

Numicon Teaching Progression: 4, 5 and 6 for Year 7 students

The Numicon teaching progression chart gives an overview of the expected coverage over the school year for Year 7 students *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 medium-term planning documents for Number, Pattern and Calculating 4, 5 and 6, and Geometry, Measurement and Statistics 4, 5 and 6 for references to assessment milestone statements; a fantastic tool for measuring children's progress.

Edit the document to meet the needs of the students you are working with, especially if they are new to this approach. *The sequence may extend into the following year.*

Weeks	Numicon 4 Context and activity group number Monday	Numicon 5 Context and activity group number Tuesday	Numicon 6 Context and activity group number Wednesday...
1	Getting Started	Getting started	Getting Started – follow N5
2	Numbers and the Number System 1 Understanding place value in 4-digit numbers <ul style="list-style-type: none"> Place value grid Mass EM 4(9) 	Numbers and the Number System 1 Working with numbers to 1M <ul style="list-style-type: none"> Reading larger no's Extending PV frame Powers of numbers EM5(8) 	Numbers and the Number System 1 Working with numbers beyond 1M Activities 1-3 <ul style="list-style-type: none"> Rounding
3	Numbers and the Number System 2 Fractions connected with number lines	Numbers and the Number System 2 Improper fractions and mixed numbers	Numbers and the Number System 2 Ordering and comparing fractions
4	Numbers and the Number System 6 Introducing decimal fractions	Numbers and the Number System 3 Understanding decimals	Numbers and the Number System 1 Activity 4 Working with decimals
5	Numbers and the Number System 5 Fractions and recognizing part-whole relationships	Numbers and the Number System 6 Comparing and ordering fractions	Calculating 8 Converting fractions and decimals
6	Geometry 1 Classifying triangles and quadrilaterals	Geometry 1 Measuring angles	Geometry 1 2D shapes and angles
7	<p>For the next seven weeks you will need to decide whether your children need to revisit some of the N4 and 5 content or focus on deepening their understanding of these three N6 units.</p> <p>Alternatively, you may choose to leave some of the N5 units until the children are working on the investigating tasks.</p>		
8	Calculating 1 Using adding and subtracting facts and understanding inverse relationships Calculating 2 Strategies for bridging when adding and subtracting to 100	Calculating 1 Calculating 2 Strategies for bridging when adding and subtracting to 1000	Calculating 1 Activities 4 & 5 Adding and subtracting large numbers
9	Calculating 3 Developing fluency with mental adding strategies	Calculating 3 Further strategies for adding and subtracting	
10	Numbers and the Number System 3	Numbers and the Number System 4	Calculating 3 Estimating, rounding and

	Estimating and rounding	Rounding	equivalence
11	Numbers and the Number System 4 Introducing negative numbers	Numbers and the Number System 5 Working with negative numbers	Calculating 1 Activities 1 – 3 Adding and subtracting negative numbers in context
12	Calculating 3 Developing fluency with mental adding strategies (Repeat) Calculating 8 Developing fluency with the column method of adding	Calculating 5 Written methods of adding	Calculating 4 Column methods for adding and subtracting
13	Calculating 4 Developing fluency with mental subtracting strategies Calculating 9 Developing fluency with the column method of subtracting	Calculating 6 Written methods of subtracting	
14	Geometry 2 Understanding reflective symmetry	Geometry 2 Transformations	Geometry 3 Transformations in 4 quadrants
15	Pattern and Algebra 1 Exploring sequences and number patterns Investigating Rules	Pattern and Algebra 1 Patterns and sequences	Pattern and Algebra 2 Exploring number sequences and relationships
16	Calculating 5 Developing fluency with multiplying facts to 12 x 12 Calculating 6 Developing fluency with dividing facts to 12 x 12	Calculating 4 Developing fluency with multiplying and dividing	Calculating 2 Multiplying and dividing Associative and distributive properties
17	Pattern and Algebra 2 Exploring inverse relationships	Pattern and Algebra 2 Using inverse relationships to solve problems	Pattern and Algebra 1 Multiples, factors, and primes
18	For the next few weeks you will need to decide whether your children need to revisit some of the N4 and 5 content or focus on deepening their understanding of the N6 unit Calculating 6. Alternatively, you may choose to leave some of the N5 units until the relevant investigating tasks.		
19	Calculating 7 Mental strategies for multiplying and dividing by 10 and 100	Calculating 7 Multiplying and dividing by 10, 100 and 1000 Calculating 8 Using mental methods for multiplying and dividing	Calculating 6 Exploring calculations: multi-step non-routine problems and order of operations
20	Calculating 10 Exploring the distributive property and developing written methods of multiplying Calculating 11 Using multiplying facts to solve dividing problems	Calculating 9 Division with remainders	Calculating 6 Exploring calculations: multi-step non-routine problems and order of operations
21	Calculating 12 Developing fluency with the short-written method of multiplying	Calculating 12 Written methods of multiplying	Calculating 9 Written column methods of multiplying
22	Calculating 13 Developing fluency with the short-written method of dividing	Calculating 13 Written methods of dividing	Calculating 10 Introducing long written methods of dividing

