

|  | Unit 1-Place value | Unit 2-Addition andsubtraction | Unit 3-Statistics | Unit 4-Multiplication and division | Unit 5-Measurement (Perimeter and area) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - read, write, order and compare numbers to at least 1000000 and determine the value of each digit <br> - count forwards orbackwards in steps of powers of 10 for any given number up to 1000000 <br> - interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero <br> - round any number up to 1000000 to the nearest $10,100,1000,10$ 000 and 100000 <br> - solve number problems and practical problems that involve all of the above <br> - read Roman numerals to 1000 (M) and recognise years written in Roman numerals. | - add and subtract whole numbers with more than 4 digits, including using formal written methods (columnaraddition and subtraction) <br> - add and subtract numbers mentally with increasingly large numbers <br> - use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy <br> - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. | - solve comparison, sum and difference problems using information presented in a line graph <br> - complete, read and interpret information in tables, including timetables | - identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers <br> - know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers <br> - establish whether a number up to 100 is prime and recall prime numbers upto 19 <br> - multiplyand divide whole numbers and those involving decimals by 10, 100 and 1000 | - measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres <br> - calculate and compare the area of rectangles (including squares), including using standard units, square centimetres ( $\mathrm{cm}^{2}$ ) and square metres $\left(\mathrm{m}^{2}\right)$, and estimate the area of irregular shapes |
|  | Unit 1-Multiplication and division | Unit 2-Fractions | Unit 3 - Decimals and percentages |  |  |
| $\begin{aligned} & \underline{E} \\ & \stackrel{y}{4} \\ & .0 \\ & . \frac{1}{0} \\ & \text { in } \end{aligned}$ | - multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers <br> - multiply and divide numbers mentally drawing upon known facts <br> - divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context | - compare and order fractions whose denominators are all multiples of the same number <br> - identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths <br> - recognise mixed numbers and improper fractions and convert from one form to the otherand write mathematical statements >1 as a mixed number [for example, 5 $2+54=56=151$ ] <br> - add and subtract fractions with the same denominatorand denominators that are multiples of the same number <br> - multiply properfractions and mixed numbers by whole numbers, supported by materials and diagrams | - read and write decimal numbers as fractions [for example, $0.71=$ 71/100] <br> - recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <br> - round decimals with 2 decimal places to the nearest whole number and to 1 decimal place <br> - read, write, order and compare numbers with up to 3 decimal places <br> - solve problems involving number up to 3 decimal places <br> - recognise the per cent symbol (\%) and understand that per cent relates to'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction <br> - solve 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 |  |  |


| щләł дәшuns | Unit 1 - Decimals | Unit 2 -Geometry (shapes) | Unit 3-Geometry (position and direction) | Unit 4-Measurement |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - solve problems involving number up to 3 decimal places <br> - multiplyand divide whole numbers and those involving decimals by 10 , 100 and 1,000 <br> - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | - identify 3-D shapes, including cubes and other cuboids, from 2-D representations <br> - know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles <br> - draw given angles, and measure them in degrees ( ${ }^{\circ}$ ) <br> - identify: <br> - angles at a point and 1 whole turn (total $360^{\circ}$ ) <br> - angles at a point on a straight line and half a turn (total $180^{\circ}$ ) <br> - other multiples of $90^{\circ}$ <br> - use the properties of rectangles to deduce related facts and find missing lengths and angles <br> - distinguish between regular and irregular polygons based on reasoning about equal sides and angles | - identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed | - convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] <br> - understand and use a pproximate equivalences between metric units and commonimperial units such as inches, pounds and pints <br> - estimate volume [for example, using $1 \mathrm{~cm}^{3}$ blocks to build cuboids (including cubes)] and capacity [for example, using water] <br> - solve problems involving converting between units of time <br> - use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling |  |

