

TJA 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
<div>Autumn</div> <div>Daily 10 carried out each day – to contain:</div> <div>1 x addition 1 x subtraction 1 x division 1 x multiplication 1 x inverse operation 5 x new learning (your year group objectives)</div> <div>2 challenge questions – can be reasoning focus</div> <div>Ensure differentiation takes place is needed</div>	<div>Number: Place Value</div> <div>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.</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Numbers to 10,000, 100,000, a million, ten millionCompare and order any numberRounding numbersNegative numbers</div>	<div>Number: Addition and Subtraction</div> <div>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.</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Add and subtract whole numbers with more than 4 digitsInverse operations (addition and subtraction)Multi step addition and subtraction problemsAdd and subtract integers</div>	<div>Assessment week: Arithmetic Focus</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Multiply and divide by 10,100,1000Short divisionArithmetic gap analysis</div>	<div>Number: Multiplication and Division</div> <div>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.</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Multiply up to a 4 digit numbers by a 2 digit numbers x2Long division x 2</div>	<div>Number: Percentages</div> <div>National Curriculum objectives 1. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Understand percentagesPercentage of an amountPercentages – missing valuesPercentage word problems</div>	<div>Number: Fractions</div> <div>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]</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Equivalent fractions and simplifying fractionsImproper fractions to mixed numbers/Mixed numbers to improper fractionsMultiply and divide fractions by integersMultiply fractions by fractions<div>Week 2<ul style="list-style-type: none">Fractions of an amountCompare and order fractionsAdd and subtract fractionsMixed number addition and subtraction</div></div>	<div>Number</div> <div>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</div> <div>Small steps</div> <div>Week 1<ul style="list-style-type: none">Factors/MultiplesPrime numbersRoman numeralsBIDMAS</div>	<div>Assessment week: Arithmetic Focus</div> <div>Arithmetic gap analysis</div>	<div>Measurement: Converting units and time</div> <div>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.</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Convert and calculate metric measuresMiles & KMTimeTimetables</div>	<div>Measurement: Perimeter, Area and Volume</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Area and perimeterArea of a triangleArea of a parallelogramVolume of a cuboid</div>	<div>Geometry: Position and Direction</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">The first quadrantFour quadrantsTranslationsReflections</div>	
<div>Spring</div> <div>Daily 10 carried out each day – to contain:</div> <div>1 x addition 1 x subtraction 1 x division 1 x multiplication 1 x inverse operation 5 x new learning (your year group objectives)</div> <div>2 challenge questions – can be reasoning focus</div> <div>Ensure differentiation takes place if needed</div>	<div>Number: Fractions,Decimals, Percentages</div> <div>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.</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Understand tenths, hundredths and thousandthsRounding up to 3 decimal placesMultiple and divide decimals by integersMoney problems<div>Week 2<ul style="list-style-type: none">Converting from fraction to decimalEquivalent FDPOrdering FDPFDP word problems</div></div>	<div>Assessment week: Arithmetic Focus</div> <div>Arithmetic Gap Analysis</div>	<div>Number: Ratio</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Calculating ratioUsing scale factorsCalculating scale factorsRatio and proportion problems</div>	<div>Number: Algebra</div> <div>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.</div> <div>Small Steps</div> <div>Weeks 1<ul style="list-style-type: none">SubstitutionUse simple formulaeGenerate and describe linear sequencesFind pairs of valuesEnumerate possibilities</div>	<div>Geometry: Properties of Shapes</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Properties of 2D shapes and draw 2D shapes using given dimensions (discuss regular and irregular polygons)Properties of 3D shapesCompare and classify shapes based on their propertiesNets of shapes<div>Week 2<ul style="list-style-type: none">Measure using a protractorAngles on a straight line/ Angles around a pointAngles in a triangle (including missing angles)Angles in quadrilaterals/ Angles in regular polygons</div></div>	<div>Statistics</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Read and interpret line graphsCircles – radius, diameter, circumferenceRead and interpret pie charts/ Pie charts with percentagesThe mean</div>	<div>Assessment week: Arithmetic Focus</div> <div>Arithmetic Gap Analysis</div>	<div>Measurement: Perimeter, Area and Volume</div> <div>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</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Area and perimeterArea of a triangleArea of a parallelogramVolume of a cuboid</div>	<div>Gap Analysis – look at previous tests and teach to weaknesses</div>	<div>Number: Addition, Subtraction, Multiplication and Division</div> <div>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,</div> <div>Small Steps</div> <div>Week 1<ul style="list-style-type: none">Fluency practise<div><ul style="list-style-type: none">Worded problems all four operations</div></div>		
<div>Summer</div>	Consolidation and SATs Preparation Gap analysis from previous mock SATs				Consolidation, Investigations and Preparation for KS3							

Any spare weeks in any term = gap analysis