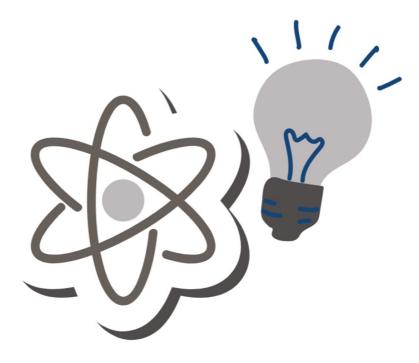


A Structured Maths Scope & Sequence for Teachers in the Classroom



BY JORDAN PRIESTLEY

### Comparisons between programmes

Structured Maths Approach is its own programme and design, meaning it is hard to match back to other programmes or ways of teaching maths currently. All programmes have their own ways of doing things, structure, sequence and own process of working through learning outcomes for students. This means it can be difficult to compare two programmes or approaches together. It is a common question I get asked around comparing Structured Maths Approach with other programmes out there so this comparison document was created to help you get a better picture of that.

In this comparison, you can see a comparison between Structured Maths Approach, The New Zealand Curriculum and Numeracy Project Framework stages below.

## Structured Maths Approach vs Numeracy Project Framework

Here you can see which phases have different stage concepts appear in them. Some have an overlap between phases and stages due to the fluid nature of Structured Maths Approach. This is broken down into addition and subtraction, multiplication and division, and proportion (or fractions). Structured Maths Approach gives a firm knowledge and skill building up to a solid stage 5, early stage 6 for some concepts.

		Phase One (Year 0)	Phase Two (Year 1)	Phase Three (Year 2)	Phase Four (Year 3)	Phase Five (Year 4)	Phase Six (Year 5)	Phase Seven (Year 6)	Key:
Stage 1	One-to-one counting								Addition and subtraction Multiplication and division Proportional
Stage 2	Counting from one (materials)								
Stage 3	Counting from one (imaging)								
Stage 4	Counting on (advanced counting)								
Stage 5	Early additive Part-whole thinking								
Stage 6	Advanced additive								
Stage 7	Advanced multiplicative part-whole								
Stage 8	Advanced proportional part-whole								

# Structured Maths Approach us Numeracy Project Framework Comparison

Designed and created by Jordan Priestley — Structured Maths Approach

Stage 8	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	
Advanced proportional part-whole	Advanced multiplicative part-whole	Advanced additive	Early additive Part-whole thinking	Counting on (advanced counting)	Counting from one (imaging)	Counting from one (materials)	One-to-one counting	
								Phase One (Year 0)
								Phase Two (Year 1)
								Phase Three (Year 2)
								Phase Four (Year 3)
								Phase Five (Year 4)
								Phase Six (Year 5)
								Phase Seven (Year 6)
							Addition and subtraction Multiplication and division Proportional	Кеу:

## Structured Maths Approach vs Curriculum Levels

Here you can see which phases have different year and curriculum levels when compared to numeracy project stages and also the phases of Structured Maths Approach.

Comparing three different areas is hard because although they are similar, they are still different and can give a range of outcomes. These are only a guide and must be used alongside your OTJ's, classroom observations, lessons and other formative assessment.

Because Structured Maths Approach builds on the layered scope and sequence, concepts can be seen across phases to show the progression over time.

				B1 0			5: 5				
Year Level	Curriculum Levels	Nu	imeracy Project Stages	Phase One (Year O)	Phase Two (Year 1)	Phase Three (Year 2)	Phase Four (Year 3)	Phase Five (Year 4)	Phase Six (Year 5)	Phase Seven (Year 6)	Кеу:
		Stage 1	One-to-one counting								Addition and subtraction Multiplication and division Proportional
End of Year 1	Early Level 1	Stage 2	Counting from one (materials)								Curriculum Levels are approximate based on Numeracy Stages and rough estimations. These will also include OTJ's and what you are
		Stage 3	Counting from one (imaging)								seeing in the classroom. This is comparing (roughly) three different things - curriculum levels, numeracy project stages and Structured Maths Approach.
End of Year 2	Level One	Stage 4	Counting on (advanced counting)								Early Level 2 = Early Stage 5 Phase 3/4
End of Year 3	Early Level 2	Early Stage 5	Early additive								Level 2 = Stage 5 Phase 4/5
End of Year 4	Level 2	Stage 5	Part-whole thinking								Early Level 3 = Early Stage 6 Phase 5/6
End of Year 5	Early Level 3	Early Stage 6	Advanced additive								Level 3 = Stage 6 Phase 6/7
End of Year	Level 3	Stage 6									Early Level 4 = Early Stage 7 Phase 7
End of Year 7	Early Level 4	Early Stage 6	Advanced multiplicative part-whole								
End of Year 8	Level 4	Stage 7	pur i-whole								
	Early Level 5	0	Advanced proportional part-whole								
	Level 5	Stage 8									

