Revised Syllabus		LOF	
B/C/D/I: Addition and Subtraction/Multiplication and Division/Fractions, Decimals, Percentages and Proportions/Money		**Strand 2: Numerical Calculations-Number**	
LEARNING OUTCOMES			
B.4.3	Add 1, 10, 100 or 1000 to/from any integer (whole number), and count on in tens, hundreds or thousands from any whole number up to 10 000.[4]	**5.2.1**	I can add hundred (100) or one thousand (1,000) to any whole number.[4]
B.4.2	Understand the principles (not the names) of the commutative and **associative laws** as they apply to addition and subtraction. e.g. 9 + 8 = 8 + 9 (commutative law) **(3 + 6) + 8 = 3 + (6 + 8) (associative law)**	**5.2.2**	I recognise that I can add numbers in any order and get the same result up to ten thousand (10,000).
B.4.4	**Extend understanding that more than two numbers can be added: three or four two-digit numbers with the help of apparatus or pencil and paper.**		

B.4.5	Extend understanding that subtraction is the inverse of addition.	5.2.4	I recognise that subtraction is the inverse of addition and vice versa. **I can also state and write a subtraction statement corresponding to a given addition statement and vice versa.** *e.g. if 4 + 3 = 7 then 7 – 3 = 4 and vice versa.*
B.4.8 **i.** **ii.** **iii.** **iv.**	**Use the following Mental Strategies:** • Using knowledge that addition can be done in any order. • **Adding 3 or 4 small numbers by putting the larger number first and /or by finding pairs totaling 9, 10 or 11.** • Partitioning into tens and units then recombine. • **Counting on or back in repeated steps of 1, 10 or 100.**		**See Strand 1.**

v.	• Finding a small difference by counting up. e.g. 102 – 97, 5003 – 4996.	**5.2.3**	I can work out a small difference by counting up from the smaller to the larger number up to ten thousand (10,000).
vi.	• **Adding three two-digit multiples of 10. e.g. 10 + 70 +50.**		
vii.	• Adding and subtracting a 'near multiple of 10' to or from a two-digit number by adding/ subtracting 10, 20, 30... and adjusting	**5.2.5**	I can add/subtract any number by adding or subtracting a multiple of 10 and then adjusting accordingly.
viii.	• **Identifying near doubles using doubles already known.**		
ix.	• Using patterns of similar calculations.		
B.4.6	Use informal pencil and paper methods to support, record or explain HTU ± TU, HTU ± HTU.[5]	**5.2.6**	I can use column addition and subtraction with up to three-digit numbers.[5]
B.4.7	Use column addition and subtraction for HTU ± TU, HTU ± HTU where the calculation cannot easily be done mentally.[5]		

		5.2.7	**I can work through situations involving addition and subtraction with two digit numbers (total up to 100).**
B.4.1	Know by heart/derive quickly: • All pairs of 100 in multiples of 10 and 5. • All number pairs that total 100. • All pairs of multiples of 100 with a total of 1000. • All pairs of multiples of 50 with a total of 1000.	5.2.8	I can derive all pairs of 100 in multiples of 5 and 10.
		5.2.9	I can derive all number pairs that total one hundred (100).
		5.2.10	I can derive all pairs of multiples of 50 with a total of one thousand (1000).
		5.2.11	I can derive all pairs of multiples of one hundred (100) with a total of one thousand (1,000).

