Mathematics in Year 5

By the end of the year it is expected that children will be able to;

Place Value

- ✓ read, write and compare numbers to at last 1,000000
- ✓ use and understand negative numbers in contexts such as temperature
- ✓ round any number to the nearest 10, 100, 1000, 10000 and 100000
- ✓ read Roman numerals up to 100 and recognise dates

Calculations

- ✓ add and subtract numbers with more than 4 digits using formal written strategies
- ✓ use rounding to check answers are sensible
- ✓ identify multiples and factors, including finding common factors of 2 numbers
- ✓ know the prime numbers up to 19 by heart and be able to find prime numbers up to 100
- ✓ use standard written methods of long multiplication and short division
- ✓ multiply and divide whole numbers and decimals by 10, 100 and 1000
- ✓ recognise and use square numbers and cube numbers
- ✓ know times tables facts up to 12 x 12

Measurement

- ✓ convert between different units of metric measurements such as centimetres to metres and grams to kilograms
- ✓ use approximate equivalences for common imperial measures such as 2.cm = 1 inch
- ✓ calculate the area of rectangles and squares using square centimetres or square metres
- ✓ calculate the area of shapes made up of rectangles and squares
- ✓ estimate volume using cm3
- ✓ solve problems involving converting between different units of time

Fractions

- ✓ compare and order fractions that have denominators that are multiples of the same number e.g. understand that 1/5 is bigger than 2/20
- ✓ find equivalent fractions
- ✓ convert between mixed number and improper fractions e.g. understand that 8/3 is equivalent to 2 2/3
- ✓ add and subtract simple fractions with a related denominator e.g. 4/5 + 1/10 = 9/10
- ✓ convert decimals to fractions e.g. 0.71 to 71/100
- ✓ round decimals to the nearest tenth
- ✓ read, write and order decimals with up to 3 decimal places
- ✓ recognise % symbol and begin to write percentages as a fraction and a decimal

Geometry

- ✓ estimate and compare angles
- ✓ draw and measure angles in degrees
- ✓ know angles around a point add up to 360° and 180° on a straight line
- ✓ calculate missing angles
- ✓ use reflection and translation to describe the position of a shape following movement

Statistics

- ✓ solve problems which involve reading and interpreting line graphs
- ✓ read and interpret information in tables, including timetables