



Respect Hope Trust Friendship Compassion Thankfulness

St Osyth Church of England Primary School

'Love one another as I have loved you.'



Progression in Maths (based on the National Curriculum and adapted from White Rose Small Steps)

Autumn Term

Spring Term

Summer Term

EYFS and KS1

Area of the National Curriculum	EYFS (from EYFS framework & Development Matters document)	Y1	Y2
<p><u>Number: Number & Place Value</u></p>	<p>Have a deep understanding of number to 10, including the composition of each number Subitise (recognise quantities without counting) up to 5 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;</p> <p>3-4 Years *Develop fast recognition of up to 3 objects, without having to count them individually ('subitising') *Recite numbers past 5 *Say one number for each item in order: 1,2,3,4,5. *Know that last number reached when counting a small set of objects tells you how many there are in total *Show 'finger numbers' up to 5. *Link numerals & amounts: e.g., showing the right number of objects to match the numeral, up to 5 *Experiment with their own symbols & marks as well as numeral *Solve real world mathematical problems with numbers up to 5 *Compare quantities using language: 'more than', 'fewer than'</p> <p>EYFS *Count objects, actions & sounds *Subitise *Link the number symbol with its value *Count beyond ten *Compare numbers</p>	<p><u>Numbers to 10</u> *Sort, count & represent objects *Count, read & write forwards & backwards from any number 0 to 10 *Count 1 more & 1 less *1-1 correspondence to start to compare groups *Compare groups using language, e.g. equal, more/greater, less/fewer *Introduce <, > & = symbols & compare numbers *Order groups of objects & numbers *Ordinal numbers *The number line</p> <p><u>Numbers to 20</u> *Count forwards & backwards & write numbers to 20 in numerals & words *Numbers from 11 to 20 - 10s & 1s *Count 1 more & 1 less *Compare & order groups of objects *Order numbers</p> <p><u>Numbers to 50</u> *Represent numbers to 50 – 10s & 1s *Find one more & one less *Compare objects within 50 *Compare & order numbers within 50 *Count in 2s & 5s</p> <p><u>Numbers to 100</u> *Counting to 100 *Partitioning numbers, comparing & ordering numbers * Find one more & one less</p>	<p><u>Numbers to 100</u> *Count objects to 100 & read & write numbers in numerals & words *Represent numbers to 100 *Tens & ones with a part-whole model *Tens & ones using addition *Use a place-value chart *Compare objects & numbers *Order objects & numbers *Count in 2s, 5s & 10s *Count in 3s</p>
<p><u>Number: Addition & Subtraction</u></p>	<p>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.</p>	<p><u>(Based on numbers/quantities worked on in Place Value)</u> *Addition symbol *Find & compare number bonds within & to 10 *Addition – adding together & adding more *Part-whole model - finding a part</p>	<p><u>(Based on numbers/quantities worked on in Place Value)</u> *Fact families – addition & subtraction bonds to 20 *Check calculations *Compare number sentences *Related facts</p>

