

# St Michael's Catholic Primary School



## Maths Progression of Knowledge and Skills

# EYFS

EYFS	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12 and 13	Week 14
Autumn	<p><b>Baseline assessments:</b> The Reception Baseline Assessment from the Local Authority as well as an additional 'ticklist' document based on guidance from Anne Brass looking</p>	<p><b>Numerical Pattern</b> Match objects which are the same – noticing when there is more or fewer objects Sort objects/amounts into groups – large and small / 2 dots and 4 dots / yellow and blue etc. Compare quantities – recognising when one quantity is <b>greater than, less than or the same as the other quantity</b></p>	<p><b>Shape, space and measure</b> Compare size of large, medium and small objects and begin ordering items by size Explore mass and capacity of different sized containers – <b>tall, short, wide and thin</b> – talk about which containers will hold the most/least Be able to copy and create repeating patterns with 2 variants Understand and use some positional language - <b>forwards, backwards, beside, next to, in front of, behind, inside, in between, along.</b></p>	<p><b>Numbers 1-3</b> Be able to subitise number up to 3 speedily Represent numbers up to 3 in a range of different ways using: pictorial representation, objects, number shapes, dice and numerals Compare numbers up to 3 - being able to sort amounts into 1,2 or 3 – noticing more and fewer Composition of numbers to 3 - being able to find all the different ways to make 3 using objects – 0-3, 3-0, 1-2, 2-1</p>	<p><b>Shape, space and measure</b> <b>Curved</b> lines and <b>straight</b> lines. Recognise and name <b>circles</b> (1 curved side) and <b>triangles</b> (3 straight sides) and be able to say how many sides they have</p>	<p><b>Numbers 1-5</b> Subitise amounts up to 4 with speed Count and subitise amounts up to 5 with accuracy and speed Represent numbers up to 5 Match and sort numerals and quantities up to 5 Compare quantities and numbers up to 5 – matching numerals and quantities, sorting amounts into 1,2,3,4 and 5 and saying if they are <b>more than, equal to or less than</b> Composition of 4 and 5 Find and then say 1 more and 1 less up to 5 confidently</p>	<p><b>Shape, space and measure</b> Recognise and name <b>squares and rectangles</b> and be able to say they have 4 sides and how they are different – squares have 4 sides the same length and rectangles have 2 long and 2 short sides Be able to use and understand language surrounding order – <b>first, next, after that, finally. As well as night, day, morning, afternoon and night.</b></p>	<p><b>Number – Alive in 5</b> Introducing 0 and where it is on a number line. Subitising, representing and composition of numbers 1 -5. Finding <b>one more/ one less</b> with numbers up to 5. Saying bonds to 5 with speed.</p>	<p><b>Shape, space and measure – Mass and capacity.</b> Comparing mass and order from <b>heaviest to lightest</b> and finding a balance. Exploring and comparing capacity - most/least</p>				
										<p><b>Daily practice: Counting forwards and backwards up to 10 and beyond</b></p>			
Spring	<p><b>Numbers 6-8</b> Represent amounts and numbers of 6, 7 and 8 Compare numbers up to 8 Subitise amounts up to 8 – recognising groups of amounts – 4 and 4 within 8 etc. Find 1 more and 1 less or 6, 7 and 8.</p>	<p><b>Shape, space, measure- Length, height and time</b> Compare length and height and order in different ways Be able to use objects to measure length and height and begin recording using picture/symbolic representations</p>	<p><b>Number – Building 9 and 10.</b> Finding numbers 9 and 10. Representing and comparing numbers to 10. Saying one more/ one less than numbers 9 and 10. Composition to 10. Bonds to 10 (2 parts). Bonds to 10 (3 parts). Making arrangements of 10. Exploring <b>odd</b> and <b>even</b> numbers. Saying doubles to 10 with speed.</p>				<p><b>Shape, space and measure – Exploring 3-D shapes.</b> Recognising and naming 3-D shapes <b>sphere, cylinder, cube, cone, pyramid.</b> Finding 2-D shapes within 3-D shapes. Using 3-D shapes for tasks and 3-D shapes within the environment. Identifying more complex patterns and continuing them. Patterns in the environment.</p>	<p><b>Number – To 20 and beyond.</b> Verbal counting beyond 20 and verbal counting patterns. Building numbers beyond 10 (11-20). Continuing patterns beyond 10 (11-20). Begin to use a number track to solve addition and subtraction problems.</p>					