# Structured Maths Approach us Year Level and Curriculum Level Comparison

Designed and created by Jordan Priestley – Structured Maths Approach

	End of Year End of Year 8	End of Year	End of Year F		End of Year 2		End of Year   Early Level		Year Level
Early Level 5 Early Stage	Early Level 4	Level 3	Level 2 Stage 5 Farly 1 eyel 3 Early Stage	Early Level 2	Level One		Early Level 1		Curriculum Levels
Early Stage 8  Stage 8	Early Stage 6 Stage 7	6 Stage 6	Stage 5 Early Stage	Early Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	N <sub>u</sub>
Advanced proportional part-whole	Advanced multiplicative part-whole	Advanced additive	·	Early additive Part-whole thinking	Counting on (advanced counting)	Counting from one (imaging)	Counting from one (materials)	One-to-one counting	Numeracy Project Stages
									Phase One (Year 0)
									Phase Two (Year 1)
									Phase Three (Year 2)
									Phase Four (Year 3)
									Phase Five (Year 4)
									Phase Six (Year 5)
									Phase Seven (Year 6)
		Level 3 = Stage 6 Phase 6/7  Early Level 4 = Early Stage 7 Phase 7	Early Level 3 = Early Stage 6 Phase 5/6	Level 2 = Stage 5 Phase 4/5	Early Level 2 = Early Stage 5 Phase 3/4	seeing in the classroom.  This is comparing (roughly) three different things - curriculum levels, numeracy project stages and Structured Maths Approach	Curriculum Levels are approximate based on Numeracy Stages and rough estimations. These will also include OTJ's and what you are	Addition and subtraction  Multiplication and division  Proportional	Key:

## Structured Maths Approach vs New Zealand Curriculum:

Here you can see which phases correlate under which progress steps from the refresh. Some overlap between phases to build a strong foundation and some are only seen in one phase.

Each of the four aspects are broken down:

- Number Structure
- Operations: Addition and Subtraction
- Operations: Multiplication and Division
- Rational Numbers

				Nu	mber Struct	ture			
	during the first 6 months	during the first	during the second	during the third year	during Year 4	during Year 5	during Year 6	during Year 7	during Year 8
	Recognise, read, write, order, partition up to 10.	Recognise, read, write, order, partition and regroup whole numbers up to 20.	Recognise, read, write, order, partition, recombine and represent whole numbers up to 100.	Recognise, read, write, order, partition, recombine and represent whole numbers up to 1,000.		Recognise, read, write, order, partition, recombine and represent whole numbers up to 100,000.		Identify, read, write, compare, and order whole numbers using powers of 10	identify, read, write compare, and orde whole numbers and decimals using powers of 10
Phase One (Year 0)									
Phase Two (Year 1)									
Phase Three (Year 2)									
Phase Four (Year 3)									
Phase Five (Year 4)									
Phase Six (Year 5)									
Phase Seven (Year 6)									
Phase Eight (Year 7)									
Phase Nine									