	<p>EYFS *Understand the ‘one more than/one less than’ relationship between consecutive numbers</p> <p>*Explore the composition of numbers to 10</p> <p>*Automatically recall number bonds for numbers 0–5 & some to 10</p>	<p>*Subtraction – taking away, how many left? Crossing out, introducing the subtraction symbol, finding a part, breaking apart & counting back</p> <p>*Fact families – the 8 facts</p> <p>*Add by counting on & by making 10</p> <p>*Find & make number bonds</p> <p>*Subtraction – not crossing 10 & crossing 10</p> <p>*Related facts</p> <p>*Compare number sentences</p>	<p>*Bonds to 100 – tens & tens & ones</p> <p>*Add & subtract 1s & 10s</p> <p>*Add & subtract 2 digit & 1-digit numbers - crossing ten</p> <p>*Add & subtract two 2-digit numbers - not crossing 10 & crossing 10</p> <p>*Add three 1-digit numbers</p>
<p>Number: Multiplication & Division</p>	<p>Explore & represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p> <p>EYFS *Continue, copy & create repeating patterns</p>	<p>*Count in 10s</p> <p>*Make & add equal groups</p> <p>*Make arrays</p> <p>*Make doubles</p> <p>*Make equal groups – grouping & sharing</p>	<p>*Recognise, make & add equal groups</p> <p>*Multiplication sentences from pictures, arrays & using the x symbol</p> <p>*2s, 5s & 10s times-tables</p> <p>*Make equal groups – grouping & sharing</p> <p>*Divide by 2 - odd & even numbers</p> <p>*Divide by 5 & 10</p>
<p>Number: Fractions</p>		<p>*Find a half & find a quarter</p>	<p>*Make equal parts</p> <p>*Recognise & find a half, quarter & a third</p> <p>*Unit & non-unit fractions</p> <p>*Equivalence of $\frac{1}{2}$ & $\frac{2}{4}$</p> <p>*Find three quarters</p> <p>*Count in fractions</p>
<p>Measurement</p>	<p>3-4 Years *Make comparisons between objects relating to size, length, weight & capacity</p> <p>*Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then...’</p> <p>EYFS *Compare length, weight & capacity</p>	<p>(Based on numbers/quantities worked on in Number)</p> <p>*Compare & measure lengths & heights</p> <p>*Introduce weight & mass - measure & compare mass</p> <p>*Introduce capacity & volume - measure & compare capacity</p> <p>*Recognising coins & notes</p> <p>*Counting in coins</p> <p>*Before & after</p> <p>*Dates</p> <p>*Time to the hour & to the half hour</p> <p>*Writing & comparing time</p>	<p>(Based on numbers/quantities worked on in Number)</p> <p>*Count & select money – pence, pounds, notes & coins</p> <p>*Make the same amount</p> <p>*Compare money & find totals, differences & change</p> <p>*Measure, compare & order lengths – cm & m</p> <p>*Four operations with lengths</p> <p>* Telling the time - O’ clock, half past, quarter past, quarter to & to 5 minutes</p> <p>*Hours & days</p> <p>*Find & compare durations of time</p> <p>*Compare & measure mass – g & kg - & volume – ml & L</p> <p>*Temperature</p>
<p>Geometry: Properties of Shapes</p>	<p>3-4 Years *Talk about & explore 2D & 3D shapes using informal & mathematical language: ‘sides’, ‘corners’, ‘flat’</p> <p>*Select shapes appropriately: e.g. triangular prism for a roof</p> <p>*Combine shapes to make new ones</p> <p>*Talk about & identify patterns around them</p> <p>*Use informal language like ‘pointy’, ‘spotty’, ‘blobs’, etc.</p> <p>*Extend & create ABAB patterns – stick, leaf, stick, leaf.</p> <p>*Notice & correct an error in a repeating pattern.</p> <p>EYFS *Select, rotate & manipulate shapes to develop spatial reasoning skills</p> <p>*Compose & decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can</p> <p>*Continue, copy & create repeating patterns</p>	<p>*Recognise, name & sort 3-D shapes</p> <p>*Recognise, name & sort 2-D shapes</p> <p>*Patterns with 3-D & 2-D shapes</p>	<p>*Recognise 2-D & 3-D shapes</p> <p>*Count sides & vertices on 2-D shapes</p> <p>*Draw & sort 2-D shapes</p> <p>*Lines of symmetry</p> <p>*Count faces, edges & vertices on 3-D shapes</p> <p>*Sort 3-D shapes</p> <p>*Make patterns with 2-D & 3-D shapes</p>

Geometry: Position & Direction	3-4 Years *Understand position through words alone – e.g., “The bag is under the table,” – with no pointing. *Describe a familiar route. *Discuss routes & locations, using words like ‘in front of’ & ‘behind’.	*Describe turns & position	*Describe movements & turns *Make patterns with shapes
Statistics			(Based on numbers/quantities worked on in Number) *Make tally charts *Draw pictograms & interpret pictograms (1-1) *Draw pictograms & interpret pictograms (2, 5 & 10) *Block diagrams

Progression in Maths (based on the National Curriculum and adapted from White Rose Small Steps)