	Composition of 6, 7 and 8. <b>Doubles</b> up to number 8. Combining 2 groups Making pairs: understanding a <b>pair</b> is 2 (1 pair = 2 socks) Combine 2 groups together using objects and add together to say the total ( <b>how many altogether?</b> ) Be able to share amounts equally between 2 groups using even numbers					
	<b>Daily practice: counting forwards and backwards up to 20 and beyond</b>					
<b>Summer</b>	<b>Number – number bonds to 10</b> Have a deep understanding of number to 10, including the composition of each number Develop understanding of number bonds to 10 and be able to say bonds with more speed Form numbers up to 10 correctly  Recognising and writing numbers up to 20	<b>Shape, space and measure – manipulate, compose and decompose.</b>  Name 2D and 3D shapes – <b>circle, triangle, square, rectangle– pyramid, cone, sphere, cylinder, cube</b> and begin to describe them Select, rotate and manipulate shapes to develop spatial reasoning skills Compose and decompose shapes to recognise a shape can have other shapes within it	<b>Addition and Subtraction</b> Add and subtract 2 single digit numbers using number tracks and mental maths skills Recognise addition and subtraction number symbols and read a simple number sentence – begin recording own number sentences using squared paper.	<b>Numerical patterns</b> Playing with and building <b>doubles</b> . Know double facts up to 5 and represent using concrete objects Know evens and odds up to 10 with speed.  Exploring sharing and grouping. Even and odd sharing.	<b>Deepening Understanding</b> Recognise number patters repeating themselves when counting past 10 using number tracks up to 20 Explore and represent patterns within number up to 10 and beyond 10 – place value of teen numbers including 20. Explore fact families for numbers up to 10 Identify units of repeating patterns, creating and exploring patterns. Replicate and build scenes and instructions. Visualise from different positions. Give instructions to build. Explore mapping and represent maps within models. Create own map from familiar places. Create own maps and plan from story situations.	
	<b>Daily practice: counting up to 30 and beyond (forwards)</b>					

<b>Key Stage 1</b>												
<b>YEAR 1</b>	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Autumn</b>	Place value (within 10)					Addition and Subtraction (within 10)					Geometry: shape	Consolidation

	Sort objects (e.g. colour, shape, size) Count objects Count objects from a larger group Represent objects Recognise numbers as words Count on from any number 1 more Count backwards within 10 1 less Compare groups by matching Fewer, more, same Less than, greater than, equal to Compare numbers Order objects and numbers The number line	Introduce parts and wholes Part-whole model Write number sentences Fact families - addition facts Number bonds within 10 Systematic number bonds within 10 Number bonds to 10 Addition - add together Addition - add more Addition problems Find a part Subtraction - find a part Fact families - the eight facts Subtraction - take away/crossing out (How many left?) Subtraction - take away (How many left?) Subtraction on a number line Add or subtract 1 or 2			Recognise and name 3-D shapes (EYFS plus prism, cuboid, square-based pyramid,) Sort 3-D shapes Recognise and name 2-D shapes (EYFS plus, pentagon, hexagon) Sort 2-D shapes Patterns with 3-D and 2-D shapes To name the faces of 3D shapes and say if they are curved or flat	Assessments	
Spring	<b>Place Value (within 20)</b> Count within 20 Understand 10 Understand 11, 12 and 13 Understand 14, 15 and 16 Understand 17, 18 and 19 Understand 20 1 more and 1 less The number line to 20 Estimate on a number line to 20 Compare numbers to 20 Order numbers to 20	<b>Addition and Subtraction</b> Add by counting on within 20 Add ones using number bonds Find and make number bonds to 20 Doubles Near doubles Subtract ones using number bonds Subtraction- counting back Subtraction- finding the difference Related facts Missing number problems	<b>Number: Place Value (within 50)</b> Counting from 20-50 20,30,40 and 50 Count by making groups of 10 Groups of tens and ones Partition into tens and ones The number line to 50 Estimate on a number line to 50 1 more, 1 less	<b>Measurement: Length &amp; Height</b> Compare lengths and heights using non-standard units Measure lengths using objects Measure length using a cm ruler	<b>Measurement: Weight &amp; Volume</b> Introduce weight and mass (heavy/light) Measure mass (balancing scales) Compare mass (balancing scales) Introduce capacity and volume (full/empty, half full, more than less than, quarter full) Measure capacity (glass/jugs) Compare capacity		
Summer	<b>Multiplication and Division</b> Count in 2s Count in 10s Count in 5s Recognise equal groups Add equal groups Make arrays Make doubles Make equal groups – grouping Make equal groups – sharing	<b>Fractions</b> Recognise a half of an object or a shape Find a half of an object or a shape Recognise a half of a quantity Find a half of a quantity Recognise a quarter of an object or a shape Find a quarter of an object or a shape Recognise a quarter of a quantity Find a quarter of a quantity	<b>Geometry</b> Describe turns Describe position – left and right Describe position – forwards and backwards Describe position – above and below Ordinal numbers	<b>Place Value (within 100)</b> Count from 50 to 100 Tens to 100 Partition into tens and ones The number line to 100 1 more, 1 less Compare numbers with the same number of tens Compare any two numbers	<b>Money</b> Unitising Recognise coins Recognise notes Count in coins	<b>Measurement: Time</b> Before and after Days of the week Months of the year Hours, minutes and seconds Tell the time to the hour Tell the time to the half hour	Consolidation Assessments

