|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year 6  ES | End of year expectations for mental calculations | End of year expectations for written methods and problem solving | Written strategies/ recordings/methods/images | Vocabulary  &  Links |
| * Perform mental calculations, including with mixed operations and large numbers (more complex calculations) * Children use representation of choice * Consolidate partitioning and re‐partitioning * Use compensation for adding too much/little and adjusting * Refer back to pictorial and physical representations when needed.   **Common mental calculation strategies:**  Partitioning and recombining  Doubles and near doubles  Use number pairs to 10 and 100  Adding near multiples of ten and adjusting  Using patterns of similar calculations  Using known number facts  Bridging though ten, hundred, tenth  Complementary addition | * Add larger numbers using the formal written (column) method * Add three digit numbers using columnar method and then move onto 4 digits * Include decimal addition for money * Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions * Start with fractions where the denominator of one fraction is a multiple of the other (e.g. 1/2 + 1/8 = 5/8) * Progress to varied and increasingly complex problems * Practise calculations with simple fractions and decimal equivalents to aid fluency | Partition and recombine      1  £ 56.25  + £ 10.48  £ 66.73  1  5 625 m  + 1 048m  6 673m | * Use knowledge of the order of operations to carry out calculations involving the four operations (BIDMAS) * Solve problems involving all four operations * Algebra: use symbols and letters to represent variable and unknowns   (e.g. a + b = b + a)   * Solve problems involving the calculation and conversions of units of measure, using decimal   notation of up to three decimal places where appropriate   * Use the number line, pupils use, add and subtract positive and negative integers for measures such as temperature * Calculate and interpret the mean as an average * Interpret and construct pie charts and line graphs and use these to solve problems * Find missing angles, and express geometry relationships algebraically (e.g. d=2xr) |