

Please enlarge the following pages to A3 size, as each document is designed to provide a single-page overview of the year, when used in-sync with the Top Ten Diagnostic Assessments and Units for Years 3-6.

Top Ten Mathematics

[toptenmaths.com](https://www.toptenmaths.com)

[Hyperlinks](#) to the units are included.

Number and Algebra

Measurement and Geometry

Probability and Statistics

Rationale:

This scope and sequence is based on results achieved at our intensive PL schools, detailed at <https://www.toptenresources.com/researchbasis>, including 98% strong or exceeding in NAPLAN. It has also been based on our classroom research in-person in Singapore, where we researched scope and sequences with their school leaders, and found consistent 'blocks' of units are standard practice.

Significant results are achieved through solid blocks of teaching for the big ideas in number, based on points-of-need from the Top Ten diagnostic assessment data, with cross-content links wherever possible, but with a consistent main focus on number as the learning intention for solid sequences.

This is followed by spaced retrieval through our daily 5-minute fluency routine ([Five-Minute Fluency](#)), hands-on warm-up games detailed at the start of each unit, number talks focused on mental strategies, as well problem-solving prompts linked to each unit.

We recommend number talks, warm-up games and a [5-minute daily point-of-need fluency routine](#), instead of daily review PowerPoints. The reason we do not recommend daily review PowerPoints is that these are not differentiated by point-of-need (one slide for the whole class), do not offer high value-add in terms of student think time and work rate (dominated by screen and teacher talk time, and abstract representations only), and do not build high levels of student engagement or a love of numeracy.

This is a recommended sequence only – schools can use this as a base document to start a conversation with teams.

We recommend prioritising a yearly sequence that provides for substantial blocks of teaching for the big ideas in number, followed by spaced retrieval with warm-up games, number talks and a 5-minute fluency routine, to ensure:

1. Teachers have time to act on the data from comprehensive diagnostic assessments, then deliver material sequentially, rather than piece-by-piece throughout the year, which avoids rushing through ‘topics’ before students have consolidated and mastered critical skills conceptually. **There must be time for substantial learning guided by the pre-test data. Spaced retrieval rationales do not hold until content has been mastered substantially through multiple exposures and repeated practice over the course of three solid weeks first.** Students cannot effectively retrieve a concept, if it has not been understood in the first place.

For example, within a typical *Year 1 Addition Unit*, the focus should be on one more, counting on, partitioning 3 to 9, then 10 facts. With a ‘one-week-per-topic approach,’ one strategy would need to be taught on each day, as opposed to having a week-long focus on each strategy across a 3-5 week focus on Addition. The block method mirrors how teams deliver content in Singapore.

2. Teachers can formatively assess students’ progress throughout a unit and deliver point-of-need teaching, which simply cannot occur if topics such as Place Value, Addition, Multiplication, Fractions, and others, are allocated only one week at a time. By the time the topic is ‘revisited’ in Term 2, often students cannot build on what was started (but not consolidated or mastered concretely) in the rushed single-week Term 1 ‘coverage’ of the content. During longer units, teachers can identify gaps, observe and act on students’ thinking and strategies, then have time to work on all this intensively with students. **Coverage does not equal mastery.**
3. By deciding on the full sequence from the start of the year, teams spend planning time focusing on ‘how’ to teach, rather than ‘what’ to teach. Teams can be confident that all parts of the curriculum are allocated a fair amount of time, relative to the amount and complexity of the content for each concept. Number is prioritised and, even prior to the curriculum changes, the Top Ten sequence had number as the dominant focus, as without number all the other strands suffer (a student cannot estimate in measurement without a good grasp of number, and nor can a student work out differences in data on a graph without a solid concept of difference between within Subtraction). **Often NAPLAN points-of-need noted in the other strands can, in fact, be traced back to critical gaps in the big ideas of number.**

Note: Number units have been prioritised at the start of terms when student and teacher energy is higher.

Note: Problem-solving and cross strand connections (decimals linking to money and measurement, multiplication linking to area, fractions linking to probability, and so on) and real-life applied mathematics are already embedded within all unit plans.

Concepts can be relocated to ideally fit with inquiry focuses throughout the year (for example, orienteering in PE linking to a Location unit).