YEAR 2	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	<b>Place Value</b> Numbers to 100 Count objects to 100 by making 10s Recognise tens and ones Use a place value chart Partition numbers to 100 Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in expanded form 10s on the number line to 100 Estimate numbers on a number line Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s			<b>Addition and subtraction</b> Bonds to 10 Fact families – addition and subtraction bonds to 20 Related facts Bonds to 100 (tens) Add and subtract 1s Add by making 10 Add three 1-digit numbers Add top next 10 Add across 10 Subtract across 10 Subtract from 10 Subtract a 1-digit number from a 2-digit number – crossing ten 10 more, 10 less Add and subtract 10s Add two 2-digit numbers – not crossing ten Add two 2-digit numbers – crossing ten Subtract a 2-digit number from a 2-digit number – not crossing ten Subtract a 2-digit number from a 2-digit number – crossing ten Mixed addition and subtraction Compare number sentences Missing number questions					<b>Geometry: properties of shapes</b> Recognise 2-D and 3-D shapes (Year 1 plus heptagon, octagon, nonagon, decagon, regular and irregular and types of prism) Count sides on 2-D shapes Count vertices on 2-D shapes Draw 2-D shapes Lines of symmetry on shapes Use lines of symmetry to complete shapes Sort 2-D shapes Count faces on 3-D shapes Count edges of 3-D shapes Count vertices on 3-D shapes Sort 3-D shapes Make patterns with 2-D and 3-D shapes			
	Spring	<b>Measurement: money</b> Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money Make a pound Find change Two-step problems			<b>Multiplication and division</b> Recognise equal groups Make equal groups Add equal groups Introduce multiplication symbol Multiplication sentences Use arrays Make equal groups – grouping Make equal groups – sharing The 2-times table Divide by 2 Doubling and halving Odd and even numbers The 10-times table Divide by 10 The 5-times table Divide by 5 The 5- and 10- times tables			<b>Measurement: length and height</b> Measure in cm Measure in m Compare lengths and heights Order lengths and heights Four operations with length and height		<b>Measurement: mass, capacity and temperature</b> Compare mass Measure in grams Measure in kg Four operations with mass Compare volume and capacity Measure in ml Measure in l Four operations with volume and capacity Temperature		

<p>Summer</p>	<p><b>Fractions</b>          Introduction to part and wholes          Equal and unequal parts          Make equal parts          Recognise a half          Find a half          Recognise a quarter          Find a quarter          Recognise a quarter          Find a quarter          Recognise a third          Find a third          Find the whole          Unit fractions          Non-unit fractions          Recognise the equivalence of a half and 2 quarters          Recognise 3 quarters          Find 3 quarters          Count in fractions up to a whole</p>	<p><b>Measurement: Time</b>          O'clock and half past          Quarter past and quarter to          Tell the time past the hour          Tell the time to the hour          Tell the time to 5 minutes          Minutes in an hour          Hours in a day</p>	<p><b>Statistics</b>          Make tally charts          Tables          Block diagrams          Draw pictograms (1:1)          Interpret pictograms (1:1)          Draw pictograms (2, 5 and 10)          Interpret pictograms (2, 5 and 10)</p>	<p><b>Geometry: position and direction</b>          Language of position          Describe movement          Describe turns          Describe movement and turns          Shape patterns with turns</p>	<p><b>Consolidation</b></p>
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## KEY STAGE 2

