



FOUR OPERATIONS YEAR 6

Strand	What do I already know?	What am I going to be learning?	What next?
Mental Calculation + and -	Number bonds to 100 - Y1/2 + and - numbers to 20 - Y1 + and - two 2-digit numbers - Y2 Order doesn't matter (commutative) in addition, but it does in subtraction - Y2 Y3 - add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds Add and subtract numbers mentally with increasingly large numbers - Y5	perform mental calculations, including with mixed operations and large numbers use my knowledge of the order of operations to carry out calculations involving the four operations	KS3 Maths
Mental Calculation X and ÷	All times tables to 12x by end of Y4 Multiply 1-digit numbers by 2-digit numbers - Y3 Apply place value to x and ÷ - Y4 x 0 and 1; ÷ 1, x three numbers together - Y4	perform mental calculations, including with mixed operations and large numbers	
Written calculation x and ÷	Use x ÷ and = in Y2 Use times tables to write mathematical statements - Y3 Multiply 2- and 3-digit numbers by 1-digit numbers using formal method - Y4 Multiply numbers up to 4 digits by 2-digit numbers using formal method - Y5 Divide up to 4-digit numbers by 1-digit numbers using short division (with remainders) - Y5	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding.	
Properties of numbers x and ÷	Recognise and use factor pairs - Y4 Multiples and factors - Y5 Primes and composites - Y5 Squares and cubes - Y5	Identify common factors, common multiples and prime numbers	
Order of operations		BIDMAS - apply to calculations using four operations	
Inverse operations, estimating and checking - all four operations	Use inverse of + or - to check missing number calculations - Y2 estimate the answer to a calculation and use inverse operations to check answers - Y3 estimate and use inverse operations to check answers to a calculation - Y4 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy - Y5	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.	
Problem solving	Solve 1-step problems, using pictures or objects to help - Y1 Solve problems using objects or pictures, including quantities and measures - Y2 solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction - Y3 solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why - Y4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why - Y5	Solve problems involving addition, subtraction, multiplication and division	
Vocabulary	Ones, tens, hundreds, thousands, add, sum, total, subtract, difference, inverse, operation, estimate, commutative, round, estimate, level of accuracy, BIDMAS, long / short division, long multiplication, remainder, factors, multiples, prime, composite, common, square, cube, integer, product, quotient, divisor, dividend.		