Note: Ongoing warm-ups and 11-week terms allow time for revision of any critical gaps or partially consolidated content, particularly gaps evident from post-assessments.

Note: Financial Mathematics in the New WA Mathematics Curriculum has been incorporated into all Number and Algebra Units (Place Value, Decimals, Addition, Subtraction, Multiplication, Division and Fractions).

Note also: Modelling with Number in the new WA Mathematics Curriculum is incorporated into every operations unit through the tasks (main lesson plans), as well as the *Problem-solving Prompts PowerPoints* linked to each unit plan.

Critical note on spaced retrieval: Warm-up games and number talks for mental strategies are specifically recommended, leveraging spaced retrieval throughout the year.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE							LENGTH 2-3 weeks depending on term		
Spaced retrieval	5-minute fluency daily routine		2- and 3-digit Addition and Subtraction Number Talks			Analogue clock daily pauses to tell the time		Multiplication warm-up games		
Main lesson sequence	Revising 3- and 4-digit numbers Place Value Early Years Revision Unit	Constructing & recording to 10 000 and beyond Year 3 A Place Value	Constructing & recording to 10 000 and beyond Year 3 A Place Value	Rounding and Number Lines Year 3 B Place Value	Rounding and Number Lines Year 3 B Place Value	Renaming and Bridging Year 3 C Place Value	Renaming and Bridging Year 3 C Place Value	Estimating and measuring using formal metric units		

Focuses are recommended in the warm-ups row (below the main concept row for each term, circled in yellow above), however, these focuses should also be guided by the post-test data for each cohort.

Our five-minute fluency daily routine is pre-differentiated by point-of-need and recommended for the full seven years of primary school – all detailed within the [Five-Minute Fluency folder](#).

New WA Mathematics Curriculum – Year 3 Recommended Sequence

	Week <u>1</u>	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE 7 weeks							LENGTH, HEIGHT & WIDTH, AREA 2 weeks		MASS & CAPACITY
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to tell the time on analogue clock Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Revise 3-digit place value Early Years Revision Unit	Constructing & recording to 10 000 and beyond Year 3 A Place Value	Constructing & recording to 10 000 and beyond Year 3 A Place Value	Rounding with Number Lines Year 3 B Place Value	Rounding Year 3 B Place Value Front-load Year 4 Shootouts 4B	Renaming <i>X-ray Eyes, Hide & Seek</i> Year 3 C Place Value	Renaming Year 3 C Place Value Front-load Place Value Softball 4C	Estimate , measure and order using formal metric units (mm, cm, m) Compare areas in uniform informal units Key benchmarks for capacity (estimate using 1L container) For mass, measure in grams and kg		
Term 2	ADDITION 4 weeks				SUBTRACTION 4 weeks				TIME 2 weeks	
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Applying Early Years Strategies & Place Value Addition Unit 2	Split strategy mentally to 3-digits Addition Unit 3	Making 100 Addition Unit 4 Dollars and cents (making \$1) <i>Early Years Pack Money Unit 2</i>	Jump strategy Addition Unit 5 Switch strategy Addition Unit 6	Applying Early Years Strategies & Place Value Subtraction Unit 2	Jump Back Strategy Subtraction Unit 3	Jump the Difference Strategy Subtraction Unit 4	Jump the Difference Subtraction Unit 4 Transformation Unit 5	Tell time to the minute Durations in hours, minutes and seconds Relationship between formal units of time	
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency Warm-ups & number talks for Addition & Subtraction post-test gaps Daily pause to tell time Length/mass/capacity estimation objects/container Fractions front-loading warm-ups (Unit 2 and Unit 3)									
Main lesson sequence	Doubling Family Multiplication Unit 2	Tens Family Multiplication Unit 3 Applying Multiplicative Thinking Multiplication Unit 5	Multiples of 3 Multiplication Unit 4 Applying Multiplicative Thinking Multiplication Unit 5	Applying Multiplicative Thinking Multiplication Unit 5	Quotitive Division Division Unit 2	Halving Family and Tens Family Strategies Division Unit 3	Halving and Tens Strategies Division Unit 3 Known or near multiplication fact families Division Unit 4	Known or near multiplication facts – division fact families Division Unit 4	Simple maps to show position and pathways Relative position of key features	Dot plots, tables and column graphs Interpret to answer their question
Term 4	FRACTIONS 4 weeks				PROBABILITY & STATISTICS		ANGLES	PATTERNS 2 weeks		SHAPE
Spaced retrieval	5-minute fluency Warm-ups to target Multiplication and Division post-test gaps Multiplication practice All operations Number Talks Daily pause to tell time									
Main lesson sequence	Revision Fractions Unit 1 Real-life Fractions Unit 2	Real-life, Counting by & Number Lines Fractions Unit 2	Real-life, Counting by & Number Lines Fractions Unit 2	Equivalence Fractions Unit 3	Language of chance for everyday events List possible outcomes Likelihood of outcomes for equally likely experiments LINK TO FRACTIONS		Compare size in everyday situations LINK TO FRACTIONS	Equality, balancing + - Increasing and decreasing additive patterns Patterns Unit for 3/4		Translate, reflect, line symmetry Models of 3D, compare and classify

