Year 5 – Key Vocab:

Essentials Sequence	Key concepts	Key vocabulary
5LS1 - Place Value and Rounding of Large Numbers	Pupils to extend and apply existing understanding of place value within the new number range (1,000,000).	Place value, millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones, digits, smallest, greatest, digit, part-whole model, part, whole, re-group, placeholder, equivalent, total, equality, value, more, less, 'powers of 10,' approximately, nearest, rounded, place, position, proportion,' less than,' 'more than,' size, boundary, round
5LS2 - Interpret Negative Numbers	Pupils will develop a deeper understanding of negative numbers, recognising them within counting sequences and seeing how they relate to decimals.	Positive, negative, number line, zero, smallest, largest, minus, difference, highest, lowest, count, forwards, backwards, integers, same, different
5LS3 - Place Value of Numbers with up to Three Decimal Places	Pupils build on their understanding of place value and the base-10 number system extending to numbers with up to 3 decimal places.	Place value, thousands, hundreds, tens, ones, tenths, hundredths, thousandths, round, nearest, decimal, 'greater than', 'less than,' multiply, divide, whole, equal, re-group, 'closer to,' 'nearest whole,' digits, approximately, equivalence, groups, smaller, bigger, complements, parts
5LS4 - Multiply and Divide by 10, 100 and 1,000	Understanding what multiplication and division mean in addition to further developing the understanding of place value to be able to multiply and divide by powers of 10.	Multiplication, dividing, decimal, millions, hundred thousands, thousands, hundreds, tens, ones, tenths, sharing, groups, re-group, equally, place-holder, fraction, value, decimal, multiple, larger, smaller, left, right, 'zero as a placeholder,' 'lots of,' digits
5LS5 - Properties of Number – Multiples, Factors and Common Factors	Extending an understanding of what multiplication and division mean through gaining a greater understanding of factors and multiples.	Multiples, factors, 'common factors,' product, division, same, different, 'prime number,' 'square number,' pairs

5LS6 - Prime and Composite Numbers	Exploring which numbers are prime, and explaining why and learn that composite numbers (non-prime) are built from prime factors.	Composite, prime, factors, multiples, divide, multiply, times-table, arrays
5LS7 - Multiply and Divide Mentally	Pupils will apply knowledge of the base ten system (multiplying and dividing by 10, 100 and 1000) when using known facts to derive new facts. Doubling, halving and re-grouping will be visited.	Multiplication, dividing, decimal, thousands, hundreds, tens, ones, tenths, sharing, groups, re-group, equally, larger, smaller, quotient, distributive law, divisible/divisibility, arrays, larger, smaller, times, doubling, halving, sum, product, partition, part-whole model, part, whole
5LS8 - Solve Problems Involving Knowledge of Key Facts	Understanding of place value and properties of number to solve problems.	Prime, nearest, round, number, digits, even, off, larger, smaller, multiple, multiply, divide, product
5LS9 - Add and Subtract Using a Range of Strategies	Applying knowledge of number including rounding. Pupils to choose the most efficient strategies.	Thousands, hundreds, tens, ones, place value, regroup, exchange, calculation, sum, same, difference, addition, subtraction, method, total, formal, more than, less than, minuend, decomposition, estimate, nearest, re-group, commutativity, minus, 'take away,' equivalent, round, estimate, approximately, 'equal sum,' part, whole, rebalance, 'equal difference'
5LS10 - Add and Subtract Using Formal Written Methods	Deeper understanding of column addition and subtract and pupils will be able to reason about the process.	Thousands, hundreds, tens, ones, place value, regroup, exchange, calculation, sum, same, different, addition, subtraction, method, total, formal, more than, less than, minuend, decomposition, estimate, nearest, estimate, round, estimate, approximate
5LS11 - Formal Written Method for Multiplication	Securing the formal multiplication method and building on fact families	Doubling, halving, associative law, distributive law, multiple, equal, arrays, times tables, re-grouped, multiply, divide, odd, even, groups, thousands, hundreds, tens, ones, product, carried, 'place holder,' hundredths, thousandths, place value

