The Wilkie Way
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www.wilkieway.co.nz

Getting to grips with Te Mātaiaho - Mathematics & Statistics Phases 1 - 3

You can now download or read online the final version of this document from the Tāhūrangi website. The final version is dated October 2024.

There are a number of significant differences from the September draft document.

1. This newer version is set out in a much more user friendly format with phase progressions all on the same page with teaching considerations on the next page but all on the same spread. (using a printed version makes this much clearer as statements and teaching considerations relevant to a particular statement can be seen side by side.
A printed copy also allows me to add post-its when I want to come back to something or link things together, and I can write on it if I want to. For building my units of work I think I will be cutting and pasting.

2. The generalising properties section has gone from algebra in all three phases. The majority has become a paragraph under number in the “know” section of phase two. This is about knowing the commutative, distributive and associative properties of number operations. Using these properties of arithmetic is now under Phase 3 Algebra, Equations and Expressions.

3. Basic facts, addition and subtraction and multiplication and division have been moved from algebra to number operations.

4. At the end of each phase is a vocabulary list. Teachers need to consistently model the correct use of this language, not only in the maths lessons but also across the curriculum. The aim is for students to initially understand the language and then be able to use the language in context themselves. I would include the word “expand” as we use this when talking about standard partitioning a number into it’s component parts. I am also surprised horizontal and vertical first appear in the phase three word list when talking about XY graphs in algebra. I would be using the words vertical and horizontal when navigating a hundreds board. when describing pathways, especially when using grid references. Also in statistics when drawing bar graphs, line graphs and dot plots and when describing arrays in multiplication. Diagonal is another word not appearing in the lists until phase three. A word I often use in junior clases in PE lessons, folding squares when exploring fractions and reflective symmetry. A word that was used today in class where I was working by a year two student looking at patterns on a hundreds board.

There is no ceiling on language acquisition. The more words a student knows (with conceptual understanding), the more they have to think, comprehend and communicate with.
There are 314 words listed for phase one but also add in the 30 words required to count to a thousand (29 to count to a hundred) - all missing from the list but we know students are starting school without these words in their vocabulary.
A further 109 words listed at phase two and a further 70 words listed at phase three.

If you are floundering as to where to start with the new curriculum then a good place is to look at all the word lists and make sure you have an understanding of all of the words so you can model correct mathematical language when explicitly teaching concepts to your students.

The curriculum is laid out in the conventional format starting with the purpose of maths, then the big ideas about maths.
Understand: Patterns and variations, logic & reasoning, visualisation and application
This leads into the
Know: Number, algebra, measure, geometry, statistics and probability
and we learn this by
Do: investigating, representing, genaralising, connecting, explaining and justifying

Have we got this the wrong way up? If we put the students at the centre of education then we need to consider this model:

Students will: Investigate, represent, generalise, connect, explain and justify

Across and within: Number, algebra, measure, geometry, statistics and probability

To develop ideas about: Patterns and variation, logic and reasoning, visualisation and application

Which they will use for a range of purposes including:
- investigating, interpreting, explaining patterns and relationships in quantities, space, time data and uncertainty
- accurately and efficiently calculate, solve problems and use as a foundation for new learning
- understanding its value as a lens for collective local, national and global challenges
- challenging misinformation and disinformation
- purposely and flexibly participating fully in an increasingly technology and information rich world of work.
- and more.....

MOE PLD 2025

From November 11 2024 schools can apply for PLD to support the implementation of the revised maths curriculum for years 0 - 8.
The Ministry maths PLD will be delivered via Ministry selected facilitators who will travel to schools or centres nation wide to meet with teachers, schools or clusters of schools to deliver the training. There will be between 40 and 60 facilitators who will be led by two national leads Julia Crawford (Cognition) and Janine Simpson (Evaluation Associates)
The PLD will be delivered both in person and on line. For in person delivery the PLD will need to be hosted in a school.
A minimum of 20 teachers is required to book a facilitator. Schools are encouraged to book as a cluster or kāhui ako to access the training. The Maths PLD will be held over 4 days during 2025 and 2026. The expectation is that schools will use the Maths Curriculum Days to take part in day 1 and day 2 and arrange days 3 and 4 at their convenience before the end of 2026. MOE will do their best to make facilitators available for your first choice of days for this PLD.
The aim of the PLD is to provide teachers with:
- a good understanding of the teaching sequence to be taught across phases 1 to 3
- a good working understanding of the three elements in the maths and statisitics learning area (Understand, Know and Do)
- a good understanding of the science of learning in relation to maths and statistics and use it to inform their teaching
- a good understanding of the teaching guidance in the maths and statistics learning area
- the ability to plan for maths successfully, incorporating a quality hour a day of maths. This includes annual, unit, weekly and individual lesson planning
- increased knowledge of quality formative assessment practices that inform daily teaching

Teacher release time and travel costs are not funded for this PLD

Regionally allocated PLD (RAPLD) is no longer available, the previous list will be the central maths PLD for the coming two years.

