EDUSHOP

# Making Maths Accessible

## Intervention & Acceleration Programmes

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**It helps *all* students to address misconceptions or gaps, and also gain a better understanding so they can progress quickly to tackle higher-level problems.**

Maths Coordinator, North Island

# Enjoy Understand Achieve

## Discover the Power of Numicon: A Sensory Math Journey

Unveil a truly unique approach to mathematical learning with Numicon – an immersive experience that transforms how children engage with numbers. Numicon isn't just a teaching tool; it's a gateway to mathematical exploration, communication, and discovery.

At the heart of Numicon lies a focus on three crucial aspects of mathematical growth: communication, relationships, and generalisation. By delving into these dimensions, children not only grasp mathematical concepts but also develop a profound understanding of how mathematics functions in the world around them.

Harnessing the power of structured imagery, Numicon captivates young minds by resonating with their innate sense of patterns.

Through meticulously designed multi-sensory activities grounded in research, Numicon ensures that learning isn't just a process – it's an experience that embeds understanding.

What makes Numicon truly exceptional is its ability to adapt to the diverse strengths of individual learners. This multi-sensory approach, fortified by structured imagery, capitalises on their unique cognitive pathways. As children engage with tactile, visual, and auditory elements, their mathematical potential unlocks, leading to enhanced enjoyment, understanding, and achievement.

**Numicon has helped our learners understand maths in a way they never could before. We love it!**

D.P. in Christchurch

# Engage Multi-sensory Communicate

## Breaking Barriers: Your Pathway to Mathematical Success

Unleash your student's mathematical potential with our ground-breaking programme that defies limitations and embraces diversity – Breaking Barriers. From foundational early years maths concepts to the challenges of early Level 2 NZC/Phase 1 Te Mātaiaho, our programme spans the spectrum, ensuring no one is left behind.

**Differentiated Support:**
The programme is highly adaptable, allowing educators to customise their teaching to meet individual student's needs. It provides small, accessible steps to the learning and gives ideas for extension and further enrichment. The layout of the lessons allows the educator to choose the way in which they are delivered: alongside the classroom programme; following the suggested LTP (Long Term Plan); or creating targeted, individual programmes.

**Inclusive Learning:** The heart of Breaking Barriers lies in its commitment to inclusivity. It recognises that students have different learning styles and challenges. Whether a student faces cognitive, developmental, or language barriers, this programme offers tailored resources and strategies to support their learning.

**Cyclic Approach:** The suggested LTP allows students to revisit, practice and solidify their learning. This fosters a mastery of mathematical concepts securely embedding the learning. Our adaptable framework not only addresses current needs but also ensures growth and progression.

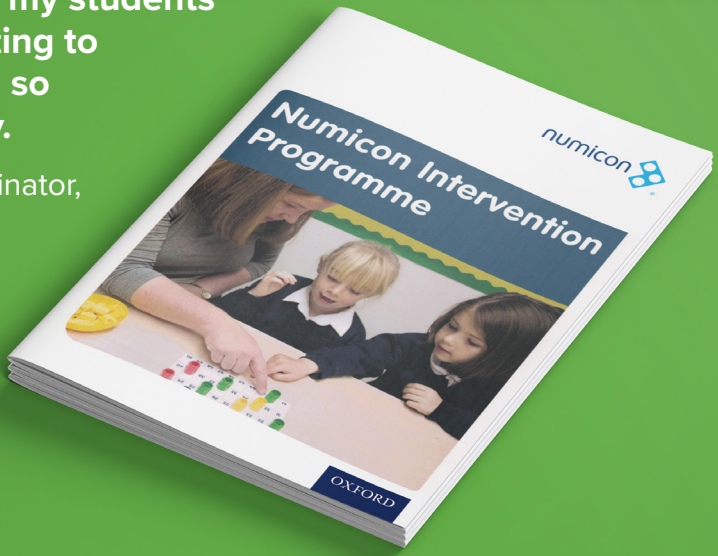
**Everyday life Connections:** Every Activity Group includes links to everyday applications suitable for all ages. Learning Centres in Years 7–13 value these.


Empower your
students today!


numicon
Breaking Barriers
Teaching Handbook
OXFORD

**NIP moves my students from counting to calculating so effortlessly.**

Maths Coordinator,
North Island




# Diagnostic Foundation Secure

## Unlock potential – Numicon Intervention Programme (NIP)

NIP is designed to foster a strong foundation in mathematics by offering a multisensory, structured, and adaptable approach to learning. It empowers students to excel in maths by fostering a deep understanding of key concepts, setting them up for success in the future.

A 12-week acceleration programme, NIP is ideal for students who have not yet had the magic of maths unlocked for them. It focuses on the key concepts of Level 1 to early Level 2 NZC/Phase 1 Te Mātaiaho.

**Proven Results:** NIP has a track record of success in educational settings worldwide. It's been used effectively across New Zealand in both schools and private tutoring companies to support and help students of all backgrounds, abilities and a diverse range of cultures.

**Concrete to Mastery:** What sets Numicon apart is its use of maths manipulatives to support the learning of abstract concepts. Numicon materials allow students to physically interact with numbers, patterns, and mathematical operations. This tangible engagement helps students move beyond rote memorization and truly grasp the principles of mathematics creating a secure sense of number.

**Diagnostic Assessment:** Identifying students' strengths, gaps, abilities and knowledge is made clear with the assessment tool. The programme can then be tailored to meet specific needs or use the suggested scope and sequence.

# Support Accelerate Embed

## Elevate mathematical abilities with Big Ideas (BI)

Is your goal to provide your students with a solid foundation in mathematics that prepares them for their future? This specialised programme is tailored to embed key mathematical concepts spanning Level 3-4 NZC/ Phases 2–3 Te Mātaiaho.

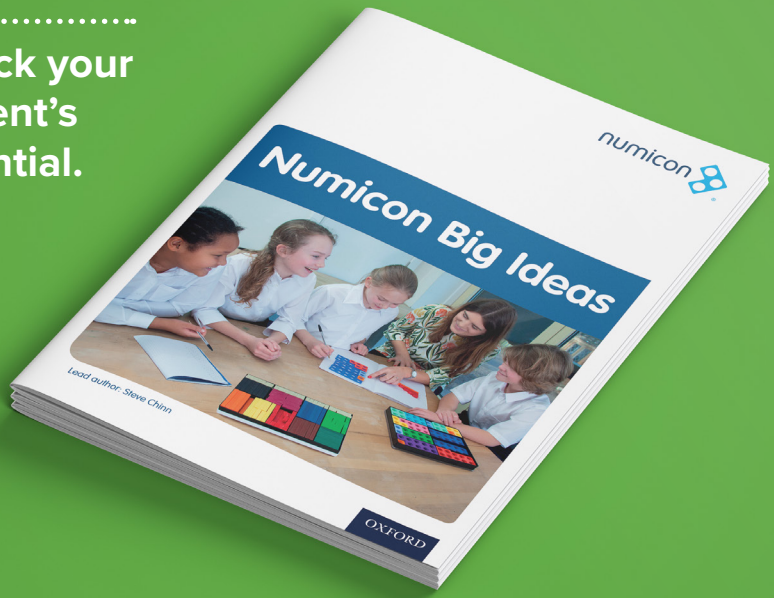
**Conceptual Mastery:** At the heart of Big Ideas lies the idea that students should not just memorize procedures but truly understand the underlying concepts. In addition to regular classroom lessons in Term 1 for Years 7 or 9, a review of number sense, the number system and operations, Big Ideas provides an acceleration programme for classroom, small group or tutoring settings. It focuses on mastering the essential concepts in five key areas:

- Place Value
- Addition & Subtraction
- Multiplication & Division
- Fractions
- Working with fractions, decimals, and percentages

**Structured Progression:** The programme is thoughtfully structured, ensuring a logical progression of concepts, making it easy to track student progress and address specific needs. This structure allows for differentiation, ensuring that all students can succeed.

**Abstract made Concrete:** With its commitment to multi-sensory learning, Big Ideas employs a range of age-appropriate visual, tactile and interactive resources that enable students to engage with maths in a hands-on way. By physically manipulating a variety of mathematical resources, students develop a deeper connection and understanding of mathematical concepts – making abstract ideas more concrete.

## Unlock your student's potential.



# Choose your programme today

| Breaking Barriers | NIP | Big Ideas |
|---|---|---|
| Tier 3 students and some Tier 2 | Tier 2 students | Tier 2 Students |
| All ages | 6 years and older | 10 years and older |
| NZC Pre-level 1 to Early Lv2<br>Te Mātaiaho Phase 1 | NZC Level 1 to Early Lv2<br>Te Mātaiaho Phase 1 | NZC Level 3 to Early Lv4<br>Te Mātaiaho Phase 2–3 |
| Flexible Timeframe | 12–15 week Acceleration | 12–15 week Acceleration |
| Can link with classroom lessons or replace classroom programme | 2–3 sessions per week supplementary to class programme | 2–3 sessions per week supplementary to class programme |
| Individual or small group | Individual or small group | Small group or whole class support |
| Individual progress record and interview-style assessment tool | Diagnostic assessment tool | Pre-test and post-test |

# Inclusive Mastery Passion

## A Whole School Approach

Why wait to intervene later with Numicon when you can support your students throughout their learning journey. Close the gap and raise student achievement across your whole school.

Our team of New Zealand Numicon Consultants are themselves dedicated teachers who have a passion for mathematics. Talk to them today about Professional Development opportunities.

## NZ 2023 Maths Curriculum links with Numicon

| Year | 0/1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9/10 |
|---|---|---|---|---|---|---|---|---|---|
| Phases | 1 | | | 2 | | | 3 | | 4 |
| Numicon Levels | FF | 1 | 2 | 3 | 4 | 5 | 5/6 | 6 | |
| Intervention Tier 3 | Breaking Barriers | | | | | | | | |
| Intervention Tier 2 | | Intervention Programme | | | | | | | |
| Senior Catch-up | | | | | | Big Ideas | | | |

EDUSHOP

## We inspire others to learn.

Feeding young minds and enriching lives through learning is the world's most important job. That's why you're a teacher – right?

We're here to help you create a better future for our nation's children.


Numicon users NZ

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**www.numicon.co.nz**


**About Numicon**

Numicon is a collaborative endeavour to facilitate children's understanding and enjoyment of maths.

Numicon was founded in the daily experience of intelligent children having real difficulty with maths, the frequent underestimation of the complexity of the ideas that we ask young children to face and a recognition of the importance of maths to them and to society as a whole.

We appreciate the complexity of these early number ideas and seek to foster the self-belief necessary to achieve in the face of difficulty; we are not about 'making maths easy'.

We believe that the combination of action, imagery and conversation helps children to structure their experiences, which is such a vital skill for both their mathematical and their overall development.

By watching and listening to what children do and say, we and many others are finding that our developing multi-sensory approach provides learners with the opportunity to play to their strengths, thereby releasing their potential to enjoy, understand and achieve in maths. This enjoyment in achievement is also shared by teachers and parents.

We strive to support teachers' subject knowledge and pedagogy with teaching materials, training and on-going feedback as we continue to develop a better understanding of how we can work together to encourage all learners in the vital early stages of their own mathematical journey.

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