Preston Manor Lower School | Long Term Plan | Maths – Year 5

	Autumn Term	Spring Term	Summer Term
Week 1	**Place value** • To explore Roman Numerals up to 1000 • To read, write and know the value of each number up to 10000 • To read, write and know the value of each number up to 100,000 • To read, write and know the value of each number up to 1,000,000 • To consolidate my learning.	**Fractions - add and subtract** • Add and subtract fractions with the same denominator • Add fractions within 1 • Add fractions with a total greater than 1 • Add to a mixed number • Add 2 mixed numbers	**Decimals** • Adding /subtracting decimals with different number of decimal places • Adding and subtracting wholes and decimals. • Decimal sequences • Multiplying decimals by 10, 100 and 1,000 • Dividing decimals by 10, 100 and 1,000
Week 2	**Rounding** • LO: Round to the nearest 10. 100 or 1,000 • LO: Round within 100,000 • LO: Round within 1,000,000 • LO: Compare and order numbers to 100,000 • LO: Compare and order numbers to 1,000,000	**Fractions** • Subtract fractions • Subtract from a mixed number • Subtract 2 mixed numbers • Problem solving	**Position and direction** • Line of symmetry • Complete a symmetric figure • Reflection • Reflection with coordinates
Recapping/review/revisit			**Recapping/review/revisit** • Symmetry from Y4. • 2D and 3D shapes. • Calculating angles in shapes
Week 3	**Add and Subtract** • To add two 4-digit number with one exchange • To add two 4-digit numbers with more than one exchange • To add whole numbers with more than 4-digits • To subtract two 4-digit numbers using one exchange • To subtract two 4-digit numbers using one exchange	**Decimals** • Decimals up to 2 DP • PUMA/PIRA • Decimals and fractions 1 • Decimals and fractions2	**Properties of shape** • Triangles • Quadrilaterals • Calculating lengths and angles in shapes • Regular and irregular polygons • Reasoning about 3-D shapes
Week 4	**Perimeter and Fractions** • To measure perimeter • To measure perimeter on a grid	**Decimals and percentages** • Equivalent fractions and decimals • Thousandths as fractions • Thousandths as decimals	**Volume** • What is volume? • Compare volume • Estimate volume

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	• To find fractions equivalent to a unit fraction • To find fractions equivalent to a non- unit fraction • To recognise equivalent fractions	• Thousandths on a place value chart • Order and compare decimals (same number of decimal places)	• Estimate capacity
Recapping/review/revisit other topics	**Recapping/review/revisit** • Place value from Year 4 • Counting in multiples of… • Addition/subtraction • 2D/3D shape names and properties	**Recapping/review/revisit** • Telling time to 5 minutes • Days, months, years, seconds, minutes • Comparing and converting lengths • Multiplication and addition • Fractions • Decimals	**Recapping/review/revisit** • Measure – Km • Measure (metric/imperial) • Time
Week 5	**Fractions** • To convert improper fractions to mixed numbers • To convert mixed numbers to improper fractions • To tell the time to 5 minutes • To tell the time to the minute • To use a.m. and p.m. to describe the time of day	**Shapes and angles** • Shapes Identify angles • Compare and order angles - • Measure angles in degrees • Measuring with a protractor 1 • Measuring with a protractor 2	**Converting units** • Kilometres • Kilograms and kilometres • Millimetres and mililitres • Metric units • Imperial units • Converting units of time ***Due to swimming, Puma and Pira these lessons are going to be reinforced***
Week 6	**Time and factors** • To tell the time on a 24-hour clock • To recap our understanding of multiples • To recap our understanding of common multiples • To recap our understanding of factors To recap our understanding of common factors	**Statistics** • Interpret graphs • Compare , sum and difference • Introduce line graphs • Read and interpret line graphs • Line graphs	**Statistics and Converting units** • Converting units of time • Use line graphs to solve problems • Read and interpret tables • Two-way tables • Timetables
Recapping/review/revisit	**Recapping/review/revisit** • Place value from Year 4 • Counting in multiples of… • addition/subtraction		**Recapping/review/revisit** • Measure – Km • Measure (metric/imperial) • Time

