Maths language for adding, subtracting, multiplying and dividing

The words used for each class level are laid out in this table. They give parents a **general** idea of how teachers will refer to addition, subtraction, multiplication and division at each class level. Parents should try to use similar words when talking about maths at home, to reinforce what is learned in school. This table gives a **base** guideline for the language of mathematics that children will learn.

	Junior Infants	Senior Infants	First Class	Second Class	Third Class	Fourth Class	Fifth and Sixth Class
Equals sign =	altogether makes makes *(the formal equals sign is not introduced in JI)*	is the same as equals =			equivalent		
Addition +	____ and ____ altogether makes more (than) combine partition add *(for teacher use)*	___ and/ add/ plus ___ is the same as ___ and/ add/ plus ____ equals count on +	Addition Plus Add And	sum	Total Increase	Raise	
Subtraction −	*Informal use by the teacher.* (e.g. *How many are left?)* **Subtraction is not on the curriculum**	____ take away _____ leaves____ ___ subtract ___ leaves *(formal sign not introduced)*	Subtraction Subtract Minus Less Difference -	More than	Decrease	Reduce	
Multiplication X			doubles/double *skip counting-* 2s, 5s, 10s	*Skip counting-* 2s, 3s, 5s, 10s *Repeated addition* **Formal multiplication is not on the curriculum**	Multiply ___ groups of ___ ___ times ___ array repeated addition triple/treble x	Product	Multiplicator Multiplicand
Division ÷					Divide Share Fair share Split Remainder		Quotient Divisor Dividend

Addition without renaming

	T	U	
	8	2	
+	1	5	
	9	7	

I am adding eighty two plus fifteen.
I will start with the units. Two plus five is seven. *I will write the seven under the units.*
Then I will add the tens. Eight tens plus one ten is nine tens. *I will write nine under the tens.*
So eighty two plus fifteen is ninety seven.

After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Addition with renaming

	T	U	
	4	5	
+	3₁	6	
	7	1	

I am adding forty five plus thirty six.
I will start with the units. Five plus six is eleven. I cannot write eleven under the units, so I will put down one unit, and carry the one ten.
Then I will add the tens. Four tens plus three tens is seven tens, plus one more ten is eight tens. *I will write eight under the tens.*
So forty five plus thirty six is seventy one.
After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Subtraction without renaming – First Class

T	U
7	8
- 1	6
6	2

I am subtracting sixteen from seventy eighty. [Check if the number on the bottom is lesser in value]
I will start with the units. Eight take away six leaves two. *I will write two under the units.*
Then I will subtract the tens. Seven tens take away one ten leaves six tens.. *I will write six under the tens.*
So seventy eight subtract sixteen is sixty two.

After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Subtraction with renaming – Second Class

T	U
²3̶	¹5
- 1	8
1	7

I am subtracting eighteen from thirty five. [Check if the number on the bottom is lesser in value]
I will start with the units. I cannot subtract eight from five. I exchange a ten to make ten units. I cross out three, and that leaves two tens. When I bring that ten over into the units, I have fifteen. Fifteen take away eight is seven. *I will write seven under the units.*
Then I will subtract the tens. Two tens take away one ten leaves one ten. *I will write one under the tens.*
So thirty five take away eighteen is seventeen.
After practice and repetition, the text in italics may be omitted for the sake of efficiency.

'Short' Multiplication - Third Class

	T	U
	1	4
x	₂	5
	7	0

I am multiplying fourteen by five.
I will start with the units. Four multiplied by five is twenty. I cannot write twenty under the units, so I will put down zero and carry over two tens.
Then I will multiply the tens. One ten multiplied by five is five tens. I will add on the two tens. That gives me seven tens.
So fourteen multiplied by five is seventy.

After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Long Multiplication – Third Class

		T	U
		4₁	3
	x	1	6
		2	5	8
+	4	3	0
	6	8	8

I am multiplying forty three by sixteen. *I will multiply thirty three by six, and then by ten, and add the two together.*

Three multiplied by six is eighteen. *I cannot write eighteen under the units, so* I will put down eight and carry over the ten.
Four tens multiplied by six is twenty four tens. Add the ten I carried over, and that gives twenty five tens. So six multiplied by forty three is two hundred and fifty eight.

Next, I will multiply forty three by ten. I will put down a zero because I am multiplying by tens.
Three multiplied by one is three. Four multiplied by one is four.
So forty three multiplied by ten is three hundred and thirty.

Now I must add up. *Eight plus zero is eight. Five plus three is eight. Two plus four is six.*

So overall, forty three multiplied by sixteen is six hundred and eighty eight.

After practice and repetition, the text in italics may be omitted for the sake of efficiency.

'Short' Division - Third Class

		2	3	r.2
4	9	¹4		

I am dividing ninety four by four. I will divide the tens, then the units.
Nine tens divided by four is two, with one ten left over. I will write the two in the tens space, and carry over the one ten. That makes fourteen units.
Fourteen divided by four is three, with two left over. I will write the three in the units space. I have a remainder of two that I cannot divide equally.
So ninety four divided by four is twenty three remainder two.
After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Long Division – Fifth Class

		1	4	r.	24
25	3	7	4		
	2	5	0	10	
	1	2	4		
	1	0	0	4	
		2	4	14	

I am dividing three hundred and seventy four by twenty five.

I will use multiples of twenty five to see how many times I can take twenty five away from three hundred and seventy four.
I will start with ten, and write it down on the right hand side. Ten multiplied by twenty five is two hundred and fifty. I will take two hundred and fifty away from three hundred and seventy four to see how much is left. There is one hundred and twenty four left.

I know that four times twenty five is one hundred. I will write four down on the right hand side.
I will take away one hundred from one hundred and twenty four to see how much is left. There is twenty four left.

Twenty four is less than twenty five, so I cannot take away another twenty five. Twenty four is a remainder.

When I add up how many times I can take away twenty five, I have ten plus four, which is fourteen.

So three hundred and seventy four divided by twenty five is fourteen remainder twenty four.

Children may use any combination of multiples to reach an answer. They may be encouraged to write out the multiples of the divisor prior to starting, to ease the process. Use of doubles and near doubles will facilitate this.

Rough Work- Multiples of 25

25 x 2 = 50
25 x 4 = 100
25 x 8 = 200
25 x 16 = 400