

## Mathematics

### End of Year Five Expectations



- Count forwards and backwards in steps of power 10 for any given number up to 1,000,000
- Recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents
- Recognise mixed numbers and improper fractions and convert from one to the other
- Read and write decimal numbers as fractions, for example,  $0.47 = 47/100$
- Recognise the per cent symbol (%) and understand per cent relates to number of parts per hundred
- Write percentages as a fraction with denominator hundred, and as a decimal fraction
- Compare and add fractions whose denominators are all multiples of the same number
- Multiply and divide numbers mentally drawing upon known facts up to  $12 \times 12$
- Round any number to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000
- Round decimals with 2dp to the nearest whole number and to 1 decimal place
- Recognise and use square numbers and cube numbers and the notation for squared ( $^2$ ) and cubed ( $^3$ )
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Multiply number up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for 2-digit numbers
- Divide numbers up to 4-digits by 1-digit numbers
- Solve problems involving multiplication and division where large numbers are used by decomposing them into factors
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why; solve problems involving 3 decimal places and problems which require knowledge of percentages and decimal equivalents
- Know angles are measured in degrees: estimate and compare acute; obtuse and reflex angles
- Draw given angles and measure them in degrees ( $^\circ$ )
- Convert between different units of metric measures and estimate volume and capacity
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of squares and rectangles including using standard units ( $\text{cm}^2$  and  $\text{m}^2$ )
- Solve comparison, sum and difference problems using information presented in a line graph