KS2 - Middle School

Autumn Term

Spring Term

Summer Term

Area of the National Curriculum	Y3	Y4
Number: Number & Place Value	3-digit Numbers *Hundreds *Represent numbers to 1000 - 100s, 10s & 1s *Number line to 1000 *Find 1, 10, 100 more or less than a given number *Compare objects & numbers to 1000 *Order numbers to 1000 *Count in 50s	4-digit Numbers *Roman numerals to 100 *Round to the nearest 10, 100 & 1,000 *Count in 1,000s *1,000s, 100s, 10s & 1s - partitioning *Number line to 10,000 *1,000 more or less *Compare & order numbers *Count in 25s *Negative numbers
Number: Addition & Subtraction	(Based on numbers/quantities worked on in Place Value) *Add & subtract multiples of 100 *Add & subtract 3-digit & 1-digit numbers – not crossing 10 & crossing 10 *Add & subtract 3-digit & 2-digit numbers – not crossing 100 & crossing 100 *Add & subtract two 3-digit numbers – not crossing 10/100 & crossing 10/100 *Spot the pattern	(Based on numbers/quantities worked on in Place Value) *Add & subtract 1s, 10s, 100s & 1,000s *Add & subtract two 4-digit numbers – no exchange, 1 exchange, >1 exchange *Efficient subtraction *Estimating answers & checking strategies
Number: Multiplication & Division	*Multiplication – equal groups *Multiply & divide by 3 – the 3 times table *Multiply & divide by 4 – the 4 times table *Multiply & divide by 8 – the 8 times table *Comparing statements *Related calculations *Multiply & divide 2-digit numbers by 1-digit numbers *Scaling *How many ways?	*Multiply & divide by 10 & 100 *Multiply by 1 & 0 *Divide by 1 & itself *Multiply & divide by 6 – the 6 times table *Multiply & divide by 9 – the 9 times table *Multiply & divide by 7 – the 7 times table *11 & 12 times tables *Multiply 3 numbers *Factor pairs *Efficient multiplication *Written methods *Multiply & divide 2-digit & 3-digit numbers by 1-digit numbers *Correspondence problems

<p><u>Number:</u> <u>Fractions</u></p>	<ul style="list-style-type: none"> *Unit & non-unit fractions *Making the whole *Tenths – counting & decimals *Fractions on a number line *Fractions of a set of objects *Equivalent fractions *Compare & order fractions *Add & subtract fractions 	<ul style="list-style-type: none"> *Equivalent fractions *Fractions greater than 1 *Count in fractions *Add 2 or more fractions *Subtract 2 fractions & from whole amounts *Calculate fractions of a quantity *Recognise tenths & hundredths *Tenths as decimals & on a place value grid & a number line *Divide 1 & 2-digit numbers by 10 & 100 *Hundredths as decimals & on a place value grid *Make a whole *Write, compare, order & round decimals *Halves & quarters
<p><u>Measurement</u></p>	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Pounds & pence *Convert pounds & pence *Add & subtract money *Give change *Measure & compare lengths *Equivalent lengths – m & cm, mm & cm *Add & subtract lengths *Measure & calculate perimeter *Months & years *Hours in a day Telling the time to 5 minutes & to the minute *Using a.m. & p.m. *25-hour clock *Start & end times - finding & comparing the duration *Measuring time in seconds *Measure, compare, add & subtract mass *Measure, compare, add & subtract capacity 	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Kilometres *Perimeter – on a grid, of rectangles & of rectilinear shapes *What is area? – counting squares *Making shapes *comparing areas *Pounds & pence *Ordering & estimating money *Four operations *Hours, minutes & seconds *Years, months, weeks & days *Analogue to digital – 12 hour & 24 hour
<p><u>Geometry:</u> <u>Properties of</u> <u>Shapes</u></p>	<ul style="list-style-type: none"> *Turns & angles *Right angles in shapes *Compare angles *Draw accurately *Horizontal & vertical, parallel & perpendicular *Recognise & describe 2D & 3D shapes *Make 3D shapes 	<ul style="list-style-type: none"> *Identify, compare & order angles *triangles *Quadrilaterals *Lines of symmetry *Complete a symmetric figure
<p><u>Geometry:</u> <u>Position & Direction</u></p>		<ul style="list-style-type: none"> *Describe position *Draw & move on a grid *Describe a movement on a grid
<p><u>Statistics</u></p>	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Pictograms, bar charts & tables 	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Interpret charts *Comparison, sum & difference *Line graphs

Progression in Maths (based on the National Curriculum and adapted from White Rose Small Steps)

