Maths Long Term Plan – Class 4 / Milestone 3 Y56

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit 1 (2 wks)	**NUMBER & PLACE VALUE** 1. Read numbers up to 10 000 000. 2. Use negative numbers and calculate across zero. 3. Order/Compare numbers up to 10 000 000. 4. Round any whole number to a required degree of accuracy. 5. Determine the value of each digit in any number. 6. Solve practical problems.	**CALCULATIONS** (with decimals) 1. Use long division with remainders written as decimals. 2. Divide numbers up to 4 digits by a two-digit number using short division with decimals. 3. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. 4. Solve problems involving numbers up to 3 dp. 5. Multiply and divide numbers by 10, 100 and 100 to 3 dp. 6. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.	**NUMBER & PLACE VALUE** (with fdp) 1. Compare and order fractions whose denominators are all multiples of the same number. 2. Compare and order fractions >1. 3. Round decimals (2dp) to the nearest whole number. 4. Read, write, order and compare numbers up to 3 dp. 5. Identify the value of each digit in numbers given to 3 dp.	**CALCULATIONS** (with fractions) 1. Solve problems involving multiplication and division by scaling simple fractions. 2. Add and subtract fractions with the same denominator and denominators with the same multiples. 3. Add and subtract mixed numbers.] 4. Multiply proper fractions and mixed numbers by whole numbers. 5. Multiply simple pairs of proper fractions 6. Divide proper fractions by whole numbers. 7. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.	**MULTIPLICATION & DIVISION** (revision) 1. Multiply numbers up to 4 digits by a two-digit whole number using the formal method for multiplication. 2. Divide numbers up to 4 digits by a two-digit whole number using formal methods. 3. Estimate and use inverse operations to check answers. 4. Identify common factors, common multiples and prime numbers. 5. Recall prime numbers up to 19 (and 100). 6. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.	**ADDITION & SUBTRACTION** (revision) 1. Add and Subtract with more than 4 digits using formal methods. 2. Add and Subtract mentally with increasingly large numbers. 3. Solve multi-step problems choosing appropriate operation. 4. Use rounding as a method to check answers. 5. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.
Unit 2 (2 wks)	**ADDITION & SUBTRACTION** 1. Add and Subtract	**MEASUREMENT** 1. Convert between different units of	**FRACTIONS, DECIMALS & PERCENTAGES** 1. Recognise mixed	**ALGEBRA** 1. Read Roman Numerals to 1000	**MEASUREMENT** 1. Estimate volume and capacity.	**BIDMAS** 1. Use knowledge of the order of

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with more than 4 digits using formal methods. 2. Add and Subtract mentally with increasingly large numbers. 3. Solve multi-step problems choosing appropriate operation. 4. Use rounding as a method to check answers. 5. Add and Subtract negative integers. 6. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.	metric measure 2. Understand and use approximate equivalences between metric and imperial. 3. Measure and calculate the perimeter of composite rectilinear shapes. 4. Calculate and compare the area of rectangles using standard units. 5. Convert between miles and kilometres. 6. Solve problems involving the calculation and conversion up to 3 dp.	numbers and improper fractions and convert from one form to the other. 2. Identify, name and write equivalent fractions. 3. Recognise and use thousandths to relate to tenths and hundredths. 4. Use common factors to simplify fractions. 5. Use common multiples to express fractions in the same denominator	(M). 2. Recognise when it is possible to use formulae for calculating the area and volume of shapes. 3. Use simple formulae and express missing number problems algebraically 4. Generate and describe linear number sequences 5. Find pairs of numbers to satisfy an equation with two unknowns 6. Enumerate possibilities of combinations of two variables.	2. Solve problems involving converting between units of time. 3. Use all four operations to solve problems involving measure (length, mass, money) using decimal notation, including scaling. 4. Use, read, write and convert between standard units, converting measurements of length, mass and time from a small to larger, vice versa. 5. Calculate, estimate and compare the volume of cubs and cuboids using standard units.	operations to carry out calculations. 2. Perform mental calculations, including with mixed operations. 3. Recognise and use square numbers and cube numbers. 4. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning. **NB:** Alternative Unit of Work may be selected for Year 6, depending on progress and assessment.
Unit 3 (2 wks)	**MULTIPLICATION & DIVISION** 1. Multiply numbers up to 4 digits by a two-digit whole number using the formal method for multiplication. 2. Divide numbers up to 4 digits by a two-digit whole number using long division with remainders.	**MEASUREMENT CONT.** 1. Know that angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. 2. Draw given angles, and measure them in degrees. 3. Identify angles at a point and angles on a straight line and	**GEOMETRY** 1. Identify 3D shapes, from 2D representations. 2. Distinguish between regular and irregular polygons. 3. Draw 2D shapes using given dimensions and angles. 4. Recognise,	**POSITION, MOVEMENT & DIRECTION** 1. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language. 2. Develop knowledge that the shape has not changed.	**DATA HANDLING & STATISTICS** 1. Solve comparison, sum and difference problems using information presented in a line graph. 2. Complete, read and interpret information in tables, including timetables.	**ALGEBRA / RATIO** 1. Solve problems involving the calculation of percentages and the use of percentages for comparison. 2. Solve problems involving unequal sharing and grouping using knowledge

