Numicon 3 teaching progression with milestones

The Numicon 3 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 3 (NPC 3) and Geometry, Measurement and Statistics 3 (GMS 3) 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.

Strand and Activity Group Number		Activity Group Title
Getting Started		Getting started with Number, Pattern and Calculating 3
Calculating	1	Developing fluency with adding and subtracting facts to 10
Numbers and the Number System	1	Finding how many by grouping in 10s and 100s
Calculating	2	Developing fluency with adding and subtracting facts to 20
Numbers and the Number System	2	Exploring hundreds, tens and units with base-ten apparatus
		NPC Milestone 1
Pattern and Algebra	1	Exploring the inverse relationship between adding and subtracting
Numbers and the Number System	3	Keeping count and writing numbers down
Calculating	3	Mental methods for adding single-digit numbers
Calculating	4	Mental methods for subtracting single-digit numbers
Geometry	1	Investigating the parts and properties of polygons and polyhedra
Pattern and Algebra	2	Exploring steps of constant size through sequences of multiples
Calculating	5	Revising multiplying as repeated adding
		NPC Milestone 2
Calculating	6	Exploring multiplying through arrays
Calculating	7	Introducing dividing as 'How many … in …?'
Geometry	2	Identifying and comparing angles by size
Numbers and the Number System	4	Partitioning 2- and 3-digit numbers with and without money
Geometry	3	Sorting and classifying 2D and 3D shapes
		GMS Milestone 1
Numbers and the Number System	5	Ordering and structuring numbers to 1000
Calculating	8	Adding and subtracting multiples of 10 and 100
		NPC Milestone 3

Strand and Activity Group Number		Activity Group Title
Calculating	9	Patterns of similar adding and subtracting calculations
Pattern and Algebra	3	Reading and creating scales with different intervals
Numbers and the Number System	6	Finding half way, rounding to the nearest 10 or 100
Calculating	10	Learning multiplying facts and looking for patterns
Calculating	11	Introducing the sharing structure of dividing
		NPC Milestone 4
Pattern and Algebra	4	Extending sequences and finding differences
Calculating	12	Partitioning strategies for adding and subtracting
Measurement	1	Telling the time to the minute on the 12-hour clock
Measurement	2	Exploring units of time
		GMS Milestone 2
Calculating	13	Using apparatus and imagery to introduce the written column method for adding
Calculating	14	Using apparatus and imagery to support subtracting and introducing the written column method
Calculating	15	Exploring ratio and scaling problems and introducing the short written methods of multiplying and dividing
		NPC Milestone 5
Measurement	3	Measuring accurately and calculating with metres, centimetres and millimetres
Measurement	4	Calculating with pounds and pence, and handling money
		GMS Milestone 3
Calculating	16	Making connections between dividing into equal parts and calculating with fractions
Measurement	5	Measuring and calculating with grams and kilograms
Measurement	6	Measuring and calculating with litres and millilitres
Numbers and the Number System	7	Understanding fractions of a whole and fractions as numbers
Numbers and the Number System	8	Using fraction notation to describe parts of a discrete set
Pattern and Algebra	5	Finding all possibilities and investigating a general statement
		NPC Milestone 6
Geometry	4	Using grids and grid references
		GMS Milestone 4