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| Year 3  ES | End of year expectations for mental calculation | End of year expectations for written methods and problem solving | Written strategies/ recordings/methods/images | Vocabulary  &  Links |
| * Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (and 2, 5 and 10 multiplication tables from Y2) * Use doubling to connect 2, 4 and 8 multiplication tables   W   * Develop efficient mental methods using commutativity and associativity * Derive related multiplication and division facts * Calculate mathematical statements for multiplication using the multiplication tables that they know,   including for 2 - digit numbers times 1 - digit numbers, using mental methods   * Partitioning: multiply the tens first and then multiply the units,   e.g. 57 x 6 = (50 x 6) + (7 x 6) = 300 + 42 = 342   * Children can apply these skills to solve spoken word problems too, * Include missing number statements e.g | * Write and calculate mathematical statements for multiplication using the multiplication tables that they   know, including for 2 - digit numbers times 1 - digit numbers, progressing to formal written methods   * Estimate before calculating * Ensure written methods build on/relate to mental methods   FRACTIONS  recognise and show, using diagrams, equivalent fractions with small denominators |  | * Solve problems, including missing number problems, involving multiplication , including positive integer scaling   problems and  correspondence  problems in which  n objects are  connected to m  objects.   * *The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high)* * *Pupils now use multiples of 2, 3, 4, 5, 8, 10, 50 and 100.* * Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy |