# The Wilkie Way

## Newsletter September 2025

## www.wilkieway.co.nz

**For this newsletter I decided to ask Chat GTP three questions.**

### 1.What is the purpose of teaching & learning Primary Mathematics?

Mathematics in primary education is more than numbers and sums, It is the foundation for how children learn to think, reason, and solve problems. The purpose of teaching and learning primary mathematics goes beyond preparing students to calculate, it equips them with skills they will need for life, work and citizenship.
At its core, primary mathematics develops numeracy. Just as literacy gives children the ability to read and write, numeracy allows them to understand and use numbers with confidence. This is essential for everyday activities; telling the time, handling money, following recipes, or understanding measurements. A child who leaves primary school without solid mathematical skills faces significant disadvantages in daily life. By teaching mathematics early and consistently, schools ensure that all students acquire the basic tools for independence.

Another purpose of teaching mathematics is to nurture logical thinking. Mathematics is structured, systematic and rule based. When children learn addition, subtraction or multiplication they are not only memorizing facts - they are also practicing how to follow steps, recognise patterns, and check accuracy. These habits of mind transfer far beyond the classroom. They prepare children to approach challenges methodically, whether they are troubleshooting a computer, evaluating information, or planning a project.

Problem solving is a central aim. Primary mathematics encourages children to approach unfamiliar tasks with persistence. Word problems, puzzles, open ended investigations show students that mathematics is not just about getting the right answer but about making sense of situations. This build resilience; children learn that it is acceptable to make mistakes as long as they keep refining their approach. In this way, mathematics cultivates a growth mindset - an attitude that intelligence can be developed through effort.

Mathematics also plays a role in fostering creativity. While often seen as rigid, mathematics actually allows for multiple strategies and solutions. A child might add numbers by counting on, using a number line or applying a known fact. Encouraging flexibility in thinking helps students appreciate that there is more than one way to solve a problem. This creativity in reasoning is the same kind of thinking that underpins innovation in science, engineering, and technology.

Teaching mathematics at the prmary level also promotes equity. Mathematics is often described as a universal language, accessible regardless of background. A strong mathematics education ensures that all children - no matter their social or cultural circumstances - can participate in opportunities that require quantitative skills. Given the increasing importance of data in modern society, providing all children with solid mathematical foundations helps close gaps in achievement and opportunity.

Finally mathematics builds confidence. When children grasp concepts and solve problems successfully, they gain a sense of accomplishment. This confidence can shape their overall attitude towards learning. Students who believe they can do mathematics are more likely to engage with it in later schooling, opening pathways into science, technology and other fields that depend on mathematical understanding.

The purpose of teaching and learning primary mathematics is not just about arithmetic. It is about equipping children with essential life skills, nurturing logical and creative thinkers, and giving every student the confidence to engage with the world. Mathematics empowers children to understand, navigate, and contribute to the society they are growing into.

## 2. What makes a good primary mathematics teacher?

A good primary mathematics teacher does far more that deliver lessons from a text book. They build the foundation for how children see numbers, patterns, and problem solving for the rest of their lives. At this stage, confidence and curiosity matter just as much as accuracy, and the best teachers know how to nurture both.

First a strong teacher understands the subject deeply, not just the methods but the reasons behind them. They can explain why subtraction works in a certain way, or how multiplication connects to real world patterns. This depth allows them to answer unexpected questions and adjust explanations to match the way children think.

Equally important is clarity. A good primary teacher breaks down abstract ideas into simple concrete steps. They use examples, objects, drawings and stories to make numbers feel real. Rather than rushing ahead they check for understanding, noticing who is lost and who is ready for more challenge.

Patience and encouragement are key qualities. Many chlldren develop anxiety around mathematics early on, often because they feel pressured to get it “right” immediately. The best teachers create a safe space where mistakes are treated as part of learning. They celebrate effort, highlight progress, and give constructive feedback that keeps children motivated.

No two learners are the same, so a skilled teacher adapts lessons - providing extra support where needed and extension tasks for those ready to stretch. They connect mathematics to everyday life - measuring ingredients, spotting patterns in nature or estimating time - so children see its relevance.

Enthusiasm makes a difference, When a teacher shows genuine excitement about numbers and problem solving, it’s contagious. Students are far more likely to stay engaged and develop a positive attitude.

A good primary mathematics teacher combines knowledge, clarity, patience, adapatability, and passion to lay the groundwork for lifelong mathematical thinking.

