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| Family Learning – Key Learning in Multiplication and Division | |
| All learning will be progressed through a variety of experiences e.g. repeated addition & subtraction, groupings, arrays and multiplication facts using concrete learning (actual objects), pictorial representations and building towards the use of abstract representations (numerals and signs). | |
| E  A  R  L  Y  L  E  V  E  L  F  I  R  S  T  L  E  V  E  L  S  E  C  O  N  D  L  E  V  E  L | * Early play based learning with a focus of developing children’s understanding of number and patterns. * Experience of sharing and grouping * Describe, organise and make equal groups * Understand that for shares to be equal, a quantity may remain   In at least 2, 10 and 5;   * Combine and count equal groups * Partition a collection into equal shares and establish the number of shares * Partition a collection into equal shares and establish the number in each share * Describe, build and count arrays * Understand that for shares to be equal, a quantity may remain   In at least 2s, 3s, 4s, 5s and 10s;   * Build describe and count arrays * Use multiplication strategies to calculate the total of equal groups * Use multiplication strategies to calculate the number in each share/number of groups in a collection. * Begin to multiply multiples of ten up to fifty by 2, 3,4,5, and 10 * Multiply a 2-digit number by a single digit (no bridging) * Calculate the number in each share/number of groups when a collection is shared equally   In the following number sequences 2s, 4s and 8s, 3s, 5s, 9s, 10s and 7s;   * Apply strategies to build, describe and count arrays, such as skip counting, doubling and repeated addition * Apply strategies to calculate the total of equal groups * Solve problems involving grouping and sharing by at least 10 and 100 (whole answers only) * Mentally multiply and divide whole numbers by at least 2, 3, 4, 5, 10 and 100 * Mentally multiply a 2-digit number by 2, 3, 4, 5, and 10 * Begin to understand the commutative law and use it to solve problems e.g. 2 x 4, 4 x 2 * Check answers using inverse operations in mental and written calculations * Use the correct mathematical vocabulary when discussing multiplication and division e.g. product * Interpret a range of word problems, including those with more than one step and complete using the correct operation * Recall x/÷ facts * Multiply and divide whole numbers by 10, 100, 1000 * Calculate multiplication of multiples by a single digit e.g. 6x60 * Calculate multiples of 10 by multiplies of 100 * Multiply/divide decimal fractions by 10 * Mentally multiply a two digit number by a single digit * Mentally multiply decimal fractions (tenths) by a single digit * Developing mental and semi-formal written strategies for x and ÷ * Choose and justify the most efficient method for the problem given * Use my knowledge of doubling and halving to mentally solve x and ÷ problems * Multiply and divide fractions by at least 10 and 100 * Mentally divide a 3-digit number by a single digit * Explore square numbers * Use mental strategies, written strategies and formal algorithms * Choose the most efficient method for the problem given * Apply the correct order of operations in calculations when solving multi-step tasks * Solve more complex problems, using mental, written strategies and share approach with others * Choose the most efficient method/s for the problem * Multiple and divide whole numbers and decimal fractions by 10, 100 and 1000 * Understand a remainder as part of a whole e.g. 43 ÷ 5 = 8.6 * Represent my solution to a division calculation appropriate to the context of the question (remainder expressed as a fraction or decimal fraction) with at least 3 decimal places |