Maths Language for addition, subtraction, 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 Class & Sixth Class
Equals Sign =	total altogether makes (the formal equals sign is not introduced in JI)	equals is the same as =			equivalent		
Addition +	__ and __ altogether makes add combine total	__and/add/plus __is the same as __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

How we add, and talk about addition
First Class and above

Addition without renaming

	T	U
	7	3
+	2	1
	9	4

I am adding seventy three and twenty one.

I will start with the units. Three plus one is 4. *I will write the four under the units.*

Then I will add the tens. Seven plus two is 9. *I will write the nine under the tens.*

So seventy three plus twenty one equals ninety four.

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

Addition with renaming

	T	U
	4	8
+	3 $_1$	4
	8	2

I am adding forty eight plus thirty four.

I will start with the units. Eight plus four is 12. *I cannot write twelve under the units, so I will put down two units and carry my one.*

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 eight plus thirty four equals eighty two.

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

How we subtract and talk about subtraction
First/ Second Class and above

Subtraction without renaming – First Class

	T	U
	4	9
—	1	5
	3	4

I am subtracting fifteen from and forty nine.

I will start with the units. Nine take away five is four. *I will write the four under the units.*

Then I will subtract the tens. Four tens take away one ten leaves three tens. *I will write three under the tens.*

So forty nine subtract fifteen equals thirty four.

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

Subtraction with renaming – Second Class

	T	U
	²3̸	¹2
—	1	7
	1	5

I am subtracting seventeen from thirty two. (*check if the number on the bottom is lesser in value*)

I will start with the units. I cannot subtract seven from two so I will need to rename. 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 twelve. Twelve take away seven is two. *I will write two under the units.*

Then I will subtract the tens. Two tens take away one tens leaves one ten. *I will write one under the tens.*

So thirty two take away seventeen equals fifteen.

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

How we multiply and talk about multiplication
Third Class and above

Short Multiplication – Third Class

	T	U
	1	5
X	₂	4
	6	0

I am multiplying fifteen by four.

I will start with the units. Five multiply by four 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. Four multiplied by one ten is four tens. *I will add on two tens. That gives me six tens.*
So fifteen multiplied by four equals sixty.
After practice and repetition, the text in italics may be omitted for the sake of efficiency.

Long Multiplication – Third Class

		T	U
		₁4	2
	x	1	6
	2	5	2
+	4	2	0
	6	7	2

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

Six multiplied by two is twelve. I cannot write twelve under the units so I will put down two and carry over the ten.
Six multiplied by four tens is twenty four tens. Add the ten I carried over, and that gives twenty five tens. So six multiplied by forty two equals two hundred and fifty two.
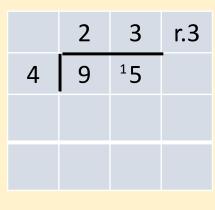
Next, I will multiply forty two by ten. I will put down a zero because I am multiplying by tens.
Two multiplied by one is two. Four multiplied by one is four. So forty two multiplied by ten equals four hundred and twenty.

Now I must add up. Two plus zero is two. Five plus two is seven. Four plus two is 6.
So overall, forty two multiplied by sixteen equals six hundred and seventy two.

How we divide and talk about division
Third Class and above

Short Division – Third Class

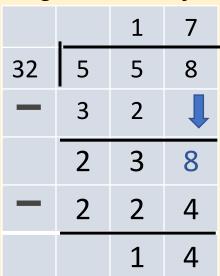|	2	3	r.3
4	9	¹5	

I am dividing ninety five 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 fifteen units.

Fifteen divided by four is three, with three left over. I will write the three in the units space. I have a remainder of three that I cannot divide equally.

So ninety five divided by four equals twenty three remainder three.

Long Division – Fifth Class

		1	7
32	5	5	8
−	3	2	↓
	2	3	8
−	2	2	4
		1	4

I am dividing five hundred and fifty eight by thirty two.

Divide thirty two into fifty five tens first. It goes in one time. I will write one over the tens.
Subtract one group of thirty two from the fifty five tens.

Bring down the eight units and divide thirty two into two hundred and thirty eight. It goes in seven times.
I will write the seven over the units.
Subtract seven groups of thirty two from two hundred and thirty eight to find the remainder.

The remainder is fourteen.

So overall, five hundred and fifty eight divided by thirty two equals seventeen remainder eight.