Misterton Primary and Nursery School –Progression in Maths Addition and Subtraction

Key Areas	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number Bonds	Know how to recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	Know how to represent and use number bonds and related subtraction facts within 20	Know how to recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				
Mental Calculation	Know how to add and subtract one-digit and one-digit numbers to 5. Know how to add and subtract some one-digit to one-digit numbers to 10.	Know how to add and subtract one-digit and two-digit numbers to 20, including zero Know how to read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)	Know how to add and subtract numbers using concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers adding three one-digit numbers Know how to show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	Know how to add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds		Know how to add and subtract numbers mentally with increasingly large numbers	Know how to perform mental calculations, including with mixed operations and large numbers Know how to use their knowledge of the order of operations to carry out calculations involving the four operations

Written Methods	Begin to recognise the symbols for addition and subtraction	Know how to read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)	Know how to add and subtract numbers with one and one, one and two digits, two and two digits	Know how to add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Know how to add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Know how to add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	

Inverse Operations, Estimating and Checking Answers		Know how to recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Know how to estimate the answer to a calculation and use inverse operations to check answers	Know how to estimate and use inverse operations to check answers to a calculation	Know how to use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	Know how to use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
Problem Solving	Know how to solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9	Know how to solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement)	Know how to solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Know how to solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Know how to solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Know how to solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division