New WA Mathematics Curriculum – Year 3/4 Recommended Sequence

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE 8 weeks								LENGTH, MASS, CAPACITY & VOLUME	
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to calculate duration or time till an event Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Constructing & recording Place Value Year 3 A	Constructing & recording Place Value Year 4 A	Rounding and Number Lines Place Value Year 3 B	Rounding and Number Lines Place Value Year 4 B	Renaming and Bridging Place Value Year 3 C	Renaming and Bridging Place Value Year 4 C	Introducing Decimals (Money focus for Year 3) Year 4 Decimals	Introducing Decimals (Money focus for Year 3) Year 4 Decimals	Estimate, measure and compare in metric units using scaled and digital instruments Analog and digital scales	
Term 2	ADDITION 3 weeks			SUBTRACTION 4 weeks				TIME 2 weeks		AREA & PERIMETER
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Split strategy mentally Add Unit 3 Making 100 and 1000 mentally Add Unit 4	Jump strategy Addition Unit 5 Switch strategy Addition Unit 6	Switch strategy Addition Unit 6 Estimate and Algorithm Addition Unit 7	Jump Back Subtraction Unit 3 Jump the Difference Subtraction Unit 4	Jump the Difference Subtraction Unit 4 Calculating Change to 5° within Unit 4	Transformation Pump it up & Drop it low Strategies Unit 5	Estimate, All Mental Strategies & the Algorithm Subtraction Unit 6	Tell time to the minute am and pm notation Convert between units of time Determine duration		Perimeter with scaled instruments, informal and formal units Area using square tiles
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency Number talks for Addition & Subtraction post-test gaps Fractions warm-ups (Unit 3) Length/mass/capacity/temperature estimation with decimals									
Main lesson sequence	Doubling and Tens Strategies (Year 4 apply to larger #s) Multiply Unit 2 and Multiply Unit 3	Multiples of 3 Family and x7 Multiply Unit 4 Applying Multiplicative Thinking Unit 5	Applying Multiplicative Thinking Multiplication Unit 5	Power of 10, Estimation and the Area Model Multiplication Unit 6	Halving Family and Tens Strategies (Year 4 apply to larger numbers) Division Unit 3	Use Known or Near Multiplication Facts – Division Fact Families Division Unit 4	Known or Near x Facts – Division Fact Families Division Unit 4 Applying to problems Division Unit 5	Divisibility Patterns Division Unit 6 Estimation and Reverse Area Model Division Unit 7	Positions and pathways Grid maps Scales and legends	Dot plots, tables, column graphs, many-to-one pictographs and column graphs
Term 4	FRACTIONS 4 weeks				PROBABILITY & STATISTICS		ANGLES	PATTERNS	SHAPE & SYMMETRY	
Spaced retrieval	5-minute fluency Warm-ups to target Multiplication and Division post-test gaps Multiplication practice All operations Number Talks									
Main lesson sequence	Real-life and Counting by Fractions Fractions Unit 2	Equivalence Fractions Unit 3	Equivalence Fractions Unit 3	Improper Fractions to Mixed Fractions Unit 4	Order likelihood of everyday events and identify when not impacted by previous events Likelihood of outcomes for equally and unequally likely experiments LINK TO FRACTIONS		Compare size (Yr3) Benchmark to right angles (Yr4) LINK TO FRACTIONS	Equality Balance + - Additive & multiplicative patterns Patterns Unit for 3/4	Translations and reflections, line symmetry Combine and split 2D For 3D, make models, compare and classify, visualise features unseen	

