Mathematics

	Year 5 Fundamentals of Mathematics
Number **Place value** **+ - X ÷** **Fractions/ Decimals/ Percentages** **Algebra/Ratio/ Proportion**	**Place value** *Reads, writes, orders, compares up to 1,000,000 (knowing value of each digit). and reads Roman numerals to 1000 (M) (recognising years in Roman numerals.) **+ -** * + - whole & decimal numbers more than 4digits (including using column method). **X ÷** *Identifies factors & multiples finding all factor pairs & common factors. *Solves x÷ problems using factors, multiples, scaling, squares & cubes. *Knows and uses prime numbers, prime factors and composite numbers. (with rapid recall of primes to 19) **FDP** *Reads, writes & compares decimal numbers, fractions & %s. * Knows the % & decimal equivalent of: 1/2, 1/4, 1/5, 2/5, 4/5 & fractions with denominator of 10 or 25. * +, - proper fractions with denominators that are multiples and X mixed numbers by whole numbers. **Counting (forwards and backwards)** * Counts in powers of 10 up to 1,000,000. * Counts forwards & backwards with positive and negative whole numbers including through zero.
Shape/space/ measure Measure Time/Money Shape Position/Direction Statistics	**Measurement** * Measure and calculate the perimeter and area of composite rectilinear shapes understanding cm^2 and m^2 as cm/m squared. **Time** * Solves problems involving converting units of time, crossing from minutes to hours. Involving days, weeks, months, years. **Geometry– shape** * Draws given angles and measures them in degrees and distinguishes between regular and irregular polygons. **Position & Direction** * Identifies, describes and represents the position of a shape following a reflection or translation. **Statistics** * Completes, reads and interprets information in tables, including timetables.
Being a mathematician	**Reasoning** *Describes, convinces & justifies decisions following lines of enquiry & generalising. **Problem solving** *Works systematically & spot patterns by visualising & making conjectures. **Fluency** *Works efficiently and accurately. **Communication** *Makes their mathematical thinking clear to themselves and others. **Reflection** * Uses own and suggested strategies to make corrections and improvements.