|  | Progression in Mathematics: Addition and Subtraction |  |  |  |
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| Concept | Nursery and EYFS $\square$ | Year 1 and Year $2 \longrightarrow$ | Year 3 and Year $4 \square$ | Year 5 and Year $6 \longrightarrow$ |
| Recall Represent Use | recognise some numbers of personal significance <br> selects the correct numeral to represent 1-5 then 1-10 objects <br> records using marks that they can interpret and explain recognise some numbers of personal significance <br> selects the correct numeral to represent 1-5 then 1-10 objects <br> records using marks that they can interpret and explain | read, write and interpret mathematical statements involving addition, subtraction and equals signs <br> represent and use number bonds and related subtraction facts within 20 recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 <br> show that addition of that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot <br> recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems | estimate the answer to a calculation and use inverse operations to check answers estimate and use inverse operations to check answers to a calculation | use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy |
| Calculations | in practical activities and discussion, begins to use the vocabulary involved in adding and subtracting using quantities and objects add and subtract two single digit numbers <br> count on or back to find the answer <br> solve problems including doubling, halving and sharing <br> solve real world mathematical problems with numbers up to 5 | add and subtract one- digit and two digit numbers to 20 , including zero <br> add and subtract numbers using concrete objects, pictorial representations, and mentally, including -a two digit number and ones <br> -a two digit number and tens -adding 3 one digit numbers | add and subtract mentally <br> -a three digit number and ones <br> -a three digit number and tens -a three digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction <br> add and subtract numbers with up to four digits, using formal written methods of columnar addition and subtraction | add and subtract numbers with up to four digits, using formal written methods of columnar addition and subtraction perform mental calculations, including mixed operations and large numbers <br> use their knowledge of the order to carry out calculations involving the four operations |


| Solve Problems | begins to identify their own mathematical problems based on their interests <br> solve problems including doubling halving and sharing <br> solve real world mathematical problems with numbers up to 5 | solve one step problems involving addition and subtraction <br> (Using pictorial and concrete representations) <br> solve missing number problems such as $9=\ldots+7$ <br> solve problems involving addition and subtraction <br> (using concrete objects and pictorial representations, including those involving numbers quantities and measures <br> applying their increasing knowledge of mental and written methods | solve problems including missing number problems, using number facts, place value and more complex addition and subtraction <br> solve addition and subtraction twostep problems in contexts, deciding which operations and methods to use and why | solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why <br> solve problems involving addition, subtraction, multiplication and division <br> solve problems using a combination of all 4 functions <br> solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why |
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