New WA Mathematics Curriculum – Year 4 Recommended Sequence

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE (INCLUDING DECIMALS) 8 weeks								LENGTH, MASS, CAPACITY & VOLUME	
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to calculate duration or time till an event Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Constructing & recording Wonders of World Place Value 4 A	Constructing & recording Places Paint Samples, Happiness Project Place Value Year 4 A	Rounding and Number Lines Rounding Shootouts with Number Lines Place Value Year 4 B	Renaming and Bridging X-ray Eyes and Banker Place Value Year 4 C	Renaming and Bridging Place Value Softball, What Changed Game Place Value Year 4 C	Introducing Decimals (money and measurement links) Year 4 Decimals	Introducing Decimals (money and measurement links) Year 4 Decimals	Introducing Decimals (money and measurement links) Year 4 Decimals	Estimate, measure and compare using scaled and digital instruments, including partial units/decimals Analog and digital scales for mass Explore and compare volume APPLYING DECIMALS	
Term 2	ADDITION 3 weeks			SUBTRACTION 4 weeks				TIME 2 weeks		AREA & PERIMETER
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Split strategy mentally to 4-digits Add Unit 3 Making 1000 mentally Add Unit 4	Jump strategy Addition Unit 5 Switch strategy Addition Unit 6	Switch strategy Addition Unit 6 Estimate and Algorithm Addition Unit 7	Jump Back Subtraction Unit 3 Jump the Difference Subtraction Unit 4	Jump the Difference Subtraction Unit 4 Calculating Change to 5° within Unit 4	Transformation Pump it up & Drop it low Strategies Unit 5	Estimate, All Mental Strategies & the Algorithm Subtraction Unit 6	Convert between units of time am and pm notation Determine duration		Perimeter with scaled instruments, informal and formal units Area using square tiles
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency daily Number talks Addition & Subtraction post-test gaps Fractions warm-ups (Unit 3 & 4) Length/mass/capacity/temp estimation with decimals									
Main lesson sequence	Doubling and Tens applied to larger numbers Multiply Unit 2 Multiplicative Thinking Unit 5	Multiples of 3 Family and x7 Multiply Unit 4 Applying Multiplicative Thinking Unit 5	Applying Multiplicative Thinking Multiplication Unit 5	Power of 10, Estimation and Area Model Multiplication Unit 6	Halving Family and Tens Strategies applied to larger numbers Division Unit 3	Use Known or Near Multiplication Facts – Division Fact Families Division Unit 4	Applying Strategies to Solve Division Problems Division Unit 5	Divisibility Patterns Division Unit 6 Estimation and Reverse Area Model Division Unit 7	Positions and pathways Grid maps Scales and legends	Many-to-one pictographs and column graphs Interpret findings in context
Term 4	FRACTIONS 4 weeks				PROBABILITY & STATISTICS		ANGLES	PATTERNS	SHAPE & SYMMETRY	
Spaced retrieval	5-minute fluency daily Warm-ups to target Multiplication and Division post-test gaps Multiplication daily practice warm-ups All operations Number Talks									
Main lesson sequence	Equivalence Fractions Unit 3	Equivalence Fractions Unit 3	Improper and Mixed Fractions Unit 4	Mixed Unit 4 or Front-load Fractions Unit 5	Order likelihood of everyday events and identify when not impacted by previous events Likelihood of outcomes for equally and unequally likely experiments LINK TO FRACTIONS		Equal to, greater or less than right angles LINK TO FRACTIONS	Multiplicative patterns Patterns Unit for 3/4	Connect 3D to 2D, visualise features that cannot be seen Composite shapes Line and rotational symmetry STEM Construction	

