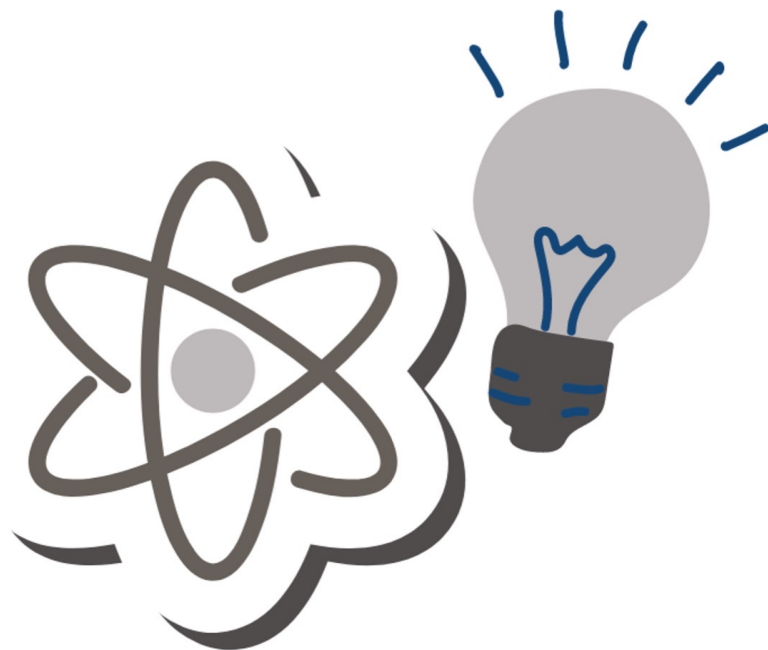


PROGRAMME COMPARISON

# STRUCTURED MATHS APPROACH

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 Refresh 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
Stage 2	Counting from one (materials)									Multiplication and division
Stage 3	Counting from one (imaging)									Proportional
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 vs Numeracy Project Framework Comparison

Designed and created by Jordan Priestley – Structured Maths Approach

	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)	
Stage 1 One-to-one counting	Blue							Blue Red Green
Stage 2 Counting from one (materials)	Blue	Blue						Blue Red Green
Stage 3 Counting from one (imaging)		Blue Red Green						Blue Red Green
Stage 4 Counting on (advanced counting)		Blue Red Green	Blue Red Green					Blue Red Green
Stage 5 Early additive Part-whole thinking			Blue Red Green	Blue Red Green	Blue Red Green			Blue Red Green
Stage 6 Advanced additive				Blue Red Green	Blue Red Green	Blue Red Green		Blue Red Green
Stage 7 Advanced multiplicative part-whole						Blue Red Green	Blue Red Green	Blue Red Green
Stage 8 Advanced proportional part-whole								Blue Red Green

Key:
Blue Addition and subtraction
Red Multiplication and division
Green Proportional

## 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.

Year Level	Curriculum Levels	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)	Key:			
End of Year 1	Early Level 1	Stage 1	One-to-one counting									Blue	Addition and subtraction	
		Stage 2	Counting from one (materials)										Red	Multiplication and division
		Stage 3	Counting from one (imaging)										Green	Proportional
End of Year 2	Level One	Stage 4	Counting on (advanced counting)											
End of Year 3	Early Level 2	Early Stage 5	Early additive Part-whole thinking											
End of Year 4	Level 2	Stage 5												
End of Year 5	Early Level 3	Early Stage 6	Advanced additive											
End of Year 6	Level 3	Stage 6												
End of Year 7	Early Level 4	Early Stage 6												
End of Year 8	Level 4	Stage 7	Advanced multiplicative part-whole											
End of Year 8	Level 4	Stage 7												
End of Year 8	Early Level 5	Early Stage 8	Advanced proportional part-whole											
	Level 5	Stage 8												

Curriculum Levels are approximate based on Numeracy Stages and rough estimations. These will also include OTJ's and what you are seeing in the classroom. This is comparing (roughly) three different things - curriculum levels, numeracy project stages and Structured Maths Approach.