KEY STAGE 2															
YEAR 3	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12			
<b>Autumn</b>	<b>Number – Place Value:</b> Represent numbers to 100 Partition numbers to 100 Number line to 100 Hundreds Represent numbers to 1,000 Partition numbers to 1,000 Flexible partitioning of numbers to 1,000 Hundreds, tens and ones Find 1, 10 or 100 more or less Number line to 1,000 Estimate on a number line to 1,000 Compare numbers to 1,000 Order numbers to 1,000 Count in 50s			<b>Addition and Subtraction</b> Apply number bonds within 10 Add and subtract 1s Add and subtract 10s Add and subtract 100s Spot the pattern Add 1s across a 10 Add 10s across a 100 Subtract 1s across a 10 Subtract 10s across a 100 Add two numbers (no exchange) Subtract two numbers (no exchange) Add two numbers (across a 10) Add two numbers (across a 100) Subtract two numbers (across a 10) Subtract two numbers (across a 100) Add 2-digit and 3-digit numbers Subtract a 2-digit number from a 3-digit number Complements to 100 Estimate answers Inverse operations					<b>Multiplication and Division</b> Multiplication – equal groups Use arrays Multiples of 2 Multiples of 5 and 10 Sharing and grouping Multiply by 3 Divide by 3 The 3 times table Multiply by 4 Divide by 4 The 4 times table Multiply by 8 Divide by 8 The 8 times table The 2, 4 and 8 times tables						
<b>Spring</b>	<b>Multiplication and Division</b> Multiples of 10 Related calculations Reasoning about multiplication Multiply a 2-digit number by a 1-digit number – no exchange Multiply a 2-digit number by a 1-digit number – with exchange Link multiplication and division Divide a 2-digit number by a 1-digit number – no exchange Divide a 2-digit number by a 1-digit number – flexible partitioning Divide a 2-digit number by a 1-digit number – with remainders Scaling			<b>Measurement: Length and Perimeter</b> Measure in metres and centimetres Measure in millimetres Measure in centimetres and millimetres Metres, centimetres and millimetres Equivalent lengths (metres and centimetres) Equivalent lengths (centimetres and millimetres) Compare lengths Add lengths Subtract lengths What is perimeter? Measure perimeter Calculate perimeter				<b>Number: Fractions</b> Understand the denominators of unit fractions Compare and order unit fractions Understand the numerators of non-unit fractions Understand the whole Compare and order non-unit fractions Fractions and scales Fractions on a number line Count in fractions on a number line Equivalent fractions on a number line Equivalent fractions as bar models				<b>Measurement: Mass and Capacity</b> Use scales Measure mass in grams Measure mass in kilograms and grams Equivalent masses (kilograms and grams) Compare mass Add and subtract mass Measure capacity and volume in millilitres Measure capacity and volume in litres and millilitres Equivalent capacities and volumes (litres and millilitres) Compare capacity and volume Add and subtract capacity and volume			

	How many ways				
<b>Summer</b>	<b>Number: Fractions</b> Add fractions Subtract fractions Partition the whole Unit fractions of a set of objects Reasoning with fractions of an amount	<b>Measurement: Money</b> Pounds and pence Convert pounds and pence Add money Subtract money Find change	<b>Measurement: Time</b> Roman numerals to 12 Tell the time to 5 minutes Tell the time to the minute Read time on a digital clock Use am and pm Years, months and days Days and hours Hours and minutes – use start and end times Hours and minutes - use durations Minutes and seconds Units of time Solve problems with time	<b>Geometry: Shape</b> Turns and angles Right angles Compare angles Measure and draw lines accurately (nearest cm) Horizontal and vertical lines Parallel and perpendicular Recognise and describe 2-D shapes (all from year 2, regular and irregular, plus trapezium and parallelogram) Draw polygons Recognise and describe 3-D shapes (all from Year 2 plus tetrahedron) Make 3-D shapes	<b>Statistics</b> Interpret pictograms Draw pictograms Interpret bar charts Draw bar charts Collect and represent data Two-way tables

