Year Group	**YEAR 5 2022-2023** **Objectives highlighted in yellow are 'Ready to Progress criteria' – children need to be secure on these before moving on**
Autumn 1	**Number – Place Value** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Solve number problems and practical problems that involve the above. Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000. **Number – Addition and Subtraction** Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. **Number-Multiplication and Division** Secure fluency in multiplication and division facts **(5NF1)** Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. **(5MD-2)** Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.
Autumn 2	**Number-Multiplication and Division** Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes. Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size **(5MD-1)** Multiply and divide whole numbers by 1,000. Multiply and divide numbers mentally, drawing upon known facts, multiples of 10, 100, 1000 **Fractions** Find equivalent fractions and understand that they have the same value and the same position in the linear number system. **5F–2** including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator, and denominators that are multiples of the same number.