Early Level 2 = Early Stage 5  
Phase 3/4

Level 2 = Stage 5  
Phase 4/5

Early Level 3 = Early Stage 6  
Phase 5/6

Level 3 = Stage 6  
Phase 6/7




Early Level 4 = Early Stage 7  
Phase 7

# Structured Maths Approach vs Year Level and Curriculum Level Comparison

Designed and created by Jordan Priestley – Structured Maths Approach

Year Level	Curriculum Levels	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)
End of Year 1	Early Level 1	Stage 1	One-to-one counting						
		Stage 2	Counting from one (materials)						
		Stage 3	Counting from one (imaging)						
End of Year 2	Level One	Stage 4	Counting on (advanced counting)						
		Stage 5	Counting on (advanced counting)						
End of Year 3	Early Level 2	Stage 6	Counting on (advanced counting)						
		Stage 7	Counting on (advanced counting)						
End of Year 4	Level 2	Stage 8	Counting on (advanced counting)						
		Stage 9	Counting on (advanced counting)						
End of Year 5	Early Level 3	Stage 10	Counting on (advanced counting)						
		Stage 11	Counting on (advanced counting)						
End of Year 6	Level 3	Stage 12	Counting on (advanced counting)						
		Stage 13	Counting on (advanced counting)						
End of Year 7	Early Level 4	Stage 14	Counting on (advanced counting)						
		Stage 15	Counting on (advanced counting)						
End of Year 8	Level 4	Stage 16	Counting on (advanced counting)						
		Stage 17	Counting on (advanced counting)						
End of Year 8	Early Level 5	Stage 18	Counting on (advanced counting)						
		Stage 19	Counting on (advanced counting)						
End of Year 8	Level 5	Stage 20	Counting on (advanced counting)						
		Stage 21	Counting on (advanced counting)						

Key:
 Addition and subtraction
 Multiplication and division
 Proportional

Curriculum Levels are approximate based on Numeracy Stages and rough estimations. These will also include OTJ's and what you are seeing in the classroom.

This is comparing (roughly) three different things - curriculum levels, numeracy project stages and Structured Maths Approach.

Early Level 2 = Early Stage 5  
Phase 3/4

Level 2 = Stage 5  
Phase 4/5

Early Level 3 = Early Stage 6  
Phase 5/6

Level 3 = Stage 6  
Phase 6/7

Early Level 4 = Early Stage 7  
Phase 7

## Structured Maths Approach vs New Zealand Curriculum Refresh:

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 five aspects are broken down:

- Subitising
- Number Structure
- Operations: Addition and Subtraction
- Operations: Multiplication and Division
- Rationale Numbers

	Subitising						
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	recognise instantly the total number of objects in a group up to 6	recognise instantly the total number of objects in two patterns, each of up to five objects	partition a pattern of up to 10 objects, instantly recognise the number of objects in each part, and confirm the total number in the pattern using the parts	NA	NA	NA	NA
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)							

	Number Structure						
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	NA	partition and recombine sets of up to 10 in different ways, recognise and represent in different ways, the ten and ones structure of teen numbers (11-19)	group, partition and recombine whole numbers up to 100	group, partition and recombine whole numbers up to 1,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 10,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 100,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 1,000,000
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)							

	Operations: Additions and subtraction						
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	join and separate groups of up to a total of 10 objects, and find the result by grouping and counting	join and separate groups of up to a total of 20 objects, and find the difference between groups by grouping and counting	add and subtract numbers up to 100 by grouping and using number patterns	add and subtract two and three digit numbers	use their recalled addition and subtraction basic facts to solve problems, add and subtract two and three-digit numbers reliably and efficiently	add or subtract any whole number reliably and efficiently	add and subtract whole numbers and decimals to two places
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)							

	Operations: Multiplication and division						
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	NA	multiply and divide by making equal groups and using grouping or counting	multiply and divide by grouping and using number patterns	multiply two single digit numbers or multiply a single-digit and a two-digit number, divide whole numbers with a single-digit divisor and no remainders	use the relationship between multiplication and division to divide, recall multiplication and corresponding division facts for threes and fours	multiply two-digit numbers reliably and efficiently using the distributive property, recall multiplication and corresponding division facts for sixes, eights, and nines	multiply two and three digit whole numbers, divide whole numbers by one- or two-digit divisors
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)							