5LS12 - Formal Written Method of Short Division	Focus on dividing up to 4-digit numbers with a 1-digit number	Division, halving, sharing, re-grouping, remainder, arrays, groups, quotient, equal, multiples, thousands, hundreds, tens, ones, place value, equally, same, different, part-whole model, altogether, shared, placeholder, tenths, hundredths, divisible, split
5LS13 - Equivalent Fractions	Focus on equivalence with improper fractions and mixed numbers	Equivalent, smallest, largest, fractions, unit fractions, discrete, parts, whole, equal, groups, split, continuous, quantities, total, remaining, divided, bar model, value, denominator, numerator, subtracted, addition, answer, benchmark, smallest, largest, multiply, divide, multiplier, divisor, tenths, hundredths, improper fractions, 'mixed number,' convert
5LS14 - Compare and Order Fractions	Focus on ordering fractions of amounts and identifying how fraction size might not indicate the largest quantity.	Improper fraction, mixed number, multiply, convert, simplify equivalent, smallest, largest, fractions, unit fractions, discrete, parts, whole, equal, groups, split, continuous, quantities, total, remaining, divide, bar model, value, denominator, numerator, multiples, 'greater than,' 'less than'
5LS15- Adding and Subtracting Fractions	Builds on from adding fractions when the denominator is the same.	Add, subtract, numerator, denominator, improper fraction, mixed number, multiplied, convert, simplify equivalent, smallest, largest, fractions, unit fractions, discrete, parts, whole, equal, groups, divide, split, convert
5LS16- Problem Solving – All Four Operations	Consolidating calculation strategies both formal and mental.	Multiply, divide, add, subtract, answer, equal, answer, same, solve
5LS17 - Multiply Fractions by Whole Numbers	Focus on multiplication in terms of "groups of" in relation to fractions.	Mixed fractions, unit fractions, discrete, parts, whole, equal, groups, split, continuous, quantities, total, remaining, divided, bar model, value, denominator, numerator, subtracted, addition, answer, smallest, largest, multiply, divide, multiplier, divisor, commutative

5LS18 - Fraction Problem Solving	Using reasoning skills about the magnitude of fractions	Fractions, equal, part, whole, numerator, denominator, groups, share, divide, smaller, bigger, split
5LS19 - Measure – Converting Units of Measure	Learning the units of measure and what they need to multiple and divide.	Metric, unit, scaling, grams, kilograms, millilitres, litres, metres, kilometres, convert, seconds, minutes, value, multiply, divide, hour, groups
5LS20 - Area	Pupils will calculate area from scale drawings using given measurements and to solve problems.	Standard, irregular, units, multiply, rectilinear, area, length, width, total, perimeter, inverse
5LS21 – Volume and Capacity	Measures involving volume/capacity.	Measure, capacity, volume, millilitres, litres, scale, units, equal, multiplication, product, group, width, height, length
5LS22 - Percentages	Builds on pupils' proportional understanding and how a % relates to the number of parts out of 100.	Equivalent, fractions, proportion, hundredths, tenths, percent, multiply, divide, whole, parts, half, quarter , double
5LS23 – Problem Solving - Percentages	Pupils are provided with an opportunity to consolidate their understanding of percentages and in apply them to a range of problem-solving activities.	Equivalent, fractions, proportion, hundredths, tenths, percent, multiply, divide, whole, parts, half, quarter, decimal, double
5LS24 - 3-D Shapes from 2-D Representations	Pupils explore cuboids including cubes and nets are introduced.	Properties, vertices, vertex, faces, congruent, polygons, regular, irregular, right angles, sides, 2D, internal, triangle, quadrilateral, pentagon, circle, hexagon, rectangle, octagon, equal, length, shape, cube, cuboids, edges, height, width, dimensions, parallel, perpendicular, net
5LS25 – Reflection and Translation	Pupils will recognise and use reflection and translation to move shapes to new positions.	Positions, translation, right, left, up, down, axes, x-axis, y-axis, whole numbers, integers, co-ordinates, movements, 2-dimensional, vertices, vertex, units, reflect, rotate, symmetry, values, quadrant, polygons, properties, quadrilateral, scalene, equivalent, isosceles, triangle, obtuse, acute, plot, mirror line, horizontal, vertical, origin, flipped

