

Numicon 1 teaching progression with milestones

The Numicon 1 teaching progression chart gives an overview of the expected coverage over the school year and the recommended order for teaching the activity groups. (Statistics work has been included within the Geometry and Measurement activity groups through appropriate contexts.)

See the long- and medium-term planning documents for Number, Pattern and Calculating 1 (NPC 1) and Geometry, Measurement and Statistics 1 (GMS 1) for references to assessment milestone statements; a fantastic tool for measuring children's progress. These can also be found in the chart at the end of the Milestone Assessment Introduction.

Term 1:

Strand and Activity Group Number		Activity Group Title
Securing Foundations	1	Learning about Numicon Shapes, number rods, pattern and counting
Securing Foundations	2	Naming Numicon Shapes, building patterns and counting objects
Securing Foundations	3	Building Numicon Shape patterns, more repeating patterns and number lines
Securing Foundations	4	Comparing and ordering, more patterns, beginning calculating
Securing Foundations	5	Describing relationships, more adding and patterns in movement
NPC Milestone 1		
Securing Foundations	6	Naming number rods, investigating teen numbers and finding totals
Securing Foundations	7	More about teen numbers, number patterns, adding
Securing Foundations	8	Beginning subtracting, sorting, more number patterns
Securing Foundations	9	Sorting, more practical subtracting
NPC Milestone 2		
Securing Foundations	10	Comparing lengths and weights, more subtracting
Securing Foundations	11	Counting and adding
Securing Foundations	12	Similar attributes, numbers to 20 and the '+' symbol
NPC Milestone 3		
Pattern and Algebra	1	Preparing for equivalence and using the '=' symbol
Calculating	1	Introducing the subtracting symbol
Numbers and the Number System	1	Ordering numbers to 20
Calculating	2	Adding and subtracting 1 and 2
Geometry	1	Recognizing and imagining common 3D shapes
Measurement	1	Comparing, ordering and measuring lengths
Measurement	2	Introducing the 1p, 2p, 5p and 10p coins
Calculating	3	Money
NPC Milestone 4		



Term 2:

Strand and Activity Group Number	Activity Group Title
Numbers and the Number System 2	Finding how many by grouping
Measurement 3	Units of time
GMS Milestone 1	
Geometry 2	Making pictures, shapes and patterns
Calculating 4	Exploring adding and subtracting facts to 10
Measurement 4	Comparing, ordering and measuring heaviness
Calculating 5	Halves and quarters of wholes
NPC Milestone 5	
Measurement 5	Comparing, ordering and measuring capacity
Pattern and Algebra 2	Reasoning with Numicon Shapes and number ideas
Pattern and Algebra 3	Odd and even
Calculating 6	Understanding subtracting as 'difference' and as 'how many more?'
Geometry 3	Recognizing and imagining common 3D shapes
GMS Milestone 2	

Term 3:

Numbers and the Number System 3	Exploring number lines and counting in steps
Calculating 7	Developing recall of adding and subtracting facts within 10
NPC Milestone 6	
Numbers and the Number System 4	Structure of 2-digit numbers and more ordering
Pattern and Algebra 4	Logic
NPC Milestone 7	

Term 3 continued:

Geometry	4	Comparing and naming common solid 3D shapes	
Calculating	8	Adding more than two numbers	
Calculating	9	Partitioning into tens and ones	
Measurement	6	Telling the time	
Pattern and Algebra	5	Finding possibilities	
			NPC Milestone  8
Geometry	5	Position, direction and movement	
			GMS Milestone  3




Numicon 2 teaching progression with milestones

The Numicon 2 teaching progression chart gives an overview of the expected coverage over the school year and the recommended order for teaching the activity groups. (Statistics work has been included within the Geometry and Measurement activity groups through appropriate contexts.)




See the long- and medium-term planning documents for Number, Pattern and Calculating 2 (NPC 2) and Geometry, Measurement and Statistics 2 (GMS 2) for references to assessment milestone statements; a fantastic tool for measuring children's progress. These can also be found in the chart at the end of the Milestone Assessment Introduction.

In Year 2, the math's teaching week will be 4 days which cover the Number, Pattern and Calculating objectives and 1 day which will cover the Geometry, Measurement and Statistics objectives.


Term 1:

Strand and Activity Group Number	Activity Group Title
Getting Started	Getting started with Number, Pattern and Calculating 2
Numbers and the Number System 1	Counting to 100 and beyond
Pattern and Algebra 1	Exploring different patterns
NPC Milestone  1	
Calculating 1	Adding and writing adding sentences
Calculating 2	Subtracting and writing subtracting sentences
Numbers and the Number System 2	2-digit numbers
NPC Milestone  2	
Calculating 3	Ordering adding and subtracting facts
Pattern and Algebra 2	Exploring the inverse relationship between adding and subtracting within 10
Numbers and the Number System 3	More 2-digit numbers
Numbers and the Number System 4	Comparing and ordering numbers to 100
Pattern and Algebra 3	Exploring equivalence – introducing empty box notation
NPC Milestone  3	
Calculating 4	Adding and subtracting whole tens
Calculating 5	Adding and subtracting 1 and 10


Term 2:

Pattern and Algebra	4	Odd and even
Calculating	6	Partitioning into tens and units to answer adding and subtracting problems
Pattern and Algebra	5	Patterns and sequences of 2s, 3s, 5s and 10s
NPC Milestone 		
Calculating	7	Adding and subtracting 1-digit numbers to and from 2-digit numbers
Calculating	8	Introducing multiplying as repeated adding
Calculating	9	Learning times tables and about multiplying through arrays
Numbers and the Number System	5	Rounding
Calculating	10	Mental strategies for near doubles and adding and subtracting 9
NPC Milestone 		
Calculating	11	Bridging through multiples of 10
Calculating	12	Adding three or more 1-digit numbers
Calculating	13	Adding and subtracting 2-digit numbers to 100
Calculating	14	Adding and subtracting to 20
NPC Milestone 		

Term 3:

Calculating	15	Introducing dividing as 'How many ... in ...?'
Pattern and Algebra	6	Logic
Calculating	16	Halves, quarters and thirds of wholes
Pattern and Algebra	7	Finding all possibilities
Numbers and the Number System	6	Introducing fractions as numbers
NPC Milestone 		

GMS Objectives:

Measurement	1	Introducing centimetres
Geometry	1	Making and classifying polygons
Geometry	2	Identifying the faces, edges and vertices of solid 3D shapes
Geometry	3	Investigating symmetry
GMS Milestone 		

GMS Objectives continued:

Measurement	2	Introducing the 20p, 50p and £1 coins
Measurement	3	Introducing the £2 coin and the £5, £10 and £20 notes

GMS Milestone  2

Geometry	4	Recognizing and naming prisms and cylinders
Measurement	4	Introducing metres

GMS Milestone  3

Measurement	5	Introducing kilograms and grams
Measurement	6	Introducing litres and millilitres, and units of temperature
Measurement	7	Telling the time and adding and subtracting with units of time
Geometry	5	Investigating and describing rotation

GMS Milestone  4

It is essential that children know by heart the multiplication facts for the $\times 2$, $\times 5$ and $\times 10$ tables. They should be able to say the answer to questions in less than 6 seconds.