	Rational numbers						
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	NA	recognise and represent in different ways, halves and quarters of sets and regions	recognise the relationships between related fractions (one half is the same as two quarters), Find a half, quarter or third of a set by recognising groups and patterns, rather than sharing by ones	recognise, read, write, represent and order halves, thirds, quarters, fifths, sixths and eighths, find a unit fraction of a whole (a region, measurement or set of objects) and add unit fractions with the same denominator	represent common fractions, including those greater than 1, on a number line	compare fractions with a benchmark fraction and put them in order, convert between benchmark fractions, decimals and percentages (e.g. $1/2 = 0.5 = 50\%$ ), represent decimals, fractions and percentages using both discrete and continuous models	recognise, read, write, represent, compare and order fractions, decimals (to three places) and percentages, convert between fractions, decimals and percentages, find equivalent fractions for halves, thirds, quarters, sixths, and eighths and represent fractions in their simplest form, find a simple fraction or percentage of a whole number
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)							

Subitising							
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
Phase One (Year 0)	recognise instantly the total number of objects in a group up to 6	recognise instantly the total number of objects in two patterns, each of up to five objects	partition a pattern of up to 10 objects, instantly recognise the number of objects in each part, and confirm the total number in the pattern using the parts	NA	NA	NA	NA
Phase Two (Year 1)							
Phase Three (Year 2)							
Phase Four (Year 3)							
Phase Five (Year 4)							
Phase Six (Year 5)							
Phase Seven (Year 6)							

Number Structure							
6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6	
NA	partition and recombine sets of up to 10 in different ways recognise and represent in different ways, the ten and ones structure of teen numbers (1-19)	group, partition and recombine whole numbers up to 100	group, partition and recombine whole numbers up to 1,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 10,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 100,000	recognise, read, write, order, partition, recombine and represent whole numbers up to 1,000,000	
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)							



*Operations: Additions and subtraction*

	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
Phase One (Year 0)	join and separate groups of up to a total of 10 objects, and find the result by grouping and counting	join and separate groups of up to a total of 20 objects, and find the difference between groups by grouping and counting	add and subtract numbers up to 100 by grouping and using number patterns	add and subtract two and three digit numbers	use their recalled addition and subtraction basic facts to solve problems add and subtract two-and three-digit numbers reliably and efficiently	add or subtract any whole number reliably and efficiently	add and subtract whole numbers and decimals to two places
Phase Two (Year 1)							
Phase Three (Year 2)							
Phase Four (Year 3)							
Phase Five (Year 4)							
Phase Six (Year 5)							
Phase Seven (Year 6)							

