Year 5 Mathematics

Key Learning for Year 5	By the end of Year 5, a child should:
Number and place value Reads, writes, orders and compares numbers to at least 1,000,000 and determines the value of each digit Interprets negative numbers in context, counts forwards and backwards with positive and negative whole numbers including through zero **Addition and subtraction** Adds and subtracts whole numbers with more than four digits, including using formal written methods (column addition and subtraction) Calculates mentally with increasingly large numbers (eg 12,462 - 2,300 = 10,162) **Multiplication and division** Identifies multiples and factors including finding all factor pairs of a number and common factors of two numbers Solves problems involving multiplication and division including using a knowledge of factors and multiples, squares and cubes Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates **Fractions (including decimals)** Compares and orders fractions whose denominators are all multiples of the same number Reads and writes decimal numbers as fractions eg 0.71 = 71/100 Reads, writes, orders and compares numbers with up to three decimal places Solves problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 **Measurement** Converts between different units of metric measure (eg kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Measures and calculates the perimeter of composite rectilinear shapes in centimetres and metres Calculates and compares the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) **Geometry: Properties of shape** Draws given angles and measures them in degrees (0) Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles **Statistics** Completes, reads and interprets information in tables, including timetables	• be fluent in formal written methods for addition and subtraction. • Use a developing knowledge of formal methods of multiplication and division, • be able to solve problems including properties of numbers and arithmetic • make connections between fractions, decimals and percentages; • classify shapes with geometric properties and use the vocabulary needed to describe them; • read, spell and pronounce mathematical vocabulary correctly.