**Year 4 Objectives**

**Place Value**

* Count in multiples of 6,7,9,25 and 1000
* Find 1000 more or less than a given number
* Count backwards from zero to include negative numbers
* Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and units)
* Order and compare numbers beyond 1000
* Identify, represent and estimate numbers using different representations
* Round any number to the nearest 10, 100 and 1000
* Solve number and practical problems that involve the above with increasingly larger positive numbers
* Read roman numeral to 100 (I to C) and know that over time, the number system changed to include the concept of zero and place value

**Addition and subtraction**

* Add and subtract numbers up to 4 digits using the formal written methods of columnar addition and subtraction
* Estimate and use inverse operations to check answers to a calculation
* Solve addition and subtraction two-step problems in context, deciding which operations and methods to use and why

**Multiplication and division**

* Recall X and ÷ facts for multiplication tables up to 12x12
* Use place value and know derived facts to X and ÷ mentally, including: X by 0 and 1; ÷ by 0 and 1; X three numbers
* Recognise and use factor pairs and commutatively in mental calculations
* X two-digit and three-digit numbers by a one-digit using written methods
* Solve problems involving X and ÷, including using the distributive law to multiply two digit numbers by one digit and scaling problems

**Fractions, decimals and percentages**

* Recognise and show, using diagrams, families of common equivalent fractions
* Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
* Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
* Add and subtract fractions with the same denominator
* Recognise and write decimal equivalents of any number of tenths or hundredths
* Recognise and write decimal equivalence to ¼, ½ and ¾
* Find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
* Round decimal with one decimal place to the nearest whole number
* Compare numbers with the same number of decimal places up to two decimal places
* Solve simple measure and money problems involving fractions and decimal to two decimal places

**Geometry – Properties**

* Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
* Identify acute and obtuse angles and compare and order angles up to two right angles by size
* Identify lines of symmetry in 2-D shapes presented in different orientations
* Complete a simple symmetric figure with respect to a specific line of symmetry

**Geometry – Position and direction**

* Describe positions on a 2-D gird as coordinates in the first quadrant
* Describe movements between positions as translations of a given unit to the left/right and up/down
* Plot specified points and draw sides to complete a given polygon

**Measure**

* Convert between different units of measure (Km to m; hour to minute)
* Measure and calculate the perimeter of rectilinear figure (including squares) in cm and m
* Find the area of shapes by counting squares
* Estimate, compare and calculate different measures, including money in pounds and pence
* Read, write and convert time between analogue and digital 12 and 24-hour clocks
* Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

**Statistics**

* Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
* Solve comparison, sum and difference problems, using information presented in bar charts, pictograms, tables and other graphs