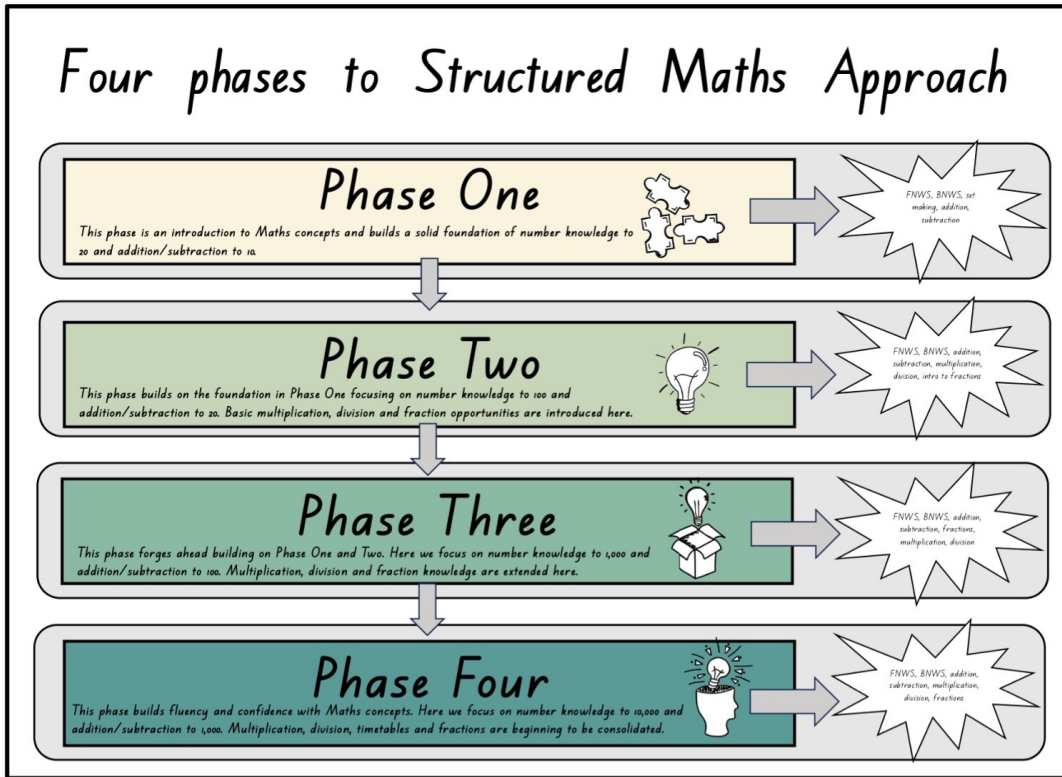
Operations: Multiplication and division

	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
Phase One (Year 0)	NA	multiply and divide by making equal groups and using grouping or counting	multiply and divide by grouping and using number patterns	multiply two single digit numbers or multiply a single-digit and a two-digit number divide whole numbers with a single-digit divisor and no remainders	use the relationship between multiplication and division to divide recall multiplication and corresponding division facts for threes and fours	multiply two-digit numbers reliably and efficiently using the distributive property recall multiplication and corresponding division facts for sixes, eights, and nines	multiply two and three digit whole numbers divide whole numbers by one- or two-digit divisors
Phase Two (Year 1)							
Phase Three (Year 2)							
Phase Four (Year 3)							
Phase Five (Year 4)							
Phase Six (Year 5)							
Phase Seven (Year 6)							

Rational numbers							
	6 months	during the first	during the second	end of year 3	during the fourth	during the fifth	end of year 6
	NA	recognise and represent in different ways, halves and quarters of sets and regions	recognise the relationships between related fractions (one half is the same as two quarters) Find a half, quarter or third of a set by recognising groups and patterns rather than sharing by ones	recognise, read, write, represent and order halves, thirds, quarters, fifths, sixths and eighths find a unit fraction of a whole (a region, measurement or set of objects) and add unit fractions with the same denominator	represent common fractions, including those greater than 1, on a number line	compare fractions with a benchmark fraction and put them in order convert between benchmark fractions, decimals and percentages (e.g. $1/2 = 0.5 = 50\%$ ) represent decimals, fractions and percentages using both discrete and continuous models	recognise, read, write, represent, compare and order fractions, decimals (to three places) and percentages convert between fractions, decimals and percentages find equivalent fractions for halves, thirds, quarters, sixths, and eighths and represent fractions in their simplest form find a simple fraction or percentage of a whole number
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)							

## 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 0 or New Entrants)

Chunk 1 Numbers 1-10	Chunk 2 Add and subtract to 5	Chunk 3 Numbers 11-20	Chunk 4 Add and subtract to 10
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### Phase 2 (Year 1)

Chunk 1 Numbers 1-100	Chunk 2 Add and subtract to 20	Chunk 3 Number Add and subtract to 20 Fractions	Chunk 4 Multiplication and division Fractions
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### Phase 3 (Year 2)