New WA Mathematics Curriculum – Year 5 Recommended Sequence

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE, FRACTIONS, DECIMALS, FACTORS AND DIVISIBILITY 8 weeks								LENGTH, MASS & CAPACITY	
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to calculate duration or time till an event Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Constructing & recording large place values Year 5 A Place Value	Rounding & Number Lines Parkour with Number Lines Year 5 B	Place Value Softball Revision Extension: Softball decimal version Renaming and Bridging Year 5 C	Factors and Multiples Multiply Unit 8 Lessons 2 & 3 Divisibility Division Unit 6	Share \$1 investigation & Constructing a fraction wall Fractions Unit 7 Lessons 3-5	Revise equivalence Fractions Unit 3 Revise improper Fractions Unit 4	Compare, order and partition decimals Year 5 Decimals Unit	Compare, order and partition decimals Year 5 Decimals Unit	Choosing appropriate metric units to estimate, measure and compare, record partial units For volume, use metric cubic units APPLYING DECIMALS	
Term 2	ADDITION 3 weeks			SUBTRACTION 3 weeks			FRACTIONS 2 weeks		TIME	AREA, PERIMETER, VOLUME
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Revise Switch Add Unit 6 Estimate & All Mental Strategies Add Unit 7	All Strategies, Estimation & Algorithm Add Unit 7	Financial Transactions Estimation (solve as well for extension) Add Unit 8	Revise Jump the Difference Subtraction Unit 4 Revise Transformation Unit 5	All Mental Strategies and Estimation Subtraction Unit 6	The Algorithm Subtraction Unit 6 Financial transactions estimation Unit 7	Revise equivalence Fractions Unit 3 Add and Subtract Fractions Unit 6	Add and Subtract Fractions (same denominator) Fractions Unit 6	Solve problems involving 12- and 24-hour time systems	Efficient perimeter strategies for rectangles Square metres for area Cubic units for volume
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency Warm-ups & number talks for Addition & Subtraction post-test gaps Fractions warm-ups (Unit 2 and Unit 3) Length/mass/capacity/temperature estimation with decimal results									
Main lesson sequence	Applying Multiplicative Thinking Unit 5	Power of 10, Estimation and the Area Model Multiplication Unit 6	Estimation, Lattice and Vertical Algorithm Multiplication Unit 7	Lattice Multiplication Unit 7 Factor strategy Unit 8	Division Fact Families Division Unit 4 Division Problems Division Unit 5	Divisibility patterns Division Unit 6	Estimation and Reverse Area Model Division Unit 7	Estimation, Short Division and Remainders in All Forms Unit 8	Directional language Grid references and coordinates	Line graphs for continuous data Organise and make choices to represent
Term 4	FRACTIONS 4 weeks				PROBABILITY & GRAPHING		ANGLES	PATTERNS	SHAPE & TRANSFORMATIONS	
Spaced retrieval	5-minute fluency Warm-ups to target Multiplication and Division post-test gaps Multiplication practice All operations Number Talks									
Main lesson sequence	Counting by, improper and mixed Fractions Unit 4	Compare and order with reasoning Fractions Unit 5	Equivalence to Decimals and Percentages Fractions Unit 7	Equivalence to Decimals and Percentages, number lines Fractions Unit 7	Compare everyday chance events Repeated chance experiments representing results as fractions LINK TO FRACTIONS Revisit graphing based on a problem to solve	Estimate, measure and construct Classify all types LINK TO FRACTIONS	Unknown values in + - x ÷ patterns Patterns Unit for 5/6	Visualise, connect, design and construct nets Translate, reflect and rotate, symmetries		