			0	perations: A	Additions ar	nd subtracti	on		
	during the first 6 months	during the first	during the second	during the third year	during Year 4	during Year 5	during Year 6	during Year 7	during Year 8
	Join and separate groups of up a total of 10	Join and separate groups of up a total of 20 and find the difference between groups by grouping and counting	Add and subtract numbers up to 100 without renaming	Add and subtract numbers up to at least 100	Add and subtract two and three digit numbers Add and subtract decimals to one decimal place.	Add and subtract whole numbers up to 10,000. Add and subtract whole numbers and decimals to two decimal places.	Add and subtract any whole numbers. Add and subtract whole numbers and decimals to two decimal places.	Use the order of operations Add and subtract decimals to three decimal places Explore adding and subtracting integers	Use the order of operations Add, subtract, and multiply decimals Add and subtract with integers
Phase One (Year 0)									
Phase Two (Year 1)									
Phase Three (Year 2)									
Phase Four (Year 3)									
Phase Five (Year 4)									
Phase Six (Year 5)									
Phase Seven (Year 6)									
Phase Eight (Year 7)									
Phase Nine (Year 8)									

			0	perations: N	Aultiplicatio	n and divisi	on		
	during the first 6 months	during the first	during the second	during the third year	during Year 4	during Year 5	during Year 6	during Year 7	during Year 8
	NA	Multiply and divide using equal grouping or counting.	Multiply and divide using equal grouping or skip counting.	Multiply a one or two digit number by a one-digit number, using skip counting or known facts. Divide whole numbers by a one-digit divisor with no remainders, using grouping.	Multiply a two-digit by one-digit number and two one-digit whole numbers. Divide up to a three-digit whole number by a one-digit divisor with no remainder.	Multiply a three-digit by one-digit number and two two-digit whose numbers. Divide up to a three-digit whose number by a one digit divisor with a remainder.	Multiply multi-digit whole numbers. Dividie up to a four digit whole number by a one-digit divisor with a remainder.	Multiply whole numbers Divide whole numbers by one- or two-digit divisors Use the order of operations Multiply and divide numbers by 10, 100, and 1,000	Multiply whole numbers Divide whole numbers Use the order of operations Multiply and divide numbers by powers of 10
Phase									
One (Year 0)									
Phase Two (Year 1)									
Phase Three (Year 2)									
Phase Four (Year 3)									
Phase Five (Year 4)									
Phase Six (Year 5)						ļ			
Phase Seven (Year 6)									
Phase Eight (Year 7)									
Phase Nine (Year 8)									

				R	ational numbe	rs			
	during the first 6 months	during the first	during the second	during the third year	during Year 4	during Year 5	during Year 6	during Year 7	during Year 8
	NA	identify and represent holes and quarter as the control of the con	identify, read, with juling symbols and words, and expected holders, quarter, and expected holders, quarter, and expected holders, quarter, and expected holders, processes, and an expected point of the whole, Diecelly compare have become in which grades. Place in half and quarter of a religious processes and dentify identifying groups and patterns and dentify the whole and of this processes, and a processes are all the processes of the processe	Identify, read, write, and separeer habes, hidd, separeer habes, hidden habes, hid	identify, sood, write, and represent tenths or footlone and decimals. Compone and asset tenths or footlone on decimals controlled and decimals to footlone and decimals or footlone and decimals or footlone and morphor and and and additional fraction of a whole number, and and and subtract fraction and add and subtract fractions with the some denominators.	identify, read, with, and represent terths and handerthin a tooctorus and decimal.  Compared the stoochus and decimal, and the stoochus and the stoochus and the stoochus and decimal, and control the stoochus and decimal terths and the stoochus	identify, seed, with, and represent functions, decimals (be here placed), decimals (be here placed), and the placed (be here), and the placed (be here), and placed (be here), and proving and convert disched), and proposed, and proving (be here), and the here has there.  Represent factions in their hastiers, the here here hastiers, and here here and improper functions on the placed of the here and improved the here hastiers, and improved the here hastiers, and improved the here has	laterfity read, write, and represent hostiens, decimal (to three places), and personal promotes are removed to three places), and personale, and removed the characteristics of the personal per	leartify mean with, and decimals and processing decimals, and percentage of comments of the control to the cont
Phase One (Year 0)									
Phase Two (Year 1)									
Phase Three (Year 2)									
Phase Four (Year 3)									
Phase Five (Year 4)									
Phase Six (Year 5)									
Phase Seven (Year 6)									
Phase Eight (Year 7)									
Phase Nine (Year 8)									