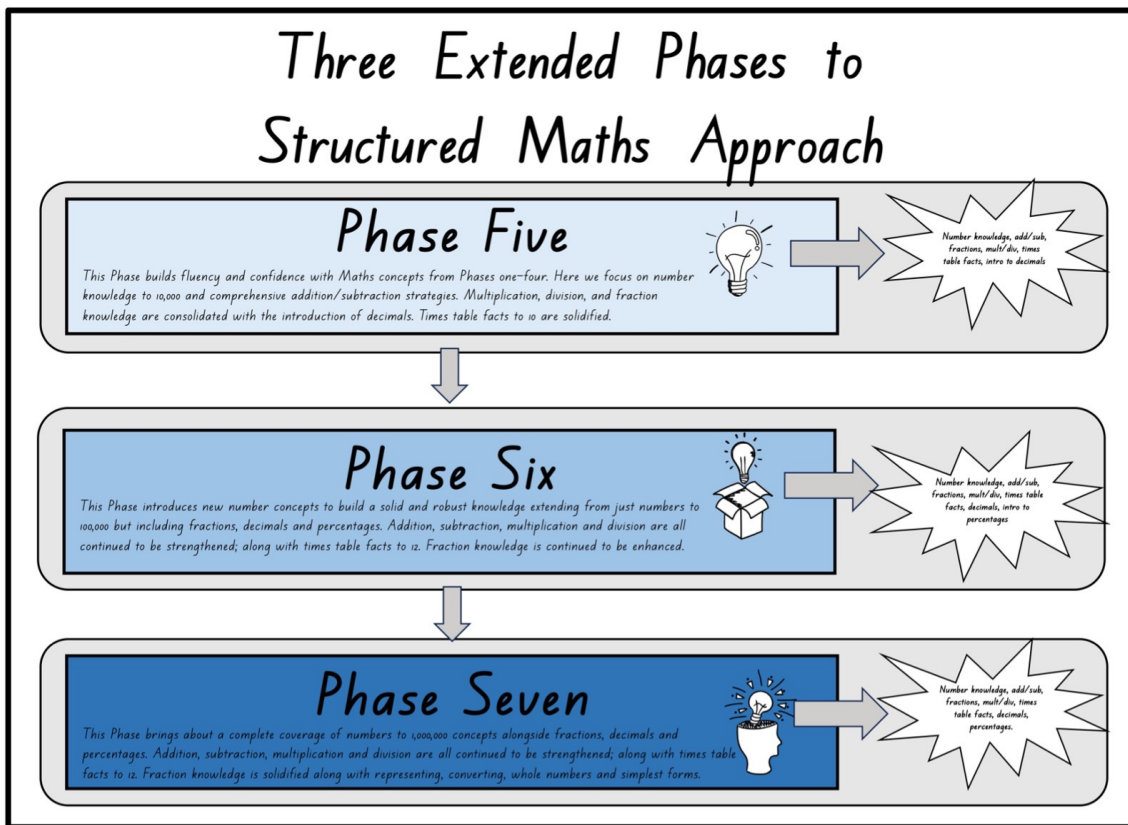
Chunk 1 Numbers 1-1,000	Chunk 2 Add and subtract to 100	Chunk 3 Number Add and subtract to 100 Fractions	Chunk 4 Multiplication and division Fractions
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### Phase 4 (Year 3)

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 4 Add and subtract to 1,000 Multiplication and division Fractions
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## The Three Extended Phases 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 5 (Year 4)

<p><i>Chunk 1</i> Numbers 1-10,000</p>	<p><i>Chunk 2</i> Addition and subtraction</p>	<p><i>Chunk 3</i> Multiplication and division</p>	<p><i>Chunk 4</i> Fractions</p>
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### Phase 6 (Year 5)

<p><i>Chunk 1</i> Numbers 1-100,000 Fractions</p>	<p><i>Chunk 2</i> Number Addition and subtraction</p>	<p><i>Chunk 3</i> Multiplication and division</p>	<p><i>Chunk 4</i> Fractions</p>
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### Phase 7 (Year 6)

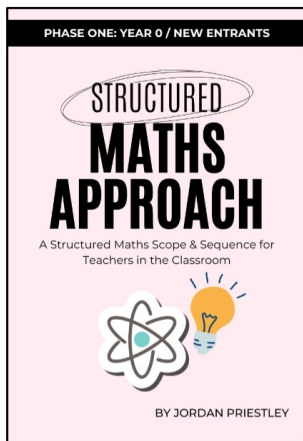
<p><i>Chunk 1</i> Numbers 1-1,000,000 Fractions</p>	<p><i>Chunk 2</i> Number Addition and subtraction</p>	<p><i>Chunk 3</i> Multiplication and division</p>	<p><i>Chunk 4</i> Fractions</p>
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## Which phase is best for me?

