Listerdale Junior Academy Maths LTP – 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 Each week: M- Daily arithmetic -10 qus T- Number of the week W- Daily arithmetic- 10 qus Th- Number connections F – Daily arithmetic –10 qus Daily arithmetic to include all operations at the appropriate level Ensure differentiation takes place is needed	Number: Place Value *National Curriculum objectives* *1. Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit* *2. Round any whole number to a required degree of accuracy* *3. Use negative numbers in context, and calculate intervals across zero* *4. Solve number and practical problems that involve all of the above.* Small Steps Week 1 • Numbers to 10,000, 100,000, a million, ten million • Compare and order any number • Rounding numbers • Negative numbers	Number: Addition and Subtraction *National Curriculum objectives* *1.. Perform mental calculations, including with mixed operations and large numbers* *2. Identify common factors, common multiples and prime numbers* *3. Use their knowledge of the order of operations to carry out calculations involving the four operations* *4. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why* *5. Solve problems involving addition, subtraction, multiplication and division* *6. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.* Small Steps Week 1 • Add and subtract whole numbers with more than 4 digits • Inverse operations (addition and subtraction) • Multi step addition and subtraction problems • Add and subtract integers	Assessment week: Arithmetic Focus *National curriculum objectives* *1.Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places* *2.Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context* Small Steps Week 1 • Multiply and divide by 10,100,1000 • Short division • Arithmetic gap analysis	Number: Multiplication and Division *National Curriculum objectives* *1. Multiply multi-digit numbers up to 4 digits by a two-digit whole number using long multiplication* *2. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context* *6. Use their knowledge of the order of operations to carry out calculations involving the four operations* *7. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.* *Small Steps* Week 1 • Mulitply up to a 4 digit numbers by a 2 digit numbers x2 • Long division x 2	Number: Percentages *National Curriculum objectives* *1. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts* Small Steps Week 1 • Understand percentages • Percentage of an amount • Percentages – missing values • Percentage word problems	Number: Fractions *National Curriculum objectives* *1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination* *2. Compare and order fractions, including fractions > 1* *3. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions* *4. Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 4 1 × 2 1 = 8 1]* *5. Divide proper fractions by whole numbers [for example, 3 1 ÷ 2 = 6 1]* Small Steps Week 1 • Equivalent fractions and simplifying fractions • Improper fractions to mixed numbers/Mixed numbers to improper fractions • Multiply and divide fractions by integers • Multiply fractions by fractions Week 2 • Fractions of an amount • Compare and order fractions • Add and subtract fractions • Mixed number addition and subtraction		Number *National Curriculum objectives* *1.Identify common factors, common multiples and prime numbers* *2.Use their knowledge of the order of operations to carry out calculations involving the four operations* Small steps Week 1 • Factors/Multiples • Prime numbers • Roman numerals • BIDMAS	Assessment week: Arithmetic Focus Arithmetic gap analysis	Measurement: Converting units and time *National Curriculum objectives* *1. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate* *2. Use, read, write and convert between standard units, converting from a smaller unit to a larger unit, and vice versa, using decimal notation to up to three decimal places* *3. Convert between miles and kilometres* *4. (Y5) Complete, read and interpret information in tables, including timetables.* Small Steps Week 1 • Convert and calculate metric measures • Miles & KM • Time • Timetables	Measurement: Perimeter, Area and Volume *National Curriculum objectives* *1.. Recognise that shapes with the same areas can have different perimeters and vice versa* *2. Recognise when it is possible to use formulae for area and volume of shapes* *3. Calculate the area of parallelograms and triangles* *4. Calculate, estimate and compare volume of cubes and cuboids using standard units* Small Steps Week 1 • Area and perimeter • Area of a triangle • Area of a parallelogram • Volume of a cuboid	Geometry: Position and Direction *National Curriculum objectives* *1. describe positions on the full coordinate grid (all four quadrants)* *2. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes* Small Steps Week 1 • The first quadrant • Four quadrants • Translations • Reflections
Spring Each week: M- Daily arithmetic -10 qus T- Number of the week W- Daily arithmetic- 10 qus Th- Number connections F – Daily arithmetic –10 qus Daily arithmetic to include all operations at the appropriate level Ensure differentiation takes place is needed	Number: Fractions,Decimals, Percentages *National Curriculum objectives* *1. Associate a fraction with division and calculate decimal fraction equivalents* *2. Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places* *3. Multiply one-digit numbers with up to two decimal places by whole numbers* *4. Use written division methods in cases where the answer has up to two decimal places* *5. Solve problems which require answers to be rounded to specified degrees of accuracy* *6. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.* Small Steps Week 1 • Understand tenths, hundredths and thousandths • Rounding up to 3 decimal places • Multiple and divide decimals by integers • Money problems Week 2 • Converting from fraction to decimal • Equivalent FDP • Ordering FDP • FDP word problems		Assessment week: Arithmetic Focus Arithmetic Gap Analysis	Number: Ratio *National Curriculum objectives* *1. solve problems involving the relative sizes of two quantities where missing values can be found by using integer X and ÷ facts* *2. Solve problems involving the calculation of % and the use of % for comparison* *3. Solve problems involving similar shapes where the scale factor is known or can be found* *4. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples* Small Steps Week 1 • Calculating ratio • Using scale factors • Calculating scale factors • Ratio and proportion problems	Number: Algebra *National Curriculum objectives* *1. Use simple formulae* *2. Generate and describe linear number sequences* *3. Express missing number problems algebraically* *4. Find pairs of numbers that satisfy an equation with two unknowns* *5. Enumerate possibilities of combinations of two variables.* Small Steps Weeks 1 • Substitution • Use simple formulae • Generate and describe linear sequences • Find pairs of values • Enumerate possibilities	Geometry: Properties of Shapes *National Curriculum objectives* *1. Draw 2-D shapes using given dimensions and angles* *2. Recognise, describe and build simple 3-D shapes, including making nets* *3. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons* *4. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles* Small Steps Week 1 • Properties of 2D shapes and draw 2D shapes using given dimensions (discuss regular and irregular polygons) • Properties of 3D shapes • Compare and classify shapes based on their properties • Nets of shapes Week 2 • Measure using a protractor • Angles on a straight line/ Angles around a point • Angles in a triangle (including missing angles) • Angles in quadrilaterals/ Angles in regular polygons		Statistics *National Curriculum objectives* *1. Interpret and construct pie charts and line graphs and use these to solve problems* *2. Calculate and interpret the mean as an average.* *3. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius* Small Steps Week 1 • Read and interpret line graphs • Circles – radius, diameter, circumference • Read and interpret pie charts/ Pie charts with percentages • The mean	Assessment week: Arithmetic Focus Arithmetic Gap Analysis	Measurement: Perimeter, Area and Volume *National Curriculum objectives* *1.. Recognise that shapes with the same areas can have different perimeters and vice versa* *2. Recognise when it is possible to use formulae for area and volume of shapes* *3. Calculate the area of parallelograms and triangles* *4. Calculate, estimate and compare volume of cubes and cuboids using standard units* Small Steps Week 1 • Area and perimeter • Area of a triangle • Area of a parallelogram • Volume of a cuboid	Gap Analysis – look at previous tests and teach to weaknesses	Number: Addition, Subtraction, Multiplication and Division *National Curriculum objectives* *1. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why* *2.Solve problems involving addition, subtraction,* Small Steps Week 1 • Fluency practise • Worded problems all four operations
Summer	Consolidation and SATs Preparation Gap analysis from previous mock SATs				Consolidation, Investigations and Preparation for KS3							

Any spare weeks in any term = gap analysis