YEAR 4	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
<b>Autumn</b>	<b>Place Value</b> Represent numbers to 1,000 Partition numbers to 1,000 Number line to 1,000 Thousands Represent numbers to 10,000 Partition numbers to 10,000 Flexible partitioning of numbers to 10,000 Find 1, 10, 100, 1,000 more or less Number line to 10,000 Estimate on a number line to 10,000 Compare numbers to 10,000 Order numbers to 10,000 Roman numerals Round to the nearest 10 Round to the nearest 100 Round to the nearest 1,000 Round to the nearest 10, 100 or 1,000				<b>Addition and Subtraction</b> Add and subtract 1s, 10s, 100s and 1,000s Add up to two 4-digit numbers - no exchange Add two 4-digit numbers - one exchange Add two 4-digit numbers - more than one exchange Subtract two 4-digit numbers - no exchange Subtract two 4-digit numbers - one exchange Subtract two 4-digit numbers - more than one exchange Efficient subtraction download Estimate answers download Checking strategies			<b>Measurement: Area</b> What is area? Count squares Make shapes Compare areas		<b>Multiplication and Division</b> Multiples of 3 Multiply and divide by 6 6 times-table and division facts Multiply and divide by 9 9 times-table and division facts The 3, 6 and 9 times-tables Multiply and divide by 7 7 times-table and division facts 11 times-table and division facts 12 times-table and division facts Multiply by 1 and 0 Divide a number by 1 and itself Multiply three numbers		Consolidation Assessments	
<b>Spring</b>	<b>Multiplication and division B</b> Factor pairs Use factor pairs Multiply by 10 Multiply by 100 Divide by 10		<b>Measurement: Length and Perimeter</b> Measure in kilometres and metres Equivalent lengths (kilometres and metres)		<b>Fractions</b> Understand the whole Count beyond 1 Partition a mixed number Number lines with mixed numbers Compare and order mixed numbers			<b>Decimals A</b> Tenths as fractions Tenths as decimals Tenths on a place value chart Tenths on a number line Divide a 1-digit number by 10		Consolidation Assessments			



	Divide by 100 Related facts – multiplication and division Informal written methods for multiplication Multiply a 2-digit number by a 1-digit number Multiply a 3-digit number by a 1-digit number Divide a 2-digit number by a 1-digit number Divide a 3-digit number by a 1-digit number Correspondence problems Efficient multiplication	Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes Find missing lengths in rectilinear shapes Calculate perimeter of rectilinear shapes Perimeter of regular polygons Perimeter of irregular polygons	Understand improper fractions Convert mixed numbers to improper fractions Convert improper fractions to mixed numbers Equivalent fractions on a number line Equivalent fraction families Add two or more fractions Add fractions and mixed numbers Subtract two fractions Subtract from whole amounts Subtract from mixed numbers	Divide a 2-digit number by 10 Hundredths as fractions Hundredths as decimals Hundredths on a place value chart Divide a 1- or 2-digit number by 100		
<b>Summer</b>	<b>Decimals B</b> Make a whole with tenths Make a whole with hundredths Partition decimals Flexibly partition decimals Compare decimals Order decimals Round to the nearest whole number Halves and quarters as decimals	<b>Money</b> Write money using decimals Convert between pounds and pence Compare amounts of money Estimate with money Calculate with money Solve problems with money	<b>Time</b> Years, months, weeks and days Hours, minutes and seconds Convert between analogue and digital times Convert to the 24-hour clock Convert from the 24-hour clock	<b>Shape</b> Understand angles as turns Identify angles Compare and order angles Triangles Quadrilaterals Polygons Lines of symmetry Complete a symmetric figure	<b>Statistics:</b> Interpret charts Comparison, sum and difference Interpret line graphs Draw line graphs	<b>Position and Direction</b> Describe position using coordinates Plot coordinates Draw 2-D shapes on a grid Translate on a grid Describe translation on a grid