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	• 2D/3D shape names and properties		
Week 7	**Prime and square numbers** • To understand what prime numbers are • To consolidate our understanding of square numbers • To consolidate our understanding of cube numbers • PIRA and PUMA	**Properties of shapes** • Drawing lines and angles accurately • Calculating angles on a straight line • Calculating angles around a point • Calculate angles • Vertically opposite angles	**Converting units** • Kilometres • Kilograms and kilometres • Millimetres and millilitres • Metric units • Imperial units • Converting units of time
Recapping/review/revisit	**Recapping/review/revisit** • Telling time to 5 minutes • Days, months, years, seconds, minutes • Comparing and converting lengths	**Recapping/review/revisit** • 1,10,100 more and less • Partitioning • Addition/subtraction	
Week 8	**Multiply and divide** • To multiply by 10, 100, 1000 • To divide by 10,100,1000 • Multiples of 10, 100, 1000 • To consolidate my learning on multiples of 10, 100, 1000 • To solve problems using dividing and multiplying by 10,100,1000	**Decimals** • Order and compare any decimals with up to 3 decimal places • Round to the nearest whole number • Round to 1 decimal place • Understand percentages • Percentages as fractions (lesson carried over to Monday next week)	**Statistics & Converting units** • Converting units of time • Use line graphs to solve problems • Read and interpret tables • Two-way tables • Timetables
Recapping/review/revisit			**Recapping/review/revisit** • Equivalent fractions • Unit & non unit fractions equivalents
Week 9	**Add and subtract/inverse** • To use inverse to add and subtract • To solve multistep addition and subtraction problems • To compare calculations • To find the missing number	**Percentages and Decimal** • Percentages as fractions and percentages as decimals (carried over) • Equivalent fractions, decimals and percentages • Adding decimals within 1 • Subtracting decimals within 1 • Complements to 1	**Multiply and Divide** • Multiply 2 digits by 2 digits • Multiply 3 digits by 2 digits • Multiply 4 digits by 2 digits • Divide with remainders • Divide using long division
Recapping/review/revisit	**Recapping/review/revisit** • Multiplication and addition • Fractions	**Recapping/review/revisit** • Times tables • Time	

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	• Decimals • 1,10,100 more and less • Partitioning	• Multiplication and addition • Fractions • Decimals -understand thousandths • Thousands and decimals	
Week 10	**Multiplication** • To multiply 2 digits by 1 digit number • To multiply 3 digits by 1 digit number • To multiply 4 digits by 1 digit number • To multiply 2 digits by 2 digits using area model • To multiply 2 digits by 2 digits number	**Decimals** • Adding decimals (crossing the whole) • Adding decimals - same number of decimal places • Subtracting decimals - same number of decimal places • (Adding and subtracting decimals with the same number of decimal places problem solving) • Adding decimals with a different number of decimal places • Subtracting decimals with a different number of decimal places	**Fractions equivalent and mixed numbers** • Find fractions equivalent to a unit fraction • Find fractions equivalent to a non-unit fraction • Recognise equivalent fractions • Convert improper fractions to mixed numbers
Recapping/review/revisit			**Recapping/review/revisit** • Perimeter • Area • Regular vs irregular shapes
Week 11	**Division** • To divide 2 digits by 1 digit (1) • To divide 2 digits by 1 digit (2) • To divide a 3 digit number by a 1 digit • To divide 4 digit by a 1 digit • To divide using remainders • To consolidate my learning in division and multiplication	**Translation** • Describe position • Draw on a grid • Position in the first quadrant • Translation • Translation with coordinates	**Area and Perimeter** • Recap Perimeter of rectilinear shapes • Calculate perimeter • Area of rectangles • Area of compound shapes • Area of irregular shapes
Recapping/review/Revisit	**Recapping/review/revisit** • Addition/subtraction • Times tables • Time • Multiplication & div • Fractions • 1,10,100 more and less	**Recapping/review/revisit** • Multiplication/division • Pre-teach shapes • Lines • Rounding	

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Week 12	**Fractions** • To add and subtract fractions with the same denominator • To subtract fractions • Subtract from a mixed number • Add to a mixed number • Subtract from a mixed number		**Adding and Subtracting** • Recap Subtract two 4-digit numbers - one exchange • Recap Subtract two 4-digit numbers - more than one exchange • Subtract whole numbers with more than 4 digits (column method) • Inverse operations (addition and subtraction) • Multi-step addition and subtraction problems
Recapping/review/Revisit			**Recapping/review/revisit** • A mix of all topics
Week 13	**Multiplication 2/2 digits** • To multiply 2 digits by 2 digit • To multiply 3 digits by 2 digit • To multiply a 4 digit number by a 2 digit • To multiply 4 digit by a 2 digit consolidation) • To solve division and multiplication problems		
Recapping/review/Revisit	**Recapping/review/revisit** • Multiplication/division • Pre-teach shapes • Lines		
Week 14	**Area and perimeter** • Area and perimeter - counting squares • Area of rectangles • Area of compound shapes • Area of irregular shapes		
Recapping/review/ revisit	**Recapping/review/revisit** • recap all knowledge from term		