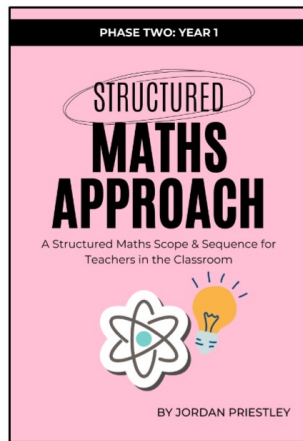
The scope is comprehensive coverage right from when students start in Year 0 (or New Entrants) and carry them through the years. They are broken down into phases and chunks within those phases that help you build on, progress and unpack key teaching targets for learners to set them up for success. This is primarily number focused and includes number knowledge and number strategy.

Having a look at the programme comparison might help you find the right phase to start with or what gaps need to be filled using Structured Maths Approach.

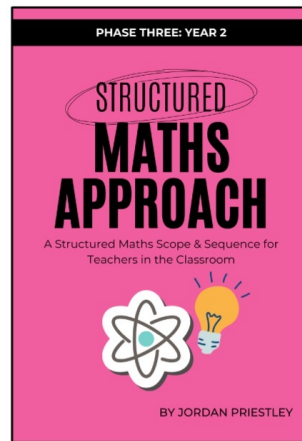
Phase One  
Year 0/New Entrants



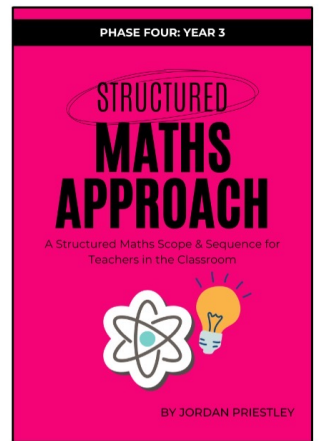
Phase Two  
Year 1



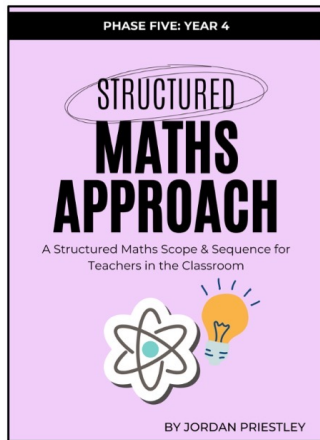
Phase Three  
Year 2



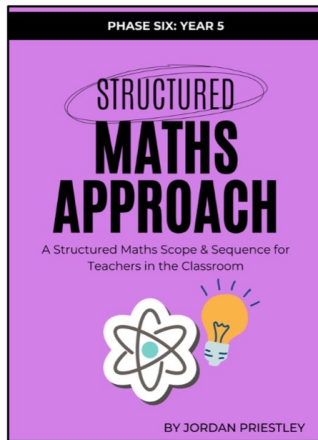
Phase Four  
Year 3



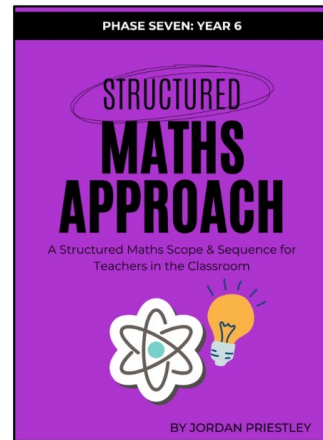
Phase Five  
Year 4



Phase Six  
Year 5



Phase Seven  
Year 6



All phases come with relevant teaching materials to support the implementation in your classroom:

- Structured Maths Approach teaching book
- Lesson plans for each lesson
- Matching slide show presentations for each lesson
- Lesson checks – worksheets that can be used as follow ups, check ins or confirmation of the learning
- Basic facts slide show presentations for key basic facts
- Lesson planner template with drop down learning targets included

Each phase comes in either physical copy (which includes a digital version also) or a digital copy only.