

Starting out with Numicon



- Advice for schools

Introduction:

Number, Pattern and Calculating (NPC) along with Geometry Measurement and Statistics (GMS) are written to complete all the strands of maths from Year 1 in both knowledge and strategy. Numicon is an outstanding approach demonstrating applied maths from an early age with robust assessment, engaging students at a very practical level and satisfying the more able students thoroughly. We offer on-going bespoke **Professional Development** for your school.

Different approaches to introducing Numicon to your school

1. Whole school introduction in one-three years, including intermediate and secondary schools with NPC and GMS
2. Whole school (primary) introduction over six years
3. Special, or high needs learners only
4. Extending the more able students only
5. Introducing Numicon to the Junior classes and intervention for Years 5 and above

1. Whole school introduction over one -three years

Year groups	First year of introduction	Second Year	Third Year
Year 0 June-December intake	Firm Foundations	Firm Foundations	Firm Foundations
Year 1	Numicon 1	Numicon 1	Numicon 1
Year 2	Numicon 2	Numicon 2	Numicon 2
Year 3	Numicon 2	Numicon 3	Numicon 3
Year 4	Numicon 3	Numicon 3	Numicon 4
Year 5	Numicon 3	Numicon 4	Numicon 4
Year 6	Numicon 3 or 4	Numicon 4 or 5	Numicon 5 or 6
Year 7	Numicon 3 or 4	Numicon 4 or 5	Numicon 5 or 6
Year 8	Numicon 4	Numicon 4 or 5	Numicon 5 or 6

Intermediate/Secondary Schools

Year groups	Students at Stage 4	Students at Stage 5	Students at Stage 6	Students at Stage 7	Students at Stage 8
Year 7/9	NIP, Numicon 4	NIP, Numicon 4	Numicon 4	Numicon 5	Numicon 6
Year 8/10	NIP, Numicon 4	NIP, Numicon 4	Numicon 4	Numicon 5	Numicon 6

Repeat this as the year groups will include students from contributing schools using other programmes, but adjust as contributing schools send through students using Numicon at a higher level.

Students at the upper end of the school working at Levels 1 and 2 of the curriculum, will make great gains with the Numicon Intervention Programme (NIP), enabling them to join a class working at Numicon 4 afterwards.

2. Whole school introduction over six years beginning with Years 0-2, then 3 & 4, and 5 & 6 and intervention at intermediate level.

Year groups	First year of introduction	Second Year	Third Year	Fourth Year	Fifth Year	Sixth Year
Year 0 June-December intake	Firm Foundations	Firm Foundations	Firm Foundations	Firm Foundations	Firm Foundations	Firm Foundations
Year 1	Numicon 1	Numicon 1	Numicon 1	Numicon 1	Numicon 1	Numicon 1
Year 2	Numicon 2	Numicon 2	Numicon 2	Numicon 2	Numicon 2	Numicon 2
Year 3	other	Numicon 3	Numicon 3	Numicon 3	Numicon 3	Numicon 3
Year 4	other	Numicon 3 or Numicon 4	Numicon 4	Numicon 4	Numicon 4	Numicon 4
Year 5	other	other	Numicon 4 or 5	Numicon 5	Numicon 5	Numicon 5
Year 6	other	other	other	Numicon 5 or 6	Numicon 6	Numicon 6
Year 7	Numicon 4 or 5	Numicon 4 Numicon 5 or 6	Numicon 4 Numicon 5 or 6	Numicon 6	Intermediate/Secondary Maths	Intermediate/Secondary Maths
Year 8	Numicon 4 Numicon 5 or 6	Numicon 4 Numicon 5 or 6	Numicon 5 or 6	Intermediate/Secondary Maths	Intermediate/Secondary Maths	Intermediate/Secondary Maths

Continue this pattern introducing Numicon with the yearly cohorts. Alongside, support the students in the other years at Stage 4 with the Numicon 2, 3 and 4 as their intervention while demonstrating new concepts in NPD with Numicon.

Students at the upper end of the school still working back at Levels 1 and 2 of the curriculum will make great gains with the Numicon Intervention Programme, enabling them to join a class working at Numicon 4 afterwards.

3. Special and high needs learners

- These students typically take one to two years to progress through each year level. Some may take longer. The table is only a suggested projection.
- **Breaking Barriers (BB)** is at the same level as Numicon 1,2 and 3, but a differentiated programme. It is equivalent to NZ Curriculum Levels 1 and early 2.
- The **Numicon Intervention Programme** guides the students in Years 3-onwards beginning Numicon. A diagnostic assessment is part of this programme. See the website for more information.
- We have learned that high needs students introduced to Numicon through BB, move with greater confidence through Numicon 4-6, once their foundations for learning are established.
- Intermediate and secondary schools working with students at NZC levels 1 and 2 commonly use the NIP and Numicon 4 programmes, though some also use BB for students requiring further support. As the contributing schools begin Numicon, the numbers of high needs students are very likely to decrease.

4. Extending the more able students

Numicon is designed with low threshold activities through to high ceiling. The first few activities in each teaching activity are low threshold with the following activities becoming more advanced for the more able students.

Investigations with Numicon is a booklet with accompanying resources to be used by students who are gifted and talented, not necessarily in maths. Each investigation challenges students to explore higher thinking and complex mathematical ideas leading them clearly into algebraic and multiplicative thinking.

5. A two-pronged approach introducing Numicon to your school

Year groups	First year of introduction	Second Year	Third Year
Year 0 June-December intake	Firm Foundations	Firm Foundations	Firm Foundations
Year 1	Numicon 1	Numicon 1	Numicon 1
Year 2	Numicon 2	Numicon 2	Numicon 2
Year 3			Numicon 3
Year 4		Numicon 3	Numicon 4
Year 5	NUMICON INTERVENTION PROGRAMME Numicon 4 Numicon 5	NUMICON INTERVENTION PROGRAMME Numicon 4 Numicon 5	Numicon 5
Year 6	NUMICON INTERVENTION PROGRAMME Numicon 4 Numicon 5	Numicon 4 or 5	NUMICON 6
Year 7	NUMICON INTERVENTION PROGRAMME Numicon 4 Numicon 5	NUMICON INTERVENTION PROGRAMME Numicon 5 Numicon 6	Intermediate/Secondary Maths
Year 8	Numicon 5 Numicon 6	Numicon 6	Intermediate/Secondary Maths