New WA Mathematics Curriculum – Year 5/6 Recommended Sequence

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE, FRACTIONS, DECIMALS, FACTORS AND DIVISIBILITY 8 weeks								LENGTH, MASS & CAPACITY	
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to calculate duration or time till an event Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Constructing & recording Year 5 A Place Value	Rounding Parkour with Number Lines Year 5 B	Renaming Year 5 C Place Value Cash renaming Place Value Revision Year 6 A Place Value	Real-life integers and placement on number lines Year 6 B Place Value	Prime, composite and square numbers using arrays Year 6 C Place Value	Share \$1 investigation and Construct a fraction wall Fractions Unit 7 Lessons 3-5	Compare, order and partition decimals Year 5 Decimals Unit	In-depth decimals before the operations Year 6 Decimals Unit Softball decimal version	Estimate, measure and convert between metric units Choosing appropriate metric units and recording partial units APPLYING DECIMALS	
Term 2	ADDITION 3 weeks			SUBTRACTION 3 weeks			FRACTIONS 2 weeks		TIME	AREA, PERIMETER, VOLUME
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Revise Switch Add Unit 6 Estimate & All Mental Strategies Add Unit 7	All Strategies & Algorithm Addition Unit 7	Add Decimals, mainly as money Addition Unit 8	Revise Jump the Difference Subtraction Unit 4 Transformation Unit 5	All Mental Strategies, Estimation & the Algorithm Subtraction Unit 6	Subtract Decimals, mainly as money Subtraction Unit 7	Revise equivalence Fractions Unit 3 THEN Fractions Unit 6	Add and Subtract Fractions Fractions Unit 6	12- and 24-time problems Timetables and itineraries	Yr5: Efficient perimeter strategies for rectangles Yr6: Understand the formula for area and volume
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency Warm-ups & number talks for Addition & Subtraction post-test gaps Fractions warm-ups (Unit 2 and Unit 3) Length/mass/capacity/temperature estimation with decimal results									
Main lesson sequence	Applying Multiplicative Thinking Unit 5 Daily practice	Estimation, Lattice and Vertical Algorithm Multiplication Unit 7	Lattice repeat Multiplication Unit 7 Factors Multiplication Unit 8	Multiply and divide decimals by power of 10 and extension Multiply Unit 9	Daily practice options Division problems Division Unit 5	Divisibility Divide Unit 6	Estimate and the Reverse Area Model Divide Unit 7	Estimation, Short Division and Remainders in All Forms Divide Unit 8	Yr5: Directional language, grid maps Yr 6: All 4 quadrants of Cartesian Plane	Software Line graphs for change over time Communicate findings
Term 4	FRACTIONS 4 weeks				PROBABILITY & GRAPHING		ANGLES	PATTERNS	SHAPE	TRANSFORMATIONS
Spaced retrieval	5-minute fluency Warm-ups to target Multiplication and Division post-test gaps Multiplication practice All operations Number Talks									
Main lesson sequence	Counting by, improper and mixed Fractions Unit 4	Compare and order with reasoning Fractions Unit 5	Equivalence to Decimals and Percentages, number lines Fractions Unit 7	Fractions of a quantity, % discounts and increases Fractions Unit 8	Compare everyday chance events Repeated chance experiments representing results as fractions Increased number of trials to compare expected and observed frequencies	Yr5: Estimate, measure, construct Yr6: Relationships between angles, unknown angles	Unknown values Additive and multiplicative patterns Generalise rules Patterns Unit for 5/6	Yr5: Nets Yr6: Visualise, sketch and construct 3D objects	Translate, reflect, rotate, line and rotational symmetry Link to Cartesian Plane to keep engaged for high school	