23	Measurement 3 Understanding and using units of length and distance Measurement 6 Understanding perimeter and area	Measurement 3 Calculating area and perimeter Measurement 3 Working with area and perimeter	Measurement 2 Areas of 2D shapes Measurement 3 3D shapes – nets and surface area
24	Measurement 4 Understanding and using units of mass Measurement 5 Understanding and using units of capacity and volume	Measurement 3 Estimating volume and capacity	Measurement 4 Volume and scaling
25	Geometry 3 Investigating angles in shapes	Geometry 3 Exploring angles	Geometry 2 Circles
26	Numbers and the Number System 7 Introducing proportion	Calculating 10 Ratio and proportion	Calculating 7 Ratio and proportion
27	Calculating	Calculating 11 Percentages	Calculating 5 Percentages
28	Geometry 4 Reading and plotting positions using coordinates	Measurement 2 Interpreting charts and graphs	Measurement 1 Statistics, charts and graphs
29	Numbers and the Number System 7 Exploring equivalence in fractions	Calculating 10 Calculating fractions of amounts	Calculating 11 Adding and subtracting with fractions
30	Numbers and the Number System 7 Exploring equivalence in fractions	Calculating 11 Calculating with fractions	Calculating 12 Multiplying and dividing fractions
31	Pattern and Algebra 3 Exploring 'equals' in balancing number sentences	Pattern and Algebra 2 Using inverse relationships to solve problems	Pattern and Algebra 3 Using algebra to solve problems
32	Numbers and the Number System 8 Introducing decimal fractions with two places	Numbers and the Number system 7 Solving problems with fractions, decimals and percentages	Calculating 13 Solving non-routine problems using all four operations
33	Pattern and Algebra 4 Exploring multiples and factors	Pattern and Algebra 5 Using equivalence to solve problems	Pattern and Algebra 4 Using symbols and letters for variables and unknowns
34	Pattern and Algebra 5 Looking for growing patterns in problem solving	Pattern and Algebra 4 Looking for patterns and generalizing	Preparing for formal testing Fluency in calculating with whole numbers and decimals
35	Calculating 14 Solving problems involving more than one step	Calculating 16 Solving problems involving several steps	Preparing for formal testing Fluency in calculating with fractions and decimals
36	Pattern and Algebra 6 Solving problems and puzzles systematically	Measurement 6 Scale drawing	Preparing for formal testing Preparing to do maths in test conditions
37	Measurement 1 and 2	Measurement 7	Investigating 1

	Calculating with time, money amounts	Solving problems involving time, money and measures	Making squares
38	Pattern and Algebra 7 Exploring general rules, reasoning and logic	Measurement 1 Metric and imperial units	Investigating 2 What did I do?