C.4.1	Extend understanding of the operations of multiplication (×) and division (÷) and further understand that: • Multiplication is repeated addition. • Multiplication can be done in any order. (commutative) • Division is repeated subtraction. • Division is grouping and/or sharing.	**5.2.12** **5.2.14** **5.2.15** **5.2.13**	I recognise that multiplication of 2, 3, 4, 5, 6, 8 & 10 is multiple groups (repeated addition). I associate division as equal sharing [×2, ×3, ×4, ×5, ×6, ×8 & ×10]. I associate division as equal grouping using 2, 3, 4, 5, 6, 8 & 10. I recognise that I can multiply numbers in any order and get the same result.
C.4.5	Multiply by 10/100 (shift the digits one/two places to the left) and **to divide multiples of 10/100 by 10/100 (shift the digits one/two places to the right. [integer answers only]).**	**5.2.17**	I can mentally multiply an integer by multiples of 10 and hundred (100).
		5.2.23	**I can work through simple one-step situations using addition, subtraction, multiplication and/or division [×2, ×3, ×4, ×5, ×6, ×8 & ×10].**

			I can also give a rough estimate of the answer of such situations and I can check the reasonableness of the answer.
C.4.2	Recognise that division is the inverse of multiplication, and that halving is the inverse of doubling.	**5.2.16**	I recognise that division is the inverse of multiplication. **I can also state and write a division statement corresponding to a given multiplication statement** (2, 3, 4, 5, 6, 8 and 10 multiplication facts) and vice versa.
		5.2.21	I can recognise that halving is the inverse of doubling.
C.4.6 **i.**	**Derive quickly:** • Division facts corresponding to the 2, 3, 4, 5, 8 and 10 times-tables.	**5.2.19**	I can double whole numbers up to thousand (1,000).
ii.	• Doubles of all whole numbers to at least 50 and all the corresponding halves.	**5.2.20**	I can halve even numbers up to one thousand (1,000).
iii.	• Doubles of multiples of 5 to 100 and all the corresponding halves.		
	• Doubles of		

iv.	multiples of 50 to 500 and all the corresponding halves.		
C.4.7 **i.** **ii.** **iii.**	**Use the following Mental Strategies:** • Using doubling or halving, starting from known facts. • Knowing how to use the relationship between multiplication and division. • **Using known number facts and place value to carry out simple multiplications and divisions mentally.**		
C.4.3	Identify remainders after simple division **and round up or down after division, depending on the context.**	**5.2.22**	I can find remainders after division (restricted to dividends of 2, 3, 4, 5, 6, 8, 10 & 100).
D.4.1	Recognise unit fractions and use them to find fractions of shapes and numbers such as: $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{10}$	**5.2.18**	I recognise unit fractions (one half $\frac{1}{2}$, one quarter $\frac{1}{4}$) in numbers.

		5.2.25	I can find fractions of a number through concrete and prictorial representations.
A.4.6	Round any two-digit number to the nearest 10.	5.2.24	I can round any whole two-digit number to the nearest ten and any three-digit number to the nearest one hundred (100).
A.4.7	Round any three-digit number to the nearest 100.		
		5.2.26	**I can read and interpret scales involving whole numbers (up to 10,000). E.g. number line and ruler.**
I: Money		**Strand 2: Numerical Calculations (Money and Consumer Mathematics)**	
		5.2.27	**I recognise that 1 euro is equal to one hundred (100) cent.**
I.4.2	Work out totals up to €100 (hundred euro) and give change.	5.2.28	I can work out totals up to one hundred (100) euro and give the correct change.
I.4.1	Recognise all euro coins and notes.	5.2.29	**I can handle small amounts of money in classroom situations (e.g. keeping track of money collected from small change for charity money collections).**

I.4.3	Understand and practice that amounts such as €3.06 (three euro six cent) is €3 (three euro) and 6c (six cent).		**I can plan an activity within a given budget (e.g. using tickets, travel brochures, price lists, menus…).** **I can use receipts, simple menus, entrance tickets to work out totals and change.**
I.4.4	Work out which coins are needed to pay.		**I recognise that prices marked as €0 .99 are a marketing strategy to make prices more attractive.**
		5.2.30	**I can use assistive technology (e.g. tablets & computers) and other resources (e.g. array cards, base 10 blocks, Cuisenaire rods, fraction wall, euro coins, ten frames, Unifix cubes) appropriate to this level to calculate and to learn about numerical calculations.**

Moved to a different strand

Not in syllabus anymore

New learning outcomes