|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strand | First Visit | | Second Visit | |
| Revise | Teach | Revise | Teach |
| Number and Place Value | * find 10 or 100 more or less than a given number * recognise the place value of each digit in a three-digit number (hundreds, tens, ones) * compare and order numbers up to 1000 * identify, represent and estimate numbers using different representations * count from 0 in multiples of 4, 8, 50 and 100 * read and write numbers up to 1000 in numerals and in words | * count in multiples of 6, 7 and 25 * find 1000 more or less than a given number * count backwards through zero to include negative numbers * recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) * order and compare numbers beyond 1000 * identify, represent and estimate numbers using different representations | * solve number problems and practical problems involving these ideas | * count in multiples of 9 and 1000 * read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value * round any number to the nearest 10, 100 or 1000 * solve number and practical problems with increasingly large, positive numbers |
| Vocabulary | thousand, hundred, value, digit, odd, even, tens, ones, partition, greater than, less than, equal to, compare, numeral, estimate, multiples, negative, round, nearest, backwards, estimate | | | |
| Addition and Subtraction | * add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds * Use a compact method to add and subtract * estimate the answer to a calculation and use inverse operations to check answers * solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | * add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate * estimate and use inverse operations to check answers to a calculation | * add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate * estimate and use inverse operations to check answers to a calculation | * add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate * estimate and use inverse operations to check answers to a calculation * solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. |
| Vocabulary | addition, subtraction, sum, total, inverse, difference, take away, less than, more than, column, carry, exchange, estimate, | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Multiplication and Division | * write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental methods | * See non-negotiables for timestables to teach each term * use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers * recognise and use factor pairs and commutativity in mental calculations * multiply two-digit and three-digit numbers by a one-digit number using grid method | * solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects * use knowledge of timestables, multiplication and division to reason and solve problems | * See non-negotiables for timestables to teach each term * solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects * multiply two-digit and three-digit numbers by a one-digit number using formal written layout |
| Vocabulary | double, multiply, divide, share equally, sharing, group, groups of, lots of, product, times, array, row, column, partition, halve, divided by, left over | | | |
| Fractions | * count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 * recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators * recognise and show, using diagrams, equivalent fractions with small denominators * compare and order unit fractions, and fractions with the same denominators * recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators * use knowledge of fractions to reason and solve problems | * 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. * 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 decimals 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 decimals to two decimal places. | * add and subtract fractions with the same denominator within one whole [for example, 7 5 + 7 1 = 7 6] * use knowledge of fractions to reason and solve problems | * 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 equivalents to 4 1 , 2 1 , 4 3 * use knowledge of fractions to reason and solve problems |
| Vocabulary | fraction, whole, equal, part, parts, half/halves, quarter(s), three-quarter, third(s), divide, tenth(s), hundredth(s), denominator, numerator, place value, decimal number, decimal place, decimal point, digits, equivalent, | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure | * measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) * measure the perimeter of simple 2-D shapes * add and subtract amounts of money to give change, using both £ and p in practical contexts | * Convert between different units of measure [for example, kilometre to metre; hour to minute] * measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres * find the area of rectilinear shapes by counting squares * estimate, compare and calculate different measures, including money in pounds and pence * solve problems and reason about measures including area and perimeter |  | |
| Vocabulary | container, weigh, weights, scale, minutes, hour, o’clock, half past, quarter past, past/to, mm, cm, m, g, kg, l, ml, degrees, ruler, mass, coins, notes, pounds, pence, change, price, costs, amount, length, height, mass, capacity, Roman numerals, digital. Analogue, | | | |
| Geometry: Properties of Shape | * identify the names and properties of an increasing range of 2D and 3D shapes (hexagon, octagon, parallelogram, and a range of prisms etc) * draw 2-D shapes and make 3-D shapes using modelling materials * recognise 3-D shapes in different orientations and describe them * identify horizontal and vertical lines and pairs of perpendicular and parallel lines | * compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes * 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. | * recognise angles as a property of shape or a description of a turn * identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | * identify acute and obtuse angles and compare and order angles up to two right angles by size |
| Vocabulary | Cube, cuboid, pyramid, sphere, cone, cylinder, prism, circle, triangle, square, hexagon, octagon, rectangle, parallelogram, rhombus, flat, curved, straight, round, vertices, face, side, edge, symmetry/symmetrical, line of symmetry, mirror line, reflection, perpendicular, parallel, angle, right angle, greater than, less than | | | |
| Geometry: Position and Direction | * angles as a turn | * describe positions on a 2-D grid as coordinates in the first quadrant | * describe positions on a 2-D grid 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. |
| Vocabulary | co-ordinate, axis, translation, plot, point, x axis, y axis, | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Statistics | * interpret and present data using bar charts, pictograms and tables * solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts, pictograms and tables. | * 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. |  |
| Vocabulary | count, tally, sort, vote, graph, block graph, pictogram, represent, group, set, list, table, label, title, most popular, most common, least popular, least common, category, compare, greater, fewer | | |