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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).  |
| EARLYLEVELFIRSTLEVELSECONDLEVEL | * 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
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