I will not be one of the MOE facilitators as I wish to continue to support schools directly as I believe teachers should be in control of their own learning and schools should be leading their professional learning rather than having it imposed on them as a one size fits all.

I enjoy assisting teachers to build their knowledge through workshops, individual and small group discussions and activities. The other part of my job is to assist teachers to improve their pedagogical practice in the classroom through in class modelling and co-teaching.

I can assist schools to create their maths and statistics implentation document based on the refreshed curriculum, necessary for sustained shared practice in schools so we have the continuity and progression as expected.
I will also work with schools to create annual overview plans and unit plans and provide guidance for weekly and daily planning.

All this PLD is not based around any specific resource although the base planning documents are from the Wilkie Way members area. I can also assist schools using Maths Aotearoa as a resource.

This professional learning will need to be school funded and a quote would be provided and need to be accepted before a PLD journey can begin.

Please contact charlotte@ncwilkinsons.com for expressions of interest and I will contact you direct.

I have space in my diary for just one or two more schools for 2025 and I will take expressions of interest for 2026.

The Wilkie Way Teacher Challenge

Order of Operations

Use just one pair of brackets in the following expression

You decide where to put the brackets.

3 + 4 x 8 - 6 ÷ 2

Change where you put the brackets.

How many different solutions can you get?

New Resources for Wilkie Way Members

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Under 30 Students $60 + GST 30 to 100 students $160+GST

101 - 300 students $260 + GST 301- 500 students $360 +GST

501 - 700 Students $460 + GST 701+ Students $560 + GST

Non NZ School $660 - paid via paypal

The directory page for the members area is having a face lift as I organise and add resources to support the refreshed curriculum.

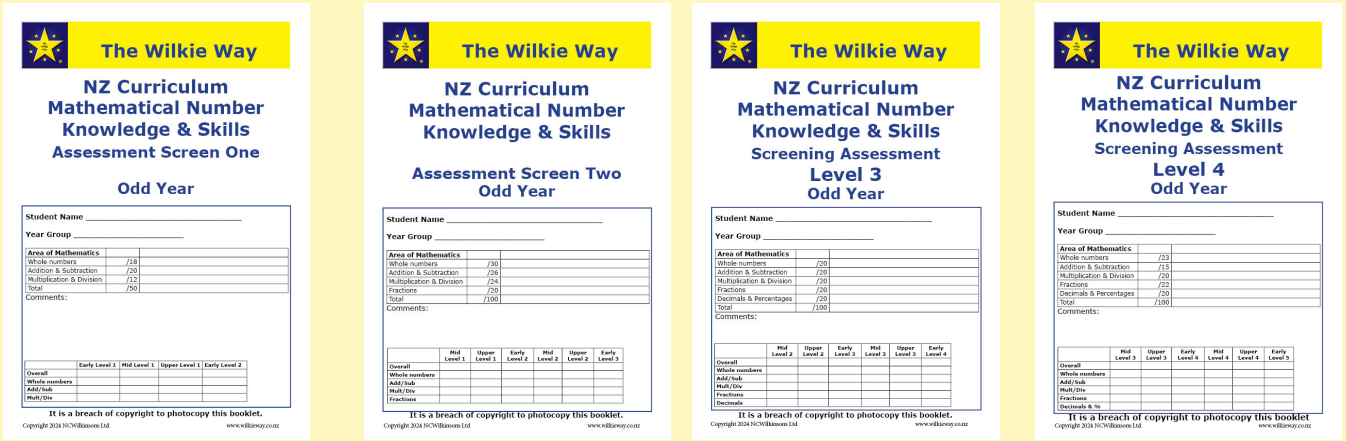
The dark blue box in each section will take you to all the resources but you can go direct to the phase level to find the resources aligned just to that phase.

Ensure you provide your students with more than just textbook and/ or workbook filling. Applying their knowlege to a range of mathematical situations, problems, challenges and different scenarios. Keep maths interesting and students thinking.

Subscribe now for an extra 2 months. Your renewal date will not be until January 2026

Assessment Screens

The assessment screens have been amended slightly for 2025 with the addition of vocabulary to assist the answering of questions. They have been altered slightly to reflect the knowledge levels in the new curriculum.



After 6 mths	8% - 20%	Begin Y3	15% - 25%	Begin Y5	15% - 25%	Begin Y7	15% - 25%
End Y1/Beg Y2	30% - 60%	End Y3/Beg Y4	40% - 60%	End Y5/Beg Y6	40% - 60%	End Y7/Beg Y8	40% - 60%
End Y2	80 - 100%	End Y4	80 - 100%	End Y6	80 - 100%	End Y8	80 - 100%

Order using the attached order form for the pre order 15% discount. Screens are available throughout the year at full price from the online store.

