| Number - Place Value | Number - Addition and Subtraction | Number - Multiplication and Division | Number - Fractions |
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| • read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit<br>• count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000<br>• interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0<br>• round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000<br>• solve number problems and practical problems that involve all of the above<br>• read Roman numerals to 1,000 (M) and recognise years written in Roman numerals | • add whole numbers with more than 4 digits, including using formal written methods (columnar addition)<br>• subtract whole numbers with more than 4 digits, including using formal written methods (columnar 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 | • identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers<br>• know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers<br>• establish whether a number up to 100 is prime and recall prime numbers up to 19<br>• 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<br>• multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 | • 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 other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]<br>• add and subtract fractions with the same denominator, and denominators that are multiples of the same number<br>• multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams<br>• read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]<br>• solve problems which require knowing those fractions with a denominator of a multiple of 10 or 25 |

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| | | • recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)<br>• solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes<br>• solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign<br>• solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates | |
| **Number – Decimals and Percentages** | **Measurement – Perimeter and Area** | **Measurement – Converting Units** | **Measurement – Volume** |
| • 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 | • 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 (cm²) and square metres (m²), and estimate the area of irregular shapes<br>• solve problems involving converting between units of time<br>• use all four operations to solve problems involving measure [for example, length, | • 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 approximate equivalences between metric units and common imperial units such as inches, pounds and pints | • estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] |

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| '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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ | mass, volume, money] using decimal notation, including scaling | | |

| Geometry: Properties of Shape | Geometry: Position and Direction | Statistics |
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| • 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 (°)<br>• identify angles at a point and 1 whole turn (total 360°)<br>• identify angles at a point on a straight line and half a turn (total 180°)<br>• identify other multiples of 90°<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 | • solve comparison, sum and difference problems using information presented in a line graph<br>• complete, read and interpret information in tables, including timetables |