## 3. What are the pros and cons of using scripted primary maths resources?

Using scripted primary maths resources has become more common as schools look for consistency in teaching. These materials often provide step by step lesson plans, suggested teacher language, and ready made activities. They bring several advantages but also come with drawbacks that teachers and leaders need to weigh carefully.

Pros:
One major benefit is consistency. Scripted resources ensure that every child in a class, or even across a school, is exposed to the same mathematical methods and vocabulary. This help reduce gaps caused by differences in teaching style or teacher experience. They also save time; teachers do not need to design every lesson from scratch, which is especially valuable for new or non specialist teachers. For schools aiming to raise attainment quickly, scripted lessons can provide structure and stability.

Cons.
The biggest criticism is the potential loss of teacher autonomy. Rigid scripts can prevent teachers from adapting lessons to the needs of their specific pupils. Childen learn in diverse ways, and sticking too closely to pre-written wording or tasks can lead to disengagement or missed opportunities for deeper understanding. Scripted resources may also discourage creativity and responsiveness in teaching, reducing mathematics to a formulaic process rather than a subject of exploration and problem solving. In addition, if teachers rely too heavily on scripts, their own subject knowledge and confidence may not grow as much as when they design lessons themselves.

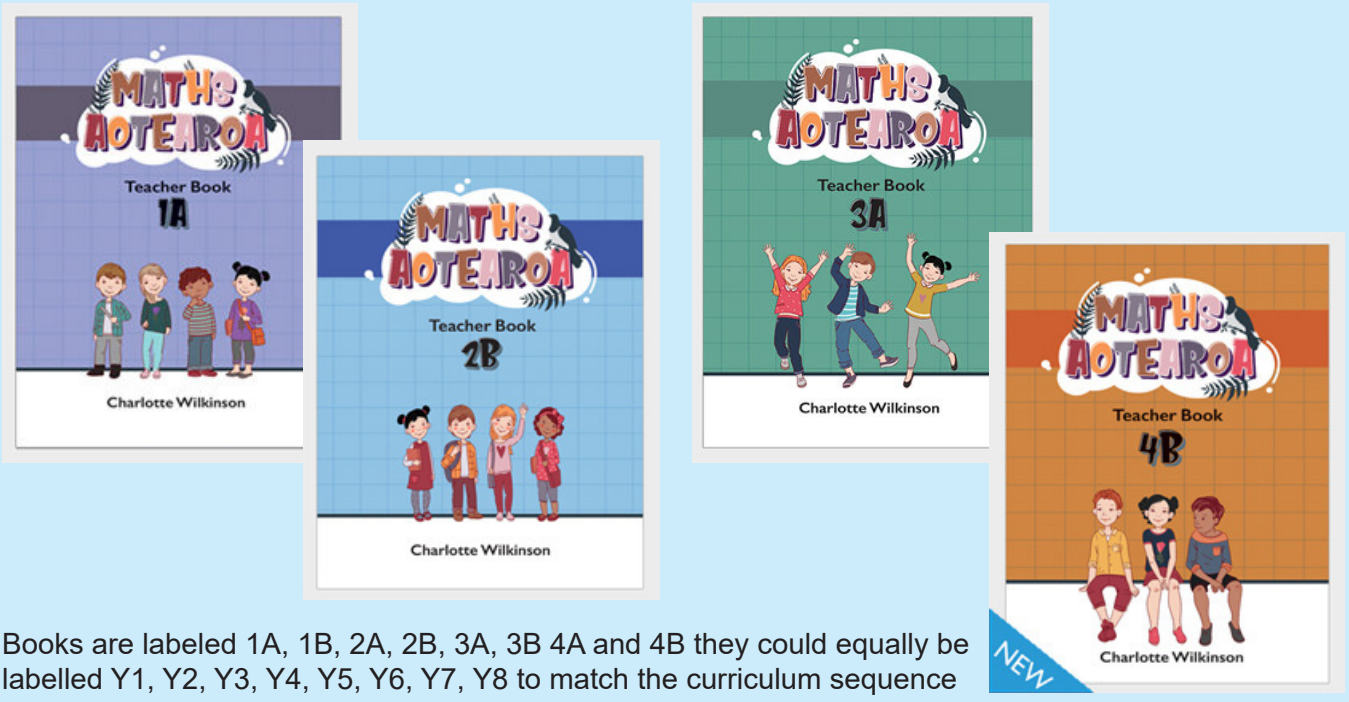
Used flexibly, they can provide structure and support, but teachers still need the freedom to adapt, question and enrich them for learners.