Phase Nine (Year 8)	Phase Eight (Year 7)	Phase Seven (Year 6)	Phase Six (Year 5)	Phase Five (Year 4)	Phase Four (Year 3)	Phase Three (Year 2)	Phase Two (Year 1)	Phase One (Year 0)			
									Recognise, read, write, order, partition up to 10.	during the first 6 months	
									Recognise, read, write, order, partition and regroup whole numbers up to 20.	during the first	
									Recognise, read, write, order, partition, recombine and represent whole numbers up to 100.	during the second	
									Recognise, read, write, order, partition, recombine and represent whole numbers up to 1,000.	during the third year	Nur
									Recognise, read, write, order, partition, recombine and represent whole numbers up to 10,000.	during Year 4	Number Structu
									Recognise, read, write, order, partition, recombine and represent whole numbers up to 100,000.	during Year 5	ure
									Recognise, read, write, order, partition, recombine and represent whole numbers up to 1,000,000.	during Year 6	
									Identify, read, write, compare, and order whole numbers using powers of 10	during Year 7	
									Identify, read, write, compare, and order whole numbers and decimals using powers of 10	during Year 8	

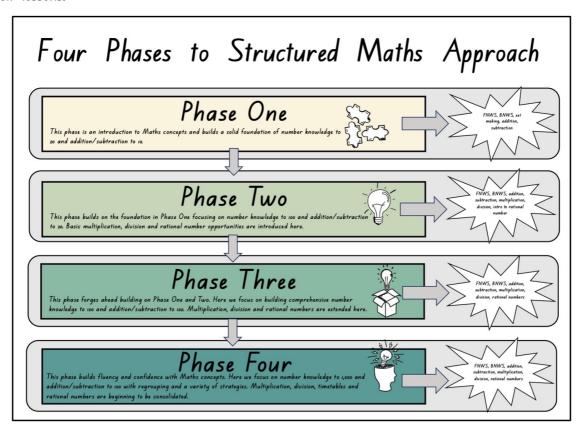
Phase Nine (Year 8)	Phase Eight (Year 7)	Phase Seven (Year 6)	Phase Six (Year 5)	Phase Five (Year 4)	Phase Four (Year 3)	Phase Three (Year 2)	Phase Two (Year 1)	Phase One (Year 0)			
									Join and separate groups of up a total of 10	during the first 6 months	
									Join and separate groups of up a total of 20 and find the difference between groups by grouping and counting	during the first	
									Add and subtract numbers up to 100 without renaming	during the second	Op
									Add and subtract numbers up to at least 100	during the third year	Operations: Additions a
									Add and subtract two and three digit numbers Add and subtract decimals to one decimal place.	during Year 4	dditions an
									Add and subtract whole numbers up to 10,000. Add and subtract whole numbers and decimals to two decimal places.	during Year 5	nd subtraction
									Add and subtract any whole numbers. Add and subtract whole numbers and decimals to two decimal places.	during Year 6	on
									Use the order of operations Add and subtract decimals to three decimal places Explore adding and subtracting integers	during Year 7	
									Use the order of operations Add, subtract, and multiply decimals Add and subtract with integers	during Year 8	

Phase Nine (Year 8)	Phase Eight (Year 7)	Phase Seven (Year 6)	Phase Six (Year 5)	Phase Five (Year 4)	Phase Four (Year 3)	Phase Three (Year 2)	Phase Two (Year 1)	Phase One (Year 0)			
									N <sub>A</sub>	during the first 6 months	
									Multiply and divide using equal grouping or counting.	during the first	
									Multiply and divide using equal grouping or skip counting.	during the second	Op
									Multiply a one or two digit number by a one-digit number, using skip counting or known facts. Divide whole numbers by a one-digit divisor with no remainders, using grouping.	during the third year	perations: N
									Multiply a two-digit by one-digit number and two one-digit whole numbers. Divide up to a three-digit whole number by a one-digit divisor with no remainder.	during Year 4	<b>Nultiplication</b>
									Multiply a three-digit by one-digit number and two two-digit whole numbers. Divide up to a three-digit whole number by a one digit divisor with a remainder.	during Year 5	Operations: Multiplication and division
									Multiply multi-digit whole numbers. Dividie up to a four digit whole number by a one-digit divisor with a remainder.	during Year 6	on
									Multiply whole numbers Divide whole plivide whole numbers by one- or two-digit divisors Use the order of operations Multiply and divide numbers by 10, 100, and 1,000	during Year 7	
									Multiply whole numbers Divide whole numbers Use the order of operations Multiply and divide numbers by powers of 10	during Year 8	