KS2 - Upper School

Autumn Term

Spring Term

Summer Term

Area of the National Curriculum	Y5	Y6
Number: Number & Place Value	<p>Numbers to 10,000 & Beyond</p> <ul style="list-style-type: none"> *Roman numerals to 1,000 *Round to nearest 10, 100 & 1,000 *Compare, order & round numbers within 100,000 *Counting in 10s, 100s, 1,000s, 10,000s & 100,000s *Compare, order & round numbers within one million *Negative numbers 	<p>Numbers to ten million</p> <ul style="list-style-type: none"> *Compare, order & round any numbers *Negative numbers
Number: Addition & Subtraction	<p>(Based on numbers/quantities worked on in Place Value)</p> <ul style="list-style-type: none"> *Add & subtract whole numbers with more than 4 digits (column method) *Round to estimate & approximate *Inverse operations 	<p>(Based on numbers/quantities worked on in Place Value)</p> <ul style="list-style-type: none"> *Add & subtract integers *Multiply up to a 4-digit number by a 2-digit number *Division using factors *Short & long division *Common factors & multiples *Prime numbers (to 100) *Squared & cubed numbers *Orders of operations *Mental calculations & estimation *Using known facts
Number: Multiplication & Division	<ul style="list-style-type: none"> *Multiples *Factors & common factors *Prime numbers *Squared & cubed numbers *Multiply & divide by 10, 100 & 1,000 *Multiples of 10, 100 & 1,000 *Multiply & divide 4-digit numbers by 1-digit *Multiply 2, 3 & 4-digit numbers by 2-digits *Divide with remainders 	
Number: Fractions, decimals & percentages	<ul style="list-style-type: none"> *Equivalent fractions *Improper fractions to mixed numbers & vice versa *Number sequences *Compare & order fractions less than 1 & greater than 1 *Add & subtract fractions *Add - fractions within 1, mixed numbers & 3 or more fractions *Subtract – breaking the whole & mixed numbers *Multiply unit fractions, non-unit fractions & mixed numbers by an integer *Fraction of an amount *Using fractions as operators *Decimals up to 2dp *Decimals as fractions *Thousandths *Rounding, ordering & comparing decimals *Percentages as fractions & decimals *Equivalent FDP. *Adding & subtracting decimals within 1 *Complements to 1 *Adding decimals – crossing the whole *Adding & subtracting decimals with the same & different number of decimal places *Adding & subtracting wholes & decimals 	<ul style="list-style-type: none"> *Simplify fractions *Fractions on a number line *Compare & order fractions – by denominator & by numerator *Add & subtract fractions *Multiply & divide fractions by integers *Multiply fractions by fractions *Four rules with fractions *Fractions of an amount & finding the whole *Three decimal places *Multiply & divide decimals by 10, 100 & 1,000 *Multiply & divide decimals by integers *Decimals as fractions & vice versa *Fractions to percentages *Equivalent FDP & ordering FDP *Percentages of an amount *Percentages – missing values

	<ul style="list-style-type: none"> *Decimal sequences *Multiplying & dividing decimals by 10, 100 & 1,000 	
Number: Ratio & proportion		<ul style="list-style-type: none"> *Ratio language & the ratio symbol *Ratio & fractions *Calculating ratio *Using & calculating scale factors
Algebra		<ul style="list-style-type: none"> *Find a rule & solve equations – one & two step *Forming expressions & equations *Substitution *Formulae *Find pairs of values *Enumerate possibilities
Measurement	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Measure & calculate perimeter *Area of rectangles, compound shapes & irregular shapes *Kilograms & kilometres *Milligrams & millilitres *Metric & imperial units *Converting units of time *Timetables *Compare & estimate volume & capacity 	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Convert & calculate with metric measures *Miles & kilometres *Imperial measures *Area & perimeter *Area of a triangle & parallelogram *Volume – counting cubes & of a cuboid
Geometry: Properties of Shapes	<ul style="list-style-type: none"> *Measuring angles – in degrees & with a protractor *Drawing lines & angles accurately *Calculating angles on a straight line & around a point *Calculating lengths & angles in shapes *Regular & irregular polygons *Reasoning about 3D shapes 	<ul style="list-style-type: none"> *Measuring angles – in degrees & with a protractor *Calculate angles *Vertically opposite angles *Angles in triangles, special quadrilaterals & regular polygons *Draw shapes accurately *Draw nets of 3D shapes
Geometry: Position & Direction	<ul style="list-style-type: none"> *Position in the first quadrant *Reflection & translation with coordinates 	<ul style="list-style-type: none"> *The first quadrant *Four quadrants *Translations & reflections
Statistics	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Read, interpret & draw line graphs *Read & interpret tables *Two-way tables *Timetables 	<p><u>(Based on numbers/quantities worked on in Number)</u></p> <ul style="list-style-type: none"> *Read, interpret & draw line graphs *Read, interpret & draw pie charts *The mean