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| **Learners are able to:** **Use number skills** **Calculate using mental and written methods**  | **Nursery*** Understand and use the concept of ‘one more’ in their play
* Understand and use the concept of ‘one less’ in their play
* **Use counting to solve simple mathematics problems in everyday and play situations**
 | **Reception** * **Mentally recall ‘one more’ of a number within 10**
* **Mentally recall ‘one less’ of a number within 10**
* Combine two groups of objects to find ‘how many altogether?’
* Take away object to find ‘how many are left?’
* **Solve simple problems in a practical situation that involve simple addition and subtraction up to 5**
* Talk about addition and subtraction instructions in play activities
 | **Year 1*** **Mentally recall ‘one more’ of a number within 20**
* **Mentally recall ‘one less’ of a number within 20**
* Use ‘counting on’ strategies to add two collections, starting with the larger number *e.g. 8 + 5*
* Add and subtract numbers involving up to 10 objects
* **Use a range of strategies to mentally solve problems within 10**
* **Solve one-step problems that involve addition and subtraction, including missing number problems, *e.g.7+ € = 9,* usingconcrete objects and pictorial representations**
* **Use known facts to solve simple problems within 10 e.g. *doubling and halving, number bonds***
* Use known number facts when adding three single digit numbers and realise addition can be done in any order
* Understand and use the mathematical symbols for addition, subtraction and equals
* Understand and use the different mathematical terms for addition and subtraction e.g. *add, combine, find the difference*
 | **Year 2** * **Mentally add 10 or 20 to a given number up to 100**
* **Mentally subtract 10 or 20 from a given number up to 100**
* Find small differences within 20 by using ‘counting on’ strategies
* Mental recall of number facts to 10 and place value to add or subtract larger numbers *e.g.*

 *24 + 4, 30 + 5, 34 +10* * **Find a small difference between two numbers by counting on, *e.g. 44 – 28 = €***
* **Solve one- and two-step problems that involve addition and subtraction, multiplication and simple division including missing number problems *e.g. 40 - € = 19***
* **Use partitioning strategies to double and halve 2-digit numbers**
* Understand that multiplication is repeated addition *e.g. 2 + 2 + 2 is the same as ‘three twos’*
* Add/subtract 9 or 11 from given number by adding/subtracting 10 and adjusting
* Understand and use mathematical symbols for addition, subtraction, multiplication, division and equals
* Understand and use the different mathematical terms for addition, subtraction, multiplication, division and equals *e.g. find the total, share, goes into*
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|  | Addition* Count in steps up to 10/20, identifying the next number
* Count one more by adding one
* Bring together a set of objects to add them. Combine two groups
* Introduce counters to represent objects
* Combine 2 groups
* Find the total of 2 groups (how many altogether)
* Add by adding to a number of objects
* Bring 3+ groups together
* Introduce the symbols add (+) and equals (=)
* Generate situations to show 3 + 2 =
* Add numbers up to 10 by moving forwards on a number line / counting forwards
* Number bonds to 5
* Three jumps to 5
* Which two numbers add to make 5 - € + € = 5, 3 +€ = 5
* Split a specific number of objects between two groups in different ways
* Select two sets to make a specific number
* Split five in different ways 2,1 2, or 4,1,0,
* Find totals of spots on dominoes
* Target game scores
* Begin to add numbers to 10 by combining sets/adding to them
* Vocabulary of addition – create a number sentence to illustrate a story
* Show awareness that addition can be done in any order – put the largest number first and count on as a strategy
* Missing numbers 3 +€ = 9
 | * Recall of number facts up to 10 (4+4)
* Bonds of 10 - add numbers up to 10
* Balance calculations e.g. 4 + 5 =€ + 3
* Look for ten when adding 3+ numbers
* How to move from one number to another e.g. from 4 to 9
* Add numbers up to 20
* Use of place value to add teen numbers e.g. 10 + 2 = 12.
* Missing numbers - 3 +€ = 17
* Adding zero - the number doesn’t change
* Use addition grids
* Rapid recall – number facts up to 10/20
* Write a number as the sum of 2/ 3 / 4 numbers
* Which two numbers add to make 35?
* Select 3 numbers from a set (e.g. 3, 6, 2, 5). What are the possible totals?
* Two odd numbers with a total of \_\_\_
* Two numbers with a total of \_\_\_\_ and a difference of \_\_\_\_
* Bonds of 10 - add numbers up to 10
* Balance calculations e.g. 11 + 3 balances 20 - 6.
* Starting number / event/ finishing number
* I’m thinking of a number. When I add 4, the answer is 16\_\_\_
* Use number bonds to 10 to answer other calculations (e.g. multiples of 10 e.g. 4 + 4 , on to 40 + 40)
* Calculate TU + U
* TU + a multiple of 10 using a 100 square or number line e.g. 27+ 10 =
* Bonds of 100 - multiples of 10
* Add a one/two digit number to two-digit numbers up to 50
* Balance calculations up to 50
* Estimate answers
* More complex puzzles
* Solve problems – choose an operation, + or -
* Add a row of numbers
* Recognise, extend and use patterns

 3 +4 30+40 300+400* Patterns 3 + 4 =

 13 + 4= 23 + 4 =* If 20 + 50 = 70, what is 22 + 50?
* Bonds of 100 - multiples of 5 e.g. 35 +€ = 100
* Add 2-digit numbers – on a number line, using a non-standard method by jumping tens then units, or units then tens
* Show awareness of mental addition strategies and know when it is appropriate to use them

+9 —adjust largest number first near doubles partition and combinelook for tens count forwards bridge * Partition tens and units to do mental calculations

TU TU + columns with no carrying * Estimate by rounding off
* Number investigations on a 100 square
* Exchange units for tens
* Practical work – bridge through the tens, exchange units for tens

TU TU + column method and carrying + Tens + Units = total * Standard column method
* Add TU numbers with the answer beyond 100 e.g. 69 + 73=
* 47 +€ + 16 = 100
* Extend to HTU – record standard and non-standard methods
* Extend to mental strategies and larger numbers
* Solve multi-step problems – number and measures
* HTU + TU
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