5LS26 - Perimeter	Focuses on calculating the perimeter of rectilinear shapes and then composite shapes and application to problem solving.	Length, width, perimeter, shape, rectangle, side, add, double, centimetres, metres, count, rectilinear, sum, altogether, total, distance, parallel, polygons, opposite, value, composite
5LS27 - Estimate, Compare, Measure and Draw Angles	Re-cap of right angles, acute and obtuse angles and an introduction to reflex angles.	Obtuse, acute, reflect, angle, degrees, right angle, turn, protractor, measure, point, largest, smallest, horizontal, 90 degrees, 180 degrees, size, scale, direction, more, less, full turn
5LS28 – Identify Unknown Angles	Focus is on calculating angles. Pupils will identify angles at a point, on a straight line or other multiples of 90° and use their understanding of angles to calculate missing values.	Multiples, total, obtuse, acute, reflect, angle, degrees, right angle, turn, protractor, measure, point, largest, smallest, horizontal, 90 degrees, 180 degrees, size, scale, direction, more, less, total, estimate, equal, quadrilaterals, triangles, full turn, value
5LS29 - Formal Methods for Division and Multiplication in Increasingly Complex Problems	Consolidates formal methods for division and multiplication. Pupils will continue to explore the relationship between remainders, fractions and decimals.	Division, halving, sharing, re-grouping, remainder, arrays, groups, quotient, equal, multiples, thousands, hundreds, tens, ones, place value, equally, same, different, part-whole model, altogether, doubling, halving, associative law, distributive law, multiple, equal, arrays, times tables, re-grouping, multiply, divide, odd, even, groups, thousands, hundreds, tens, ones, product
5LS30 - Strategies for Multiplication and Division (Mental and Written)	Mental and written strategies for multiplication and division are re-visited and pupils will also revisit converting remainders into fractions or decimals.	Remainder, divide, divisible, fraction, product, multiply, total, product, answer, even, odd, decimal, equal, quotient, multiple, group, place, value,
5LS31 - Solving Problems involving Scaling by Simple Fractions and Rates	Pupils will build models to represent scaling and correspondence problems	Factors, multiply, bar models, arrays, group, greater, larger, smaller, value, total, divide, difference, more, fewer, rate, correspondence, bar model
5LS32 - Conversion of Imperial and Metric Units of Measure	Pupils will apply their understanding of metric conversion to a range of problems	Length, metres, centimetres, millimetres, unit, equal, mass, kilograms, grams, capacity, litres,

		millilitres, hours, minutes, seconds, pounds, inches, pints, feet, foot, mile, yard, inch, multiply, divide, fractions, decimals, convert, weeks, days, fewer, smaller, larger, greater, weight, Newtons, decade, century, month, metric, imperial, 'powers of 10,' equivalent, thousandth, hundredth, tenth, scale,
5LS33 - Fractions, Decimals and Percentages Problem Solving	Pupils will use all four operations to solve problems and apply their understanding to multi-step problems involving fractions, decimals and percentages.	Thousandths, hundredths, tenths, parts, whole, percentage, decimal, numerator, denominator, divide, multiply, whole, equivalent, proportion, scale, half, double, quarter, convert, imperial, metric, measurements, equal, fraction, reduced, increased,
5LS34 - Reading Timetables and Calculating with Time	Focuses upon combining the skills of telling the time and converting time with the reading of timetables	Units, convert, minutes, hours, seconds, am, pm, midnight, noon
5LS35 – Solve Problems involving the Four Operations	Pupils exposed to worded questions involving the four operations	Total, answer, equal, add, plus, subtract, minus, 'take away,' multiply, divide, part, whole, more, less, left, share, product
5LS36 – Distinguish between Regular and Irregular Polygons	Focus on polygons and regular and irregular polygons	Quadrilaterals, parallel, perpendicular, right angle, length, equal, sides, polygon, regular, irregular, rectangle, square, circle, triangle, number of sides, line of symmetry, straight side, curved side, , greater than right angle, less than right angle, regular, irregular, congruent, rhombus, trapezium, parallelograms
5LS37 - Use Properties of Rectangles	To know what and how many angles, sides and vertices are in rectangles.	Rectangles, sides, length, width, vertex, vertices, angle, right-angle, parallel, turn, perpendicular, opposite, equal, rectilinear, perimeter, area, perpendicular, equilateral, total
5LS38 - Statistics – Solve Comparison, Sum and Difference Problems using Information in a Line Graph	Focuses upon interpreting line graphs to support comparisons and calculate (including sum and difference).	Sum, difference, line, graph, scale, axes, x-axis, y-axis, data

5LS39 - Statistics – Interpreting and Evaluating Information Presented in Charts and Tables	Pupils consider the impact of the variation within the representation of data in text and tables. They also continue to develop their understanding of discrete and continuous variables and when line graphs or bar graphs are the most appropriate representations of data.	Data, continuous, discrete, variation, line graph, bar graph, pie chart, axes, x-axis, y-axis,
5LS40 – Roman Numerals	Pupils develop a deeper understanding of the structure and conventions of Roman numerals.	Roman, numerals, clock, value, palindromic, minutes seconds, hours, half past, quarter past, quarter to