Phase Nine (Year 8)	Phase Eight (Year 7)	Phase Seven (Year 6)	Phase Six (Year 5)	Phase Five (Year 4)	Phase Four (Year 3)	Phase Three (Year 2)	Phase Two (Year 1)	Phase One (Year 0)			
									₹	during the first 6 months	
									Identify and represent halves and quarters as fractions of sels and regions, using equal parts of the whole.  Find a half or quarter of a sel using equal sharing and grouping.	during the first	
									Identify, read, write (using symbols and words), and represent halves, quarters, and eighths as fractions of sets and regions, using equal parts of the whole. Directly compare two fractions involving halves, quarters, and eighths. Find a half and quarter of a set by identifying groups and patterns and identify the whole set or shape when given a half or quarter.	during the second	
									Identify, read, write, and represent halves, thirds, quarters, fifths, sixths, and eighths as fractions of sets and regions, using equal parts of the whole and by positioning on a number (Compare and order fractions involving halves, quarters, and eighths and identify when two fractions or equivalent. Find a unit fraction of a whole number, identify the whole set or amount when given a unit fraction. Add and subtract unit fractions with the same denominator.	during the third year	R
									identify, read, write, and represent tenths as fractions and decimals Compare and adecimals as fractions and decimal tenths as fractions and decimal tenths of ractions (e.g., 0.3 = 3). Convert between mixed numbers and improper fractions. Find a unit fraction of a whole number, Identify a unit fraction part of a whole set.  Add and subtract fractions with the same denominators.	during Year 4	Rational numbers
									Identify, read, write, and represent tenths and hundredths as fractions and decimals.  Compare and order tenths and hundredths as fractions and decimals, and convert decimals to fractions. Identify equivalent fractions.  Convert between mixed numbers and improper fractions.  Find a fraction of a whole number, Identify a whole set.  Add and subtract fractions with the same denominators.	during Year 5	S
									Identify, read, write, and represent fractions, decimals (to two places), and related percentages compare and order fractions, decimals (to two places), and percentages to fractions, decimals (no two places), and percentages to fractions, identify equivalent fractions.  Represent fractions in their simplest form.  Convert between mixed numbers and improper fraction or percentage of a whole number, identify the whole set. Add and subtract fractions with the same or related denominators.	during Year 6	
									Identify, read, write, and represent fractions, decimals (to three places), and percentlages Compare, order, and convert between fractions, decimals (to three places), and percentages Find equivalent fractions, and convert between improper fractions, and mixed numbers.  Add and subtract fractions with different denominators of up to a tenth, using equivalent fractions and and aubtract decimals to three decimal places, with an emphasis on estimating before calculating	during Year 7	
									Identify, read, write, and represent fractions, decimals, and percentages Compare, order, and convert between fractions, and percentages Find equivalent fractions, and procentages Find a percentage of a number of fractions and mixed find a percentage of a whole amount, given a simple fraction or simple fraction or percentage Add and subtract fractions with different denominators, using equivalent fractions	during Year 8	

# The Four Phases breakdown to Structured Maths Approach

Here is the complete breakdown to Structured Maths Approach across the four phases and what each chunk will cover with their lessons.



