|  |  |  |
| --- | --- | --- |
| **Spring 1** | **Year 5** | **Year 6**  |
| **Length, perimeter, area and volume****(2.5 weeks)** | * measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
* 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
* estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]

use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling | * recognise that shapes with the same areas can have different perimeters and vice versa
* recognise when it is possible to use formulae for area and volume of shapes
* calculate the area of parallelograms and triangles
* calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³]
 |
| Small steps | Perimeter of rectangles Perimeter of rectilinear shapes Perimeter of polygonsArea of rectangles Area of compound shapes Estimate area | 1 Shapes – same area Area and perimeter Area of a triangle – counting squaresArea of a right-angled triangle Area of any triangle Area of a parallelogram Volume – counting cubes Volume of a cuboid |
| Vocabulary and resources | Perimeter, rectangle, length, 2d shape, width, rectilinear, straight asides, right angles, compound shape, polygon, regular, irregular, equal, area, cm, squared cm, estimate, approximate, Ruler,  | Perimeter, rectangle, length, 2d shape, width, rectilinear, straight asides, right angles, compound shape, polygon, regular, irregular, equal, area, cm, squared cm, estimate, approximate, cubed cm, formula, volume, triangle, perpendicular, parallelogram, cuboid, Ruler, |
| **Fractions****(3 weeks)** | * compare and order fractions whose denominators are all multiples of the same number
* identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
* 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, 2/5 + 4/5 = 6/5 = 1 1/5 ]
* add and subtract fractions with the same denominator, and denominators that are multiples of the same number
* multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
 | * use common factors to simplify fractions; use common multiples to express fractions in the same denomination
* compare and order fractions, including fractions >1
* add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
* multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8 ]
* divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6 ]
* solve problems which require answers to be rounded to specified degrees of accuracy
 |
| Small steps | Find fractions equivalent to a unit fraction Find fractions equivalent to a non-unit fraction Recognise equivalent fractions Convert improper fractions to mixed numbers Convert mixed numbers to improper fractions Compare fractions less than 1 Order fractions less than 1 Compare and order fractions greater than 1Add and subtract fractions with the same denominator Add fractions within 1 Add fractions with total greater than 1 Add to a mixed number Add two mixed numbers Subtract fractions Subtract from a mixed number Subtract from a mixed number – breaking the wholeSubtract two mixed numbers | Equivalent fractions and simplifying Equivalent fractions on a number line Compare and order (denominator) Compare and order (numerator) Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbersMulti-step problemsMultiply fractions by integers Multiply fractions by fractions Divide a fraction by an integer Divide any fraction by an integer Mixed questions with fractions Fraction of an amount Fraction of an amount – find the whole |
| Vocabulary and resources  | Equivalent, numerator, denominator, unit fraction, multiplied, divided, non-unit, whole, mixed number, improper fraction, compare, order, add, subtract, common denominator, partition, fractional part,Shapes, number lines, fraction walls, multilink,  | Equivalent, numerator, denominator, unit fraction, multiplied, divided, non-unit, whole, mixed number, improper fraction, compare, order, add, subtract, common denominator, partition, fractional part, integer, simplifyShapes, number lines, fraction walls, multilink, |