<b>YEAR 5</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Week 7</b>	<b>Week 8</b>	<b>Week 9</b>	<b>Week 10</b>	<b>Week 11</b>	<b>Week 12</b>
<b>Autumn</b>	<b>Place Value</b> Roman Numerals to 1,000 Numbers to 10,000 Numbers to 100,000 Numbers to a million Read and write numbers to 1,000,000 Powers of 10 10/100/1000/10000/100000 more or less Partition numbers to 1 million Number line to 1 million Compare and order numbers to 1 million	<b>Addition and Subtraction</b> Mental strategies Add whole numbers with more than 4 digits (column method) Subtract whole numbers with more than 4 digits (column method) Round to estimate and approximate Inverse operations (addition and subtraction) Multi-step addition and subtraction problems Find missing numbers	<b>Multiplication and division 1</b> Multiples and common multiples Factors Common factors Prime numbers Square numbers Cube numbers Multiply by 10, 100 and 1,000 Divide by 10, 100 and 1,000 Multiples of 10, 100 and 1,000	<b>Fractions 1</b> What is a fraction recap- unit and non-unit Fractions equivalent to a unit fraction Fractions equivalent to a non-unit fraction Recognise equivalent fractions Simplify fractions Convert improper fractions to mixed numbers Mixed numbers to improper fractions Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions with the same denominator Add fractions within 1 Add fractions that total greater than 1 Add to a mixed number Add two mixed numbers	Consolidation Assessments							

	<p>Round to nearest 10, 100 and 1,000</p> <p>Round numbers within 100,000</p> <p>Round numbers to one million</p>			<p>Subtract fractions</p> <p>Subtract from a mixed number</p> <p>Subtract from a mixed number-breaking the whole</p> <p>Subtract two mixed numbers</p>		
Spring	<p><b>Multiplication and Division 2</b></p> <p>Multiply up to a 4-digit number by a 1-digit number</p> <p>Multiply a 2-digit number by a 2-digit number (area model)</p> <p>Multiply a 2-digit number by a 2-digit number</p> <p>Multiply a 3-digit number by a 2-digit number</p> <p>Multiply a 4-digit number by a 2-digit number</p> <p>Solve problems with multiplication</p> <p>Short division</p> <p>Divide a 4-digit number by a 1-digit number</p> <p>Divide with remainders</p> <p>Efficient division</p> <p>Solve problems with multiplication and division</p>	<p><b>Fractions 2</b></p> <p>Multiply a unit fraction by an integer</p> <p>Multiply a non-unit fraction by an integer</p> <p>Multiply a mixed number by an integer</p> <p>Calculate a fraction of a quantity</p> <p>Fraction of an amount</p> <p>Find the whole</p> <p>Use fractions as operators</p>	<p><b>Fractions, decimals and percentages</b></p> <p>Decimals up to 2 decimal places</p> <p>Equivalent fractions and decimals (tenths) (hundredths)</p> <p>Equivalent fractions and decimals</p> <p>Thousandths as fractions</p> <p>Thousandths as decimals</p> <p>Thousandths on a place value chart</p> <p>Order and compare decimals (same number of decimal places)</p> <p>Order and compare any decimals with up to 3 decimal places</p> <p>Round to the nearest whole number</p> <p>Round to 1 decimal place</p> <p>Understand percentages</p> <p>Percentages as fractions</p> <p>Percentages as decimals</p> <p>Equivalent fractions, decimals and percentages</p>	<p><b>Perimeter and area</b></p> <p>Perimeter of rectangles</p> <p>Perimeter of rectilinear shapes</p> <p>Perimeter of polygons</p> <p>Area of rectangles</p> <p>Area of compound shapes</p> <p>Estimate area</p>	<p><b>Statistics</b></p> <p>Draw line graphs</p> <p>Read and interpret line graphs</p> <p>Read and interpret tables</p> <p>Two-way tables</p> <p>Read and interpret timetable</p>	Consolidation Assessments
Summer	<p><b>Geometry: angles and shapes</b></p> <p>Understand and use degrees</p> <p>Classify angles</p> <p>Estimate angles</p> <p>Measure angles up to 180°</p> <p>Draw lines and angles correctly</p> <p>Calculate angles around a point</p> <p>Calculate angles on a straight line</p> <p>Lengths and angles in shapes</p> <p>Regular and irregular polygons</p> <p>3D shapes</p>	<p><b>Geometry: Position and direction</b></p> <p>Read and plot coordinates</p> <p>Problem solving with coordinates</p> <p>Translation</p> <p>Translation with coordinates</p> <p>Lines of symmetry</p> <p>Reflection in horizontal and vertical lines</p>	<p><b>Decimals</b></p> <p>Use known facts to add and subtract decimals within 1</p> <p>Complements to 1</p> <p>Add and subtract decimals across 1</p> <p>Add decimals with the same number of decimal places</p> <p>Subtract decimals with the same number of decimal places</p> <p>Add decimals with different numbers of decimal places</p> <p>Subtract decimals with different numbers of decimal places</p> <p>Efficient strategies for adding and subtracting decimals</p> <p>Decimal sequences</p>	<p><b>Negative numbers</b></p> <p>Understand negative numbers</p> <p>Count through zero in 1s</p> <p>Count through zero in multiples</p> <p>Compare and order negative numbers</p> <p>Find the difference</p>	<p><b>Measurement: converting units</b></p> <p>Kilograms and kilometres</p> <p>Millimetres and millilitres</p> <p>Convert units of length</p> <p>Convert between metric and imperial units</p> <p>Convert units of time</p> <p>Calculate with timetables</p> <p><b>Measurement: volume</b></p> <p>Cubic centimetres</p> <p>Compare volume</p> <p>Estimate volume</p>	Consolidation Assessments

