The Welland Primary Schools Federation

Mental Maths Calculation Policy

Year Group	Mental Maths Objective	Maths Language
EYFS	- Say and use number names. - Count reliably everyday objects. - Recognise numerals 1-9. - Find 1 more or 1 less than a number from 1-20. - Use concrete objects to understand addition as combining and subtraction as taking away.	Numbers 1-20 More, less, add, take away
Year 1	- Say 1 more or less than any given number up to 100. - Know by heart all pairs of numbers with a total of 20. - Recognise + and – within number sentences. - Partition a digit number. - Understand addition can be done in any order. Count on and back in 2s, 5s and 10s from 0.	More, add, sum, total, altogether, equals, take away, subtract, how many are left, how much less is... than..., difference between, how much more is...than...., how many more to make.
Year 2	- Know by heart the multiplication and division facts for 2x, 5x and 10x tables. - Know what a 2 digit number represents, including 0 as a place holder. - Partition a 2 digit number into a multiple of 10 and 1s. - Say a number 1 or 10 more or less than any given number e.g. 47. - Know all addition and subtraction facts for each number up to 20. - Use counting on and back to find the difference-bridging through 10 and 100. - Count forwards and backwards in 2s, 3s, 5s and 10s. - Know doubles of numbers to at least 20. - Know doubles of multiples of 5 (up to 50). - Recognise and use X , ÷and = signs. - Use number facts and place value to subtract mentally. - Halve any multiple of 10 up to 100. - Divide any 2 digit multiple of 10 by 10 or 1 e.g. 60 ÷10=6.	More, add, sum, total, altogether, equals, take away, subtract, how many are left, how much less is... than..., difference between, how much more is...than...., how many more to make. Double, times, multiply, multiplied by, multiple of, lots of, groups of, times as. Each, share, halve, divide, left over, divided by, equal groups of. Year 3 Know by heart the multiplication and division facts for 2x, 3
Year 3	Know by heart the multiplication and division facts for 2x, 3x, 4x, 5x, 8x and 10x. Read and write numbers to 1000. Partition 3 digit numbers into multiples of 100, 10 and 1.	More, add, sum, total, altogether, equals, take away, subtract, how many are left, how much

		▪ Say a number that is 1, 10 or 100 more or less than any given 2 or 3-digit number. ▪ Know all addition and subtraction facts for each number to 20. Count forwards and backwards in steps of 4, 8, 50 and 100. Know doubles of whole numbers to at least 50. ▪ Know doubles of multiples of 5 up to 100. ▪ Know doubles of multiples of 50. ▪ Observe and describe the effect of multiplying and dividing by 1, 10 and 100. Know halves of even numbers to 50. ▪ Know halves of multiples of 10 up to 100. ▪ Know halves of multiples of 100 up to 1000	less is… than…, difference between, how much more is…than…., how many more to make. Double, times, multiply, multiplied by, multiple of, lots of, groups of, times as. Each, share, halve, divide, left over, divided by, equal groups of, remainder.
Year 4		▪ Know by heart the multiplication and division facts for all times tables up to 12 x 12. ▪ Partition 4 digit numbers to 1000, 100, 10 and 1. ▪ Say the number that is 1, 10, 100 or 1000 more or less than any given 2, 3 or 4-digit number. ▪ Derive all pairs of numbers that total 100 e.g. 60+40, 75+25, 38+62. ▪ Use known number facts to add and subtract numbers mentally. ▪ Count forward and backwards in steps of 6, 7, 9, 25 and 1000. Count backwards including negative numbers. Read Roman numerals up to 100. ▪ Know halves of even numbers up to at least 100. ▪ Know doubles and halves of multiples of 10 (up to 500). ▪ Know doubles and halves of multiples of 100 (up to 5000). Round any decimal numbers to the nearest whole number. Divide numbers by 10 and 100 giving decimal answers.	More, add, sum, total, altogether, equals, Increase, inverse, take away, subtract, how many are left, how much less is… than…, difference between, how much more is…than…., how many more to make, decrease. Double, times, multiply, multiplied by, multiple of, product Each, share, halve, divide, left over, divided by, equal groups of, remainder.
Year 5		▪ Use multiplication facts to 12 x 12. ▪ Read numbers up to 1,000,000 (million). ▪ Partition 4 digit numbers into multiples of 1000, 100, 10 and 1. Say the number that is 1, 10, 100 or 1000 more or less than any given 2, 3 or 4-digit number. ▪ Count forwards and backwards in steps of 0.1, 0.2, 0.3… ▪ Derive quickly decimals that total 1 e.g. 0.2+0.8, 0.75+0.25, 0.32+0.68 ▪ Derive quickly all pairs of numbers that total 100. ▪ Add several numbers- singles digits or multiples of 10 e.g. 5+ 9+ 7, 40+50+90. ▪ Derive quickly decimal subtraction facts to 1 e.g. 1-0.6 ▪ Calculate differences such as 8006-2993 mentally. ▪ Count forward and backward in steps of 7 and 9. ▪ Multiply and divide any positive integer up to 10000 by 10 and 100.	More, add, sum, total, altogether, equals, Increase, inverse, take away, subtract, how many are left, how much less is… than…, difference between, how much more is…than…., how many more to make, decrease. Double, times, multiply, multiplied by, multiple of, product Each, share, halve,

	•	Know doubles and halves of multiples of whole numbers to 100. Doubles and halves of multiples of 10 to 1000.	divide, left over, divided by, divisible by, divided into, factor, quotient, remainder.
	•	Doubles and halves of multiples of 100 up to 10000.	
	•	Round decimals to the nearest tenth.	
	•	Know all the prime numbers to 19 by heart and be able to work out all prime numbers to 100.	
Year 6	•	Use multiplication facts to 12 x 12 fluently.	More, add, sum, total, altogether, equals, Increase, inverse, take away, subtract, how many are left, how much less is… than…, difference between, how much more is…than…., how many more to make, decrease. Double, times, multiply, multiplied by, multiple of, product Each, share, halve, divide, left over, divided by, divisible by, divided into, factor, quotient, remainder.
	•	Read numbers up to 10,000,000 (10 milllion) including negative numbers.	
	•	Identify common factors, common multiples and prime numbers.	
	•	Say the number that is 1, 10, 100 or 1000 more or less than any given 2, 3 or 4-digit number.	
	•	Count forwards and backwards in steps of 0.1, 0.2, 0.3…and 0.25.	
	•	Derive quickly decimals that total 1 e.g. 0.2+0.8, 0.75+0.25, 0.32+0.68 Derive quickly all pairs of numbers that total 100. Add nearest multiple of 10 or 100 and adjust.	
	•	Subtracting decimals.	
	•	Divide fractions by whole numbers, for example 1/3 ÷ 2 = 1/6 Use division to calculate the decimal equivalent of a fraction Know and use common equivalences between fractions, decimals and percentages, such as 1/2 = 0.5 = 50%	
	•	Derive quickly decimal subtraction facts to 1 e.g. 1-0.6 and 1- 0.75.	
	•	Multiply and divide decimals by 10, 100 and 1000.	
	•	Reduce a fraction to its simplest form.	
	•	Find fractions of amounts e.g. 5/8 of 32, 9/100 of 400cm Doubles and halves of digit numbers.	
	•	Doubles of decimal numbers e.g. 3.8x2.	
	•	Doubles and halves of multiples of 10 to 1000.	
	•	Doubles and halves of multiples of 100 up to 10000.	
	•	Square root of numbers up to 100.	