New WA Mathematics Curriculum – Year 6 Recommended Sequence

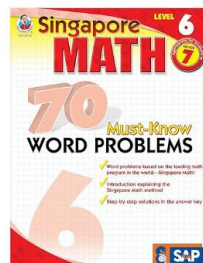
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	PLACE VALUE, FRACTIONS, DECIMALS, FACTORS AND DIVISIBILITY 8 weeks								LENGTH, MASS & CAPACITY	
Spaced retrieval	5-minute fluency daily routine Addition & Subtraction Number Talks Daily pause to calculate duration or time till an event Multiplication daily practice warm-ups									
Main lesson sequence	Bookwork expectations Rounding Revision Parkour Year 5 B	Place Value Revision Year 6 A Place Value OR for higher cohorts Year 6 E Extension	Real-life integers and placement on number lines Year 6 B Place Value	Prime, composite and square numbers using arrays Year 6 C Place Value	Share \$1 investigation & Constructing a fraction wall Fractions Unit 7 Lessons 3-5	Revise equivalence Fractions Unit 3 Revise comparing Fractions Unit 5	Front-loading decimals before the operations Year 6 Decimals Unit	Front-loading decimals before the operations Year 6 Decimals Unit	Convert between metric units for length, mass and capacity APPLYING DECIMALS	
Term 2	ADDITION 3 weeks			SUBTRACTION 3 weeks			FRACTIONS 2 weeks		TIME	AREA, PERIMETER, VOLUME
Spaced retrieval	5-minute fluency daily routine Daily length estimation challenge using objects Warm-ups relating to Place Value post-test gaps Multiplication Number Talks									
Main lesson sequence	Revise Switch Add Unit 6 Estimate & All Mental Strategies Add Unit 7	All Strategies & Algorithm Addition Unit 7	Add Decimals, mainly as money Addition Unit 8	Revise Jump the Difference Subtraction Unit 4 Revise Transformation Subtraction Unit 5	All Mental Strategies, Estimation & the Algorithm Subtraction Unit 6	Subtract Decimals, mainly as money Subtraction Unit 7	Revise equivalence Fractions Unit 3 Add / Subtract Fractions Unit 6	Add and Subtract Fractions (related denominator) Fractions Unit 6	Solve longer durations for 12-/24-systems in timetables, itineraries	Construct and understand the formula for the area of a rectangle and volume of a prism LEADING INTO MULTIPLICATION
Term 3	MULTIPLICATION 4 weeks				DIVISION 4 weeks				LOCATION 1 week	STATISTICS 1 week
Spaced retrieval	5-minute fluency Warm-ups & number talks for Addition & Subtraction post-test gaps Fractions warm-ups (Unit 2 and Unit 3) Length/mass/capacity/temperature estimation with decimal results									
Main lesson sequence	Daily practice options Area Model Multiply Unit 6	Estimation, Lattice and Vertical Algorithm Multiplication Unit 7	Lattice repeat Multiplication Unit 7 Factor strategy Multiplication Unit 8	Multiply decimals by power of 10 and extension Multiplication Unit 9	Daily practice options Division problems Division Unit 5	Divisibility Divide Unit 6 Estimate and Reverse Area Divide Unit 7	Estimation, Short Division and Remainders in All Forms Divide Unit 8	Divide decimals by power of 10 and extension Divide Unit 9	All 4 Quadrants of Cartesian Plane Applying Integers	Side-by-side column graphs Analyse, choose and interpret
Term 4	FRACTIONS 4 weeks				PROBABILITY & STATISTICS		ANGLES	PATTERNS	SHAPE	TRANSFORMATIONS
Spaced retrieval	5-minute fluency Warm-ups to target Multiplication and Division post-test gaps Multiplication practice All operations Number Talks									
Main lesson sequence	Compare and order with reasoning Fractions Unit 5	Equivalence to Decimals and Percentages, number lines Fractions Unit 7	Fractions of a quantity, % discounts and increases Fractions Unit 8	Extension only x and ÷ fractions Fractions Unit 9 Fractions Unit 10	Repeated chance experiments with equally likely or unequally likely outcomes, increased number of trials to compare expected and observed frequencies, variation from increased trials		Relationships between angles, determine unknown angles	Order of operations Generalise rules Patterns for 5/6	Visualise, sketch and construct 3D objects	Translate, reflect, rotate 2D shapes Linking to Cartesian Plane to keep engaged for high school preparation

Recommended resources for ongoing, in-class, workable extension

Overview of extension within the pack

Further extension options

- All extending prompts within all units (the majority of lessons contain at least two extending prompts, while some include up to seven extending prompts that span to secondary level).
- *Fractions Unit 9* and *Fractions Unit 10* relating to multiplying and dividing fractions with visual models and understanding.
- *Integers (Place Value Unit 6B)* which includes extending prompts relating to Year 7 and above content.
- *Prime, composite, square, triangular numbers unit (Place Value 6C)*, which includes extending prompts relating to Year 7 and above content.
- Open middle for challenging, grit-building and easy-to-pass-across problems to solve with no explanation required:
<https://www.openmiddle.com/>
- Infinite Pickle problems: <https://mathpickle.com/wp-content/uploads/2023/04/The-Infinite-Pickle-web-May-2023.pdf> and <https://mathpickle.com/organized-by-grade/>
- TedED Riddles: https://www.youtube.com/playlist?list=PLJicmE8fK0EiFRt1Hm5a_7SJFaikIFW30
- NRICH problems to solve: <https://nrich.maths.org/>



- Singapore Maths worded problems books: