

BJA Maths LTP – Year 5

	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 Mental Maths Objectives All times tables Number bonds to 1 million + revise previous unit objectives	Number: Place Value			Number: Addition and Subtraction		Statistics		Number: Multiplication and Division			Measurement: Perimeter and Area				
	<i>National Curriculum objectives</i> 1. Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit 2. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero 4. Round up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 5. Solve number problems and practical problems that involve all of the above 6. Read Roman numerals to 1000 and recognise years written in Roman numerals Small Steps - Week 1 1000s, 100s, 10s and 1s - Numbers to 10,000 - Numbers to 100,000 - Numbers to 1 million Week 2 - Counting in 10s, 100s, 1,000s, 10,000s and 100,000s - Compare and order numbers to 100,000 - Compare and order numbers to 1 million Week 3 - Round numbers to 100,000 - Round numbers to 1 million - Negative numbers - Roman numerals to 1,000			<i>National Curriculum objectives</i> 1. Add and subtract whole numbers with more than 4 digits, including using formal written methods 2. Add and subtract numbers mentally with increasingly large numbers 3. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 4. Solve multi-step problems in contexts, deciding which operations and methods to use and why Small Steps - Week 1 - Add whole numbers numbers with more than 4 digits (column method) – 1 exchange and then more than one Week 2 - Subtract whole numbers numbers with more than 4 digits (column method) – 1 exchange and then more than one Throughout unit - Round to estimate and approximate - Inverse operations (+ and -) - Multi-step addition and subtraction problems Link to money		<i>National Curriculum objectives</i> 1. Solve comparison, sum and difference problems using information presented in a line graph 2. Complete, read and interpret information in tables, including timetables. Small Steps - Week 1 - Read and interpret line graphs - Draw lone graphs - Use line graphs to solve problems - Read and interpret tables Week 2 - Two-way tables - Timetables		<i>National Curriculum objectives</i> 1. identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers 2. Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers 3. Establish whether a number up to 100 is prime and recall prime numbers up to 19 5. Multiply and divide numbers mentally drawing upon known facts 7. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 8. Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) 9. Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Small Steps - Week 1 - Multiples - Factors - Common factors - Prime numbers - Square numbers - Cube numbers Week 2 - Multiply by 10, 100, 1,000 - Divide by 10, 100, 1,000 - Multiples of 10, 100, 1,000 (last objective)			<i>National Curriculum objectives</i> 3. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres 4. Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes Small Steps - Week 1 - Measure perimeter (perimeter on a grid, of rectangles and of rectilinear shapes) - Calculate perimeter Week 2 - Counting squares - Area of rectangles - Area of compound shapes - Area of irregular shapes				
Cross curricular links															
Spring Mental Maths Objectives All times tables Money – finding change Time – nearest minute/ 24 hour clock + revise previous unit objectives	Number: Multiplication and Division			Number: Fractions									Number: Decimals and Percentages		
	<i>National Curriculum objectives</i> 4. Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers 6. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context 10. Solve problems involving addition, subtraction, multiplication and division and a combination of these, understanding the meaning of the equals sign 11. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates Small Steps - Week 1 - Multiply 2/3/4 digits by 1 digit - Multiply 2/3/4 digits by 2 digits Week 2 - Divide 2/3/4 digits by 1 digit - Dived with remainders Week 3 - Multiplication and division misconceptions - Problem solving (including scaling)			<i>National Curriculum objectives</i> 1. compare and order fractions whose denominators are all multiples of the same number 2. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths 3. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number 4. Add and subtract fractions with the same denominator and denominators that are multiples of the same number 5. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Small Steps - Week 1 - Equivalent fractions - Improper fractions to mixed numbers - Mixed numbers to improper fractions Week 2 - Number sequences - Compare and order fractions less than one - Compare and order fractions greater than one Week 3 - Add and subtract fractions - Add fractions within one - Add 3 or more fractions - Add fractions - Add mixed numbers Week 4 - Subtract fractions - Subtract – breaking the whole - Subtract 2 mixed numbers Week 5 - Multiply unit fractions by integer - Multiply non-unit fractions by an integer - Multiply mixed numbers by integer Week 6 - Calculate fractions of a quantity - Fraction of an amount - Using fractions as operators									<i>National Curriculum objectives</i> 6. Read and write decimal numbers as fractions [for example, 0.71 = 100 71] 7. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents 8. Round decimals with two d.p to the nearest whole number and to one d.p 9. Read, write, order and compare numbers with up to three decimal places 10. Solve problems involving number up to three decimal places 11. Recognise the % symbol and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal 12. Solve problems which require knowing percentage and decimal equivalents of and those fractions with a denominator of a multiple of 10 or 25 Small Steps - Weeks 1 & 2 - Decimals up to 2 d.p - Decimals as fractions - Thousands as decimals - Rounding decimals (2 d.p) - Order and compare decimals (3 d.p) Week 3 - Understand percentages - Percentages of fractions and decimals - Equivalent F.D.P		
Cross curricular links															
Summer Mental Maths Objectives All times tables Money – finding change Time – nearest minute/ 24 hour clock + revise previous unit objectives	Number: Decimals			Geometry: Properties of Shape			Geometry: Position and Direction		Measurement: Covering Units		Measurement: Volume	Measurement:			
	<i>National Curriculum objectives</i> 1. Adding decimals with the same number of decimal places 2. Adding decimals with different number of decimal places 3. Adding wholes and decimals 4. Complements to one Week 2 - Adding decimals with the same number of decimal places - Adding decimals with different number of decimal places - Adding wholes and decimals - Complements to one Week 3 - Decimal sequences - Multiplying decimals by 10, 100, 1,000 - Dividing decimals by 10, 100, 1,000 Link complements to one to money – making £1			<i>National Curriculum objectives</i> 1. Identify 3-D shapes from 2-D representations 2. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles 3. Draw given angles, and measure them in degrees (o) 4. Identify: angles at a point and one whole turn (total 360o) angles at a point on a straight line and 2 1 a turn (total 180o) other multiples of 90o 5. Use the properties of rectangles to deduce related facts and find missing lengths and angles 6. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Small Steps - Weeks 1 & 2 - Identify angles - Compare and order angles - Measuring with a protractor - Drawing lines and angles accurately - Calculating angles - straight line - Calculating angles around a point Week 3 - Triangles - Quadrilaterals - Calculating lengths and angles in shapes - Regular and irregular polygons - Reasoning about 3D shapes			<i>National Curriculum objectives</i> 1. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed Small Steps - Week 1 - Position in the first quadrant - Translation - Translation with coordinates Week 2 - Lines of symmetry - Complete a symmetric figure - Reflection - Reflection with coordinates Link to topic		<i>National Curriculum objectives</i> 1. Convert between different units of metric measure 2. Understand and use approximate equivalences between metric units and common imperial units 6. Solve problems involving converting between units of time Small Steps - Week 1 - Kilograms and kilometres - Millimetres and millilitres - Metric units - Imperial units Week 2 - Recap time to nearest minute and 24 hour clock - Converting units of time - Timetables Check money – £/ps		<i>National Curriculum objectives</i> 5. Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Small Steps - Week 1 - What is volume? - Compare volume - Estimate volume - Estimate capacity	Problem Solving Week Include money and scaling			

Cross curricular links						
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