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	3. Estimate and use inverse operations to check answers. 4. Identify common factors, common multiples and prime numbers. 5. Recall prime numbers up to 19 (and 100).	find missing angles. 4. Identify angles on points that are multiples of 90. 5. Find unknown angles in any triangles, quadrilaterals and regular polygons. 6. Calculate the area of parallelograms and triangles.	describe and build simple 3D shapes, including making nets. 5. Compare and classify geometric shapes based on their properties and sizes 6. Illustrate and name parts of circles.	3. Describe positions on the full coordinate plane and reflect them in the axes.	3. Interpret and construct pie charts and line graphs and use these to solve problems. 4. Calculate and interpret the mean as an average.	of fractions and multiples. *Refer to other units for further ideas.* **NB:** Alternative Unit of Work may be selected for Year 6, depending on progress and assessment.
Unit 4 ***Year 6 Only*** ***Year 5*** **(Y6 recap / to be embedded within SATS Revision).** **(1 wk)**	**BIDMAS** 1. Use knowledge of the order of operations to carry out calculations. 2. Perform mental calculations, including with mixed operations. 3. Recognise and use square numbers and cube numbers. **WORD PROBLEMS** 1. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning.	**DATA HANDLING & STATISTICS** 1. Solve comparison, sum and difference problems using information presented in a line graph. 2. Complete, read and interpret information in tables, including timetables. 3. Interpret and construct pie charts and line graphs and use these to solve problems. 4. Calculate and interpret the mean as an average.	**CONVERTING FDP** 1. Recognise the per cent symbol and understand it relates to 'parts per 100'. 2. Write percentages as a fraction with denominator 100 and as a decimal. 3. Read and write decimal numbers as fractions. 4. Associate a fraction with division and calculate decimal fraction equivalents. 5. Recall use equivalences between simple FDP in context.	**RATIO & PROPORTION** 1. Solve problems involving the calculation of percentages and the use of percentages for comparison. 2. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. 3. Use all four operations to solve problems involving measure (length, mass, money) using decimal notation, including scaling.	**SATS REVISION**	**WORD PROBLEMS** 1. Solve problems which require knowing percentage and decimal equivalents. 2. Solve problems involving addition, subtraction, multiplication and a division and a combination of these, including understanding of the meaning. 3. Use all four operations to solve problems involving measure (length, mass, money) using decimal notation, including scaling.
ASSESSMENT	BASELINE ASSESSMENT NUMBER & PLACE VALUE CALCULATIONS	AUTUMN TERM MEASUREMENT DATA HANDLING/	FRACTIONS (FDP) GEOMETRY SATS PRACTISE	SPRING TERM RATIO & ALGEBRA SATS PRACTISE	**SATS** MEASUREMENT DATA HANDLING/	SUMMER TERM RATIO & ALGEBRA

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		STATISTICS			STATISTICS	

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