Phase 1 (Year o or New Entrants)			
Chunk 1	Chunk 2	Chunk 3	Chunk 4
Numbers 1–10	Add and subtract to 5	Numbers 11–20	Add and subtract to 10

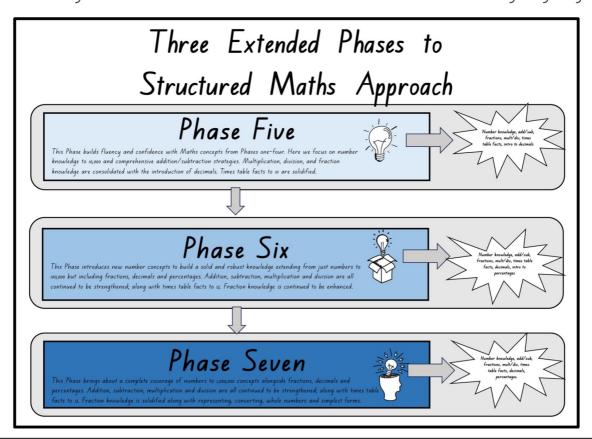
Phase 2 (Year 1)			
Chunk 1 Numbers 1—100	Chunk 2 Add and subtract to 20	Chunk 3 Add and subtract to 20 Rational Numbers	Chunk & Multiplication and division Rational Numbers

Phase 3 (Year 2)			
Chunk 1 Numbers 1—1,000	Chunk 2 Add and subtract to 100	Chunk 3 Add and subtract to 100 Rational Numbers	Chunk & Multiplication and division Rational Numbers

Phase L (Year 3)			
Chunk 1 Numbers 1–10,000	Chunk 2 Add and subtract to 1,000	Chunk 3  Add and subtract to 1,000  Multiplication and division	Chunk & Add and subtract to 1,000 Multiplication and division Rational Numbers

## The Three Extended Phases of Structured Maths Approach breakdown

Here is the complete breakdown to the extended Structured Maths Approach across the last three additional phases and what each chunk will cover within their lessons. This has been an add-on to the initial Structured Maths Approach plan due to high teacher demand and the need for a continuation for students in higher year groups.

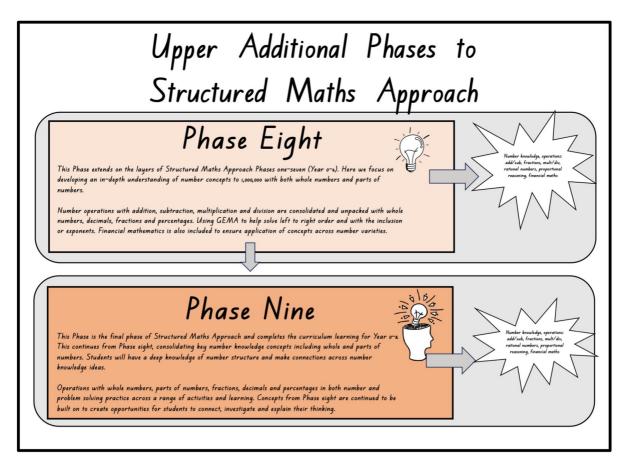


Phase s (Year L)				
Chunk 1 Numbers 1–10,000	Chunk 2 Addition and subtraction	Chunk 3 Multiplication and division	Chunk & Rational Numbers (fractions)	
Phase 6 (Year 5)				
Chunk 1 Numbers 1–100,000 Rational Numbers (fractions)	Chunk 2 Number Addition and subtraction	Chunk 3 Multiplication and division	Chunk & Rational Numbers (fractions)	

Phase 7 (Year 6)			
Chunk 1 Numbers 1—1,000,000 Rational Numbers (fractions)	Chunk 2 Number Addition and subtraction	Chunk 3 Multiplication and division	Chunk & Rational Numbers (fractions)

# The Upper Additional Phases Structured Maths Approach

Here is the complete breakdown to the upper additional Structured Maths Approach across the last two additional phases and what each chunk will cover within their lessons. This has been a final add-on to the initial Structured Maths Approach plan due to high teacher demand and the need for a continuation for students in higher year groups.



Phase 8 (Year 7)			
Chunk 1 Number concepts	Chunk 2 Addition, subtraction, multiplication and division	Chunk 3 Rational Numbers (fractions)	Chunk & Rational Numbers (fractions)

Phase a (Year 8)			
Chunk 1 Number concepts	Chunk 2 Addition, subtraction, multiplication and division	Chunk 3 Rational Numbers (fractions)	Chunk & Rational Numbers (fractions)