After reading the responses to all three questions,  I recommend that as a school or a syndicate you reflect and evaluate the teaching and learning of mathematics in your school.
Refer back to the New Zealand Mathematics curriculum Te Mātaiaho especially the purpose statement, the explict teaching, positive relationships with mathematics and statistics, rich tasks and communication in mathematics and statistics.
Look carefully at your chosen resource - how well does it actually match the sequence of learning in our curriculum?
None of the resources funded by MOE were written for our curriculum sequence and one I reviewed recently I was quite shocked at the disparity. The year 4 book covered number work from year 2 and 3 statements and measurement and geometry from year 5 statements.
Consider yourself as a primary mathematics teacher - are you increasing your subject knowledge, can you use the representatives effectively, are you developing a passion for the subject, are you flexible enough to cater for the wide range of learning styles in your class?

Personally I have never understood the need for a scripted resource. However I believe a teacher guide is necessary, the teacher guide should aim to build teacher subject knowledge so that eventually the teacher is knowledgeable and confident to not require constant referal to the teacher guide but can use the scope and sequence provided in the “scheme of work” to provide consistency and continuity for all students across a school.
For a scheme of work that does closely follow the scope and sequence of the NZ curriculum and was written in New Zealand for New Zealand teachers and students then look no further than Maths Aotearoa for years 1 - 8 published by Edify. Find out more about Maths Aotearoa on the Maths Aotearoa page of wilkieway.co.nz. *(Why this resource is not MOE funded is political not educational. There was a closed tender process and only large overseas corporations were invited to tender.)*

A big thank you to those schools who were already using this resource, with evidential data to show the progress of students and the increasing knowledge and confidence of their teachers. A thank you to those schools who have considered carefully the NZ curriculum, their students and their teachers and have chosen to invest in Maths Aotearoa. As these are physical teacher guides and student texts there is no ongoing cost required in online subscriptions for access to teacher guidance and purchasing student workbooks every year (post 2026)
The teacher guides are the centre part of the scheme and the student texts have explict teaching activities and rich tasks but should not be the only resource used. Each chapter is also linked to the Figure it Out resources.
A subscription for membership to Wilkie Way gives you access to adaptable planning and supporting workbooks and maintenance sheets for each book.




Books are labeled 1A, 1B, 2A, 2B, 3A, 3B 4A and 4B they could equally be labelled Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8 to match the curriculum sequence but student learning need does not necessarily match their year group.

# New Resources for Wilkie Way Members

**Annual Subscriptions purchased at the online store at www.wilkieway.co.nz**

**Individual $60 - paid via paypal**
**NZ School paid via invoice - complete form at online store**
**30 & under Students $65 + GST**
**31 to 100 students $180+GST**
**101 - 300 students $290 + GST**
**301- 500 students $400 +GST**
**501 - 700 Students $520 + GST**
**701+ Students $630 + GST**
**Non NZ School $750 - paid via paypal**

I will shortly be preparing the even year assessment screen for next year. Like the odd year screens these will be updated to reflect the changes in the curriculum and will be labelled

Screen 1 - covering learning statements from years 1 & 2
Screen 2 - covering learning statement from year 2, 3 & 4
Screen 3 - covering learning statements from year 3, 4 & 5
Screen 4 - covering learning statements from years 6, 7 & 8

The screens cover the number structure, number operations and rational number statements in the curriculum.

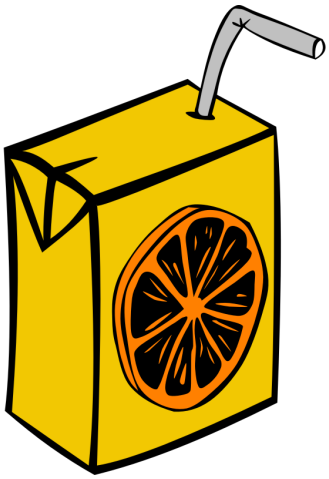
To find out more about these screens you can download a sample copy from the online store at wilkieway.co.nz

If you are interested in using these screens next year then please request an order form from charlotte@ncwilkinsons.com to receive the discount I can offer on pre orders. This order form will also become available to download from the website in Term 4

## The Wilkie Way Teacher Challenge

Kelly drank one third of a container of juice. She spilt a quarter of the remainder and then drank the last 120mL.

How much was in the container to start with?



Using the bar model really helps with these types of problems.

Try changing the fractions in the problem.