				Multiply by 10, 100 and 1000 Divide by 10, 100 and 1000 Multiply and divide decimals - missing values		Estimate capacity	
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YEAR 6	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	<b>Number: Place Value</b> Numbers to one million Numbers to ten million Read and write numbers to ten million Powers of 10 Number line to ten million Compare and order any integers Round any integer Negative numbers		<b>Number: Addition, subtraction, multiplication and division</b> Add and subtract integers Common factors Common multiples Rules of divisibility Primes to 100 Squares and cube numbers Multiply up to a 4-digit number by 2-digit number Solve problems with multiplication Short division Division using factors Introduction to long division Long division with remainders Solve problems with division Solve multi-step problems Order of operations Mental calculations and estimation Reason from known facts				<b>Number: Fractions A</b> Equivalent fractions and simplifying Equivalent fractions on a number line Compare and order (denominator) Compare and order (numerator) Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi-step problems			<b>Number: Fractions B</b> Multiply fractions by integers Multiply fractions by fractions Divide a fraction by an integer Divide any fractions by an integer Mixed questions with fractions Fraction of an amount Fraction of an amount – find the whole		<b>Measurement: Converting Units</b> Metric measures Convert metric measures Calculate with metric measures Miles and kilometres Imperial measures
Spring	<b>Number: Ratio</b> Add or multiply? Use ratio language Introduction to the ratio symbol Ratio and fractions Scale drawing Use scale factors Similar shapes Ratio problems Proportion problems Recipes		<b>Number: Algebra</b> 1-step function machines 2-step function machines Form expressions Substitution Formulae Form equations Solve 1-step equations Solve 2-step equations Find pairs of values Solve problems with two unknowns	<b>Number: Decimals</b> Place value within 1 Place value – integers and decimals Round decimals Add and subtract decimals Multiply by 10, 100 and 1,000 Divide by 10, 100 and 1,000 Multiply decimals by integers Divide decimals by integers Multiply and divide decimals in context	<b>Number: Fractions decimals and percentages</b> Decimal and fraction equivalents Fractions as division Understand percentages Fractions to percentages Equivalent fractions, decimals and percentages Order fractions, decimals and percentages Percentage of an amount – one step Percentage of an amount – multi-step Percentages – missing values			<b>Measurement: Area and perimeter and volume</b> Shapes – same area Area and perimeter Area of a triangle – counting squares Area of a right-angled triangle Area of any triangle Area of a parallelogram Volume – counting cubes Volume of a cuboid		<b>Statistics</b> Line graphs Dual bar charts Read and interpret pie charts Pie charts with percentages Draw pie charts The mean		

<b>Summer</b>	<b>Geometry: Properties of Shape</b> Measure and classify angles Calculate angles Vertically opposite angles Angles in a triangle Angles in a triangle – special cases Angles in a triangle – missing angles Angles in a quadrilateral Angles in polygons Circles Draw shapes accurately Nets of 3D shapes	<b>Geometry: Position &amp; Direction</b> The first quadrant Read and plot points in 4 quadrants Solve problems with coordinates Translations Reflections	Consolidation and themed projects (review areas that need deepening/securing and prepare for secondary school. Develop investigation skill, trial and error etc)
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<b>Cross Curricular Links</b>	
Science	Measuring and reading scales (temperature, mass, length, volume); calculations (adding, find differences), graphs, tables and charts
History	Life of mathematicians in the past, dates, timelines (BC and AD link to negative numbers), time durations
DT	Measuring, units, calculations, costs
Geography	Grids, co-ordinates, distances, heights, comparing numbers e.g. population, land area.