert improper fractions to mixed numbers	Step 8 Compare and order fractions greater than 1	Step 8 Subtract mixed numbers
Step 9 Equivalent fractions on a number line	Step 9 Add and subtract fractions with the same denominator	Step 9 Multi-step problem
Step 10 Equivalent fraction families	Step 10 Add fractions within 1	**Fractions B**
Step 11 Add two or more fractions	Step 11 Add fractions with total greater than 1	Step 1 Multiply fractions by integers
Step 12 Add fractions and mixed numbers	Step 12 Add to a mixed number	Step 2 Multiply fractions by fractions
Step 13 Subtract two fractions	Step 13 Add two mixed numbers	Step 3 Divide a fraction by an integer
Step 14 Subtract from whole amounts	Step 14 Subtract fractions	Step 4 Divide any fraction by an integer
Step 15 Subtract from mixed numbers	Step 15 Subtract from a mixed number	Step 5 Mixed questions with fractions
	Step 16 Subtract from a mixed number – breaking the whole	Step 6 Fraction of an amount
Length and Perimeter	Step 17 Subtract two mixed number	
Step 1 Measure in kilometres and metres	**Fractions B**	**Decimals**
Step 2 Equivalent lengths (kilometres and metres)	Step 1 Multiply a unit fraction by an integer	Step 1 Place value within 1
Step 3 Perimeter on a grid	Step 2 Multiply a non-unit fraction by an integer	Step 2 Place value – integers and decimals
Step 4 Perimeter of a rectangle	Step 3 Multiply a mixed number by an integer	Step 3 Round decimals
Step 5 Perimeter of rectilinear shapes	Step 4 Calculate a fraction of a quantity	Step 4 Add and subtract decimals
Step 6 Find missing lengths in rectilinear shapes	Step 5 Fraction of an amount	Step 5 Multiply by 10, 100 and 1,000
Step 7 Calculate perimeter of rectilinear shapes	Step 6 Find the whole	Step 6 Divide by 10, 100 and 1,000
Step 8 Perimeter of regular polygons	Step 7 Use fractions as operators	Step 7 Multiply decimals by integers
Step 9 Perimeter of polygons		Step 8 Divide decimals by integers

		Step 9 Multiply and divide decimals in context
Spring 2		
Year 4	**Year 5**	**Year 6**
Decimals	**Decimals and percentages**	**Fractions decimals and percentages**
Step 1 Tenths as fractions	Step 1 Decimals up to 2 decimal places	Step 1 Place value within 1
Step 2 Tenths as decimals	Step 2 Equivalent fractions and decimals (tenths)	Step 2 Place value – integers and decimals
Step 3 Tenths on a place value chart	Step 3 Equivalent fractions and decimals (hundredths)	Step 3 Round decimals
Step 4 Tenths on a number line	Step 4 Equivalent fractions and decimals	Step 4 Add and subtract decimals
Step 5 Divide a 1-digit number by 10	Step 5 Thousandths as fractions	Step 5 Multiply by 10, 100 and 1,000
Step 6 Divide a 2-digit number by 10	Step 6 Thousandths as decimals	Step 6 Divide by 10, 100 and 1,000
Step 7 Hundredths as fractions	Step 7 Thousandths on a place value chart	Step 7 Multiply decimals by integers
Step 8 Hundredths as decimals	Step 8 Order and compare decimals (same number of decimal places)	Step 8 Divide decimals by integers
Step 9 Hundredths on a place value chart	Step 9 Order and compare any decimals with up to 3 decimal places	Step 9 Multiply and divide decimals in context
Step 10 Divide a 1- or 2-digit number by 100	Step 10 Round to the nearest whole number	
	Step 11 Round to 1 decimal place	Step 1 Decimal and fraction equivalents
	Step 12 Understand percentages	Step 2 Fractions as division
	Step 13 Percentages as fractions	Step 3 Understand percentages
	Step 14 Percentages as decimals	Step 4 Fractions to percentages
	Step 15 Equivalent fractions, decimals and percentages	Step 5 Equivalent fractions, decimals and percentages
		Step 6 Order fractions, decimals and percentages
		Step 7 Percentage of an amount – one step
		Step 8 Percentage of an amount – multi-step
		Step 9 Percentages – missing values
Shape	**Shape**	**Shape**
Step 1 Understand angles as turns	Understand and use degrees	Step 1 Measure and classify angles
Step 2 Identify angles	Step 2 Classify angles	Step 2 Calculate angles
Step 3 Compare and order angles	Step 3 Estimate angles	Step 3 Vertically opposite angles
Step 4 Triangles	Step 4 Measure angles up to 180°	Step 4 Angles in a triangle
Step 5 Quadrilaterals	Step 5 Draw lines and angles accurately	Step 5 Angles in a triangle – special cases
Step 6 Polygons	Step 6 Calculate angles around a point	Step 6 Angles in a triangle – missing angles

Step 7 Lines of symmetry	Step 7 Calculate angles on a straight line	Step 7 Angles in a quadrilateral
Step 8 Complete a symmetric figure	Step 8 Lengths and angles in shapes	Step 8 Angles in polygons
	Step 9 Regular and irregular polygons	Step 9 Circles
	Step 10 3-D shapes	Step 10 Draw shapes accurately
		Step 11 Nets of 3-D shapes
Summer 1		
Year 4	**Year 5**	**Year 6**
Position and Direction	**Position and Direction**	**Position and Direction**
Step 1 Describe position using coordinates	Step 1 Read and plot coordinates	The first quadrant
Step 2 Plot coordinates	Step 2 Problem solving with coordinates	Step 2 Read and plot points in four quadrants
Step 3 Draw 2-D shapes on a grid	Step 3 Translation	Step 3 Solve problems with coordinates
Step 4 Translate on a grid	Step 4 Translation with coordinates	Step 4 Translations
Step 5 Describe translation on a grid	Step 5 Lines of symmetry	Step 5 Reflections
	Step 6 Reflection in horizontal and vertical lines	
Addition and subtraction		
Step 1 Add and subtract 1s, 10s, 100s and 1,000s	**Converting**	**Converting**
Step 2 Add up to two 4-digit numbers – no exchange	Step 1 Kilograms and kilometres	Step 1 Metric measures
Step 3 Add two 4-digit numbers – one exchange	Step 2 Millimetres and millilitres	Step 2 Convert metric measures
Step 4 Add two 4-digit numbers – more than one exchange	Step 3 Convert units of length	Step 3 Calculate with metric measures
Step 5 Subtract two 4-digit numbers – no exchange	Step 4 Convert between metric and imperial units	Step 4 Miles and kilometres
Step 6 Subtract two 4-digit numbers – one exchange		
Step 7 Subtract two 4-digit numbers – more than one exchange	Step 5 Convert units of time	Step 5 Imperial measures
Step 8 Efficient subtraction	Step 6 Calculate with timetables	
Step 9 Estimate answers		
Step 10 Checking strategies		
Summer 2		
Year 4	**Year 5**	**Year 6**
Money	**Decimals**	**Problem solving**
Step 1 Write money using decimals	Step 1 Use known facts to add and subtract decimals within 1 1	
Step 2 Convert between pounds and pence	Step 2 Complements to 1	
Step 3 Compare amounts of money	Step 3 Add and subtract decimals across	

Step 4 Estimate with money	Step 4 Add decimals with the same number of decimal places	
Step 5 Calculate with money	Step 5 Subtract decimals with the same number of decimal places	
Step 6 Solve problems with money	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	
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		