

## Year 5 and 6 Maths Long Term Plan

	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
<b>Autumn Year 5</b>	<b>Place Value</b> Read, write, order and compare numbers to 10,000, 100,000, 1,000,000. Powers of 10. 10/100/1,000/10,000/100,000 more or less. Partition numbers to 1,000,000. Round to the nearest 10, 100, 1,000. Round within 100,000. Round within 1,000,000. Negative numbers. Roman numerals to 1,000.	<b>Addition and Subtraction</b> Mental strategies. Add whole numbers with more than four digits (column addition). Subtract whole numbers with more than four digits (column subtraction). Round to check answers. Use inverse operations. Multi-step addition and subtraction problems. Compare calculations. Find missing numbers.	<b>Multiplication and Division</b> Multiples. Common multiples. Factors. Common factors. Prime, square and cube numbers. Multiply by 10, 100, 1,000. Divide by 10, 100, 1,000. Multiples of 10, 100, 1,000. Multiply 4 digit numbers by 1 digit numbers (short multiplication). Multiply 2 numbers (grid method). Multiply 2, 3, 4 digit numbers by 2 digit numbers (long multiplication). Solve multiplication problems. Divide 4 digit numbers by 1 digit numbers (short division). Divide with remainders. Efficient division. Solve problems with multiplication and division.	<b>Fractions</b> Find fractions equivalent to a unit fraction. Find fractions equivalent to a non-unit fraction. Recognise equivalent fractions. Convert improper fractions to mixed numbers. Convert 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 with different denominators within 1 and with a total of more than 1. Add fractions to a mixed number. Add two mixed numbers. Subtract fractions with different denominators. Subtract from a mixed number. Subtract from a mixed number, breaking the whole. Subtract two mixed numbers.	<b>Assessment and Consolidation</b>									
<b>Autumn Year 6</b>	<b>Place Value</b> Read, write, order and compare numbers to 1,000,000, 10,000,000. Powers of 10. Round any integer. Negative numbers. Revise Roman numerals.	<b>Four Operations: Addition, Subtraction, Multiplication, Division</b> Add and subtract integers (column addition and subtraction). Solve problems with addition and subtraction. Common factors. Common multiples. Rules of divisibility. Primes to 100. Square and cube numbers. Multiply 4 or more digit numbers by 2 digit numbers (long multiplication). Solve problems with multiplication. Short division. Division using factors. 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>Fractions</b> Equivalent fractions and simplifying. Compare and order using denominator/numerator. Add and subtract fractions with denominators which are/are not multiples of each other. Add and subtract mixed numbers. Solve multi-step problems. Multiply fractions by integers. Multiply fractions by fractions. Divide fractions by integers. Mixed problem solving. Finding a fraction of an amount. Find the whole.	<b>Assessment and Consolidation</b>									
<b>Spring Year 5</b>	<b>Fractions</b> Multiply fractions by integers. Multiply non-unit fractions by integers. Multiply mixed numbers by integers. Finding a fraction of an amount. Find the whole. Using fractions as operators. Fraction problems solving.	<b>Fractions, Decimals and Percentages</b> Decimals to 2 decimal places. Equivalent fractions as decimals (tenths and hundredths). Thousandths as fractions. Thousandths as decimals. Thousandths on a place value chart. Ordering and comparing decimals to 3 d.p.. Rounding decimals to the nearest whole number. Round to 1 d.p. Adding and subtracting decimals within 1. Complements to 1. Adding and subtracting decimals greater than 1. Adding and subtracting decimals with the same and different numbers of decimal places. Efficient calculation strategies. Multiplying and dividing decimals by 10, 100, 1,000. Decimals problem solving - missing values. Understanding percentages. Percentages as decimals and fractions. Equivalent fractions, decimals and percentages.	<b>Measurement: Converting Units</b> Kilograms and tonnes. Milligrams and millimetres. Converting units of length. Convert between metric and Imperial units. Converting units of time. Solving problems with timetables.	<b>Measurement: Area, Perimeter, Volume</b> Perimeter of rectangles. Perimeter of rectilinear shapes. Perimeter of polygons. Area of rectangles. Area of compound shapes. Estimate area. Cubic centimetres. Compare volume. Estimate volume. Estimate capacity.	<b>Geometry: Position and Direction</b> Read and plot coordinates in the first quadrant. Solve coordinate problems. Translation. Translation with co-ordinates. Reflection.	<b>Geometry: Properties of Shapes</b> Understand and use degrees. Classify angles. Estimate angles. Measure angles up to 180°. Draw lines and angles accurately. Calculate angles around a point. Calculate angles on a straight line. Calculate lengths and angles in shapes. Revise triangles and quadrilaterals. Regular and irregular polygons. Reasoning about 3D shapes.	<b>Assessment</b>							

<b>Spring Year 6</b>	<b>Ratio</b> Introduction to ratio. Use the language of ratio. The ratio symbol. Ratio and fractions. Scale drawing. Using scale factors. Similar shapes. Ratio problems. Proportion problems. Recipe problems.	<b>Fractions, Decimals and Percentages</b> Place value within 1 to 3 d.p.. Integers and decimals. Round decimals. Add and subtract decimals. Multiply and divide decimals by 10, 100, 1,000. Multiply decimals by integers. Divide decimals by integers. Decimal problem solving. Decimals and fraction equivalents. Fractions as division. Understand percentages. Fractions to percentages. Equivalent fractions, decimals and percentages. Ordering fractions, decimals and percentages. Finding percentages of an amount one step/multi-step problems. Finding missing values with percentages.	<b>Measurement: Converting Units</b> Metric measures. Converting metric measures. Calculating with metric measures. Miles and kilometres. Imperial measures.	<b>Measurement: Area, Perimeter, 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>Geometry: Position and Direction</b> Position in the first quadrant. All four quadrants. Solve coordinate problems. Translations. Reflection.	<b>Geometry: Properties of Shapes</b> Measure and classify angles. Calculate angles. Vertically opposite angles. Angles in a triangle. Angles in a triangle: special cases; missing angles. Angles in a quadrilateral. Angles in polygons. Circles. Draw shapes accurately. Nets of 3D shapes.	<b>Assess-m ent</b>
<b>Summer Year 5</b>	<b>Statistics</b> Revise interpreting charts: comparison, sum and difference. Draw line graphs. Read and interpret line graphs. Solve problems using line graphs. Read and interpret tables. Two-way tables. Read and interpret timetables.	<b>Negative Numbers</b> Understand negative numbers. Count through zero in 1s and multiples. Compare and order negative numbers. Find the difference. Solve problems using negative numbers.	<b>Projects, Consolidation and Problem Solving</b> Focus on revision and consolidation of learning from earlier in the year, particularly the four operations and fractions, in preparation for learning in Year 6.				
<b>Summer Year 6</b>	<b>Statistics</b> Revise interpreting charts: comparison, sum and difference. Line graphs. Dual bar charts. The mean.	<b>SATs Revision</b>	<b>SATs</b>	<b>Statistics</b> Read and interpret pie charts. Pie charts with percentages. Draw pie charts.	<b>Algebra</b> One step function machines. Two step function machines. Form expressions. Substitution. Formulae. Form equations. Solve one-step equations. Solve two-step equations. Find pairs of values. Solve problems with two unknowns.	<b>Projects, Consolidation and Problem Solving</b> Focus on revision and consolidation of learning from earlier in the year, particularly the four operations and fractions, in preparation for learning in Year 7.	