MATHEMATICS Long Term Planning – Summary of YEAR 5 Units

AUTUMN 1	AUTUMN 2
- Read, write, compare, order and round numbers up to 1,000,000 understanding the value of each digit. - Recognise number sequences and patterns. - Add and subtract whole numbers with more than 4-digits using the formal column written methods and solve multi-step word problems involving both. - Using rounding to support estimation of answers for addition and subtraction. - Measure and calculate the perimeter of rectangular shapes in both cm and m. - Understand properties of different types of angles.	- Interpret negative numbers in context. - Multiply number up to 4 digit numbers using short multiplication written methods. - Divide numbers up to 4 digit by using both the long and short division written methods. - Identify multiples and factors, prime numbers and prime factors. - Multiply and divide numbers by 10, 100 and 1000. - Compare and order fractions and identify and name equivalent fractions. - Calculate and compare area of rectangular shapes and estimate area of irregular shapes. - Identify properties of 2dshapes and identify regular and irregular polygons. - Solve problems and questions based on data presented in a line graph.
SPRING 1	SPRING 2
- Read and write Roman numerals to 1000. - Add and subtract using formal column methods for numbers up to 4-digits and decimals up to 1 decimal place. - Identify squared and cubed numbers. - Understand how fractions link to decimals and measures for 100^{th} and 1000^{th}. - Add and subtract decimals using written methods and mental strategies (number bonds). - Use a protractor to measure and draw angles accurately. - Explain the position of a shape following reflection and translation.	- Multiply number up to 4 digit numbers using short and long multiplication written methods. - Divide numbers up to 4 digit by using both the long and short division written methods. - Solve problems for multiplication and division, apply knowledge of factors, multiples, square, and cube numbers. - Convert mixed number fractions to improper fractions. - Add and subtract fractions, which would exceed a whole. Apply knowledge of fractions to find fractions on quantities. - Convert between different units of measure and solve problems that include conversions on measure and time. - Identify 3d shapes in different 2d representations. - Complete, read and interpret information shared in a timetable.
SUMMER 1	SUMMER 2
- Add and subtract using formal column methods for numbers up to 4-digits and decimals up to 1 decimal place. - Solve multistep problems that include all four operations. - Understand the place value of decimal numbers to compare, order and solve problems including these. - Begin to understand what percentages are and how they relate to fractions and decimals. - Solve problems involving conversions of measure including time. - Identify and solve missing angles.	- Solve problems for multiplication and division, apply knowledge of factors, multiples, square, and cube numbers. - Solve multistep problems that include all four operations. - Multiply fractions by whole numbers. - Solve problems including fractions, decimals and percentages. - Compare and covert metric and imperial units of measure. - Use all four operations to solve problems involving all areas of measure.