NSW Syllabus Alignment Guide Stage 2 – Stage 3

 (\mathfrak{C})

Australian Curriculum Edition

NSW Syllabus Edition Coming Soon

Our NSW Syllabus Edition of Maths Trek **Years 3–6** will be ready for use in 2026. In the meantime, schools can use the Australian Curriculum Edition of Maths Trek. This *Alignment Guide* shows how the Australian Curriculum Edition aligns to Stages 2 and 3.

Note: Our NSW Syllabus Edition for K-2 is ready for use in 2025.



Maths Trek Years 3–6 are written for the Australian Curriculum v9. Refer to the tables to see how the Maths Trek topics and investigations align with the NSW Mathematics Syllabus for Stage 2A to Stage 3B.

Stage 2A Syllabus Alignment Guide

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

• develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01

Strand	Mathematical concept	Outcomes	Content	Topics and investigations
 Number and algebra	Representing numbers using place value A	 A student: applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands MA2-RN-01 represents and compares decimals up to 2 decimal places using place value MA2-RN-02 	 Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 	 1.3 Regrouping numbers 2.3 Place value to thousands 3.1 Expanded notation 3.2 Counting on and back by 1, 10, 100 3.3 Comparing numbers to 10 000 4.1 Ordering numbers to 10 000
	Additive relations A	 A student: selects and uses mental and written strategies for addition and subtraction involving 2-and 3-digit numbers MA2-AR-01 completes number sentences involving addition and subtraction by finding missing values MA2-AR-02 	 Use the principle of equality Recognise and explain the connection between addition and subtraction Select strategies flexibly to solve addition and subtraction problems of up to 3 digits Represent money values in multiple ways 	 Fact families for addition and subtraction Addition with partitioning Subtraction with partitioning Subtraction with partitioning Addition with partitioning Addition with bar models Subtraction with bar models Subtraction with bar models Subtraction with bar models Subtraction with bar models Subtraction Addition Addition Addition Subtraction Addition Addition Subtraction Addition Subtraction Addition Subtraction Addition Subtraction Trash or treasure



 Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
 Number and algebra	Multiplicative relations A	 A student: represents and uses the structure of multiplicative relations to 10 × 10 to solve problems MA2-MR-01 completes number sentences involving multiplication and division by finding missing values MA2-MR-02 	 Generate and describe patterns Use arrays to establish multiplication facts from multiples of 2 and 4, 5 and 10 Recall multiplication facts of 2 and 4, 5 and 10 and related division facts Represent and solve problems involving multiplication fact families 	 16.1 Number patterns 16.2 Multiples 2, 3, 4, 5, 10 16.3 Multiples and repeated addition 17.1 Multiplication facts 3, 4 17.2 Multiplication facts 5, 10 20.3 Multiplication problem-solving 24.1 Division facts 3, 4 24.2 Division facts 5, 10 24.3 Division problem-solving 	Inv: Picture perfect patterns
	Partitioned fractions A	A student: • represents and compares halves, quarters, thirds and fifths as lengths on a number line and their related fractions formed by halving (eighths, sixths and tenths) MA2-PF-01	 Create fractional parts of a length using techniques other than repeated halving Model and represent unit fractions, and their multiples, to a complete whole on a number line 	29.3 Fractions as part of a whole30.2 Fractions on a number line30.3 Fractions as division	Inv: Fraction action
 Measurement and space	Geometric measure A	A student: • uses grid maps and directional language to locate positions and follow routes MA2-GM-01 • measures and estimates lengths in metres, centimetres and millimetres MA2-GM-02 • identifies angles and classifies them by comparing to a right angle MA2-GM-03	 Position: Interpret movement on a map Position: Locate positions on grid maps Length: Measure and compare objects using metres, centimetres and millimetres Angles: Identify angles as measures of turn 	 8.1 Measuring with metres 8.2 Measuring with centimetres 8.3 Measuring with metres and centimetres 25.2 Angles 32.2 Right angles 32.3 Maps and plans 	Inv: How do I measure up? Inv: Kakadu crossing Inv: Top team



Maths Trek 3

Maths Trek Copyright © Firefly Education 4

	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
	Measurement and space	Two-dimensional spatial structure A	 A student: compares two-dimensional shapes and describes their features MA2-2DS-01 performs transformations by combining and splitting two- dimensional shapes MA2-2DS-02 estimates, measures and compares areas using square centimetres and square metres MA2-2DS-03 	 2D shapes: Compare and describe features of two-dimensional shapes 2D shapes: Transform shapes by reflecting, translating and rotating Area: Use square centimetres to measure and estimate the areas of rectangles Area: Use square metres to measure and estimate the areas of rectangles 		
0		Three-dimensional spatial structure A	 A student: makes and sketches models and nets of three-dimensional objects including prisms and pyramids MA2-3DS-01 estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres MA2-3DS-02 	 3D objects: Make models of three-dimensional objects to compare and describe key features Volume: Measure and order containers using litres Volume: Compare objects using familiar metric units of volume 	15.2 Measuring with litres26.2 Pyramids and prisms26.3 Cylinders, cones, spheresInv: Cube conundrum	
		Non-spatial measure A	 A student: estimates, measures and compares the masses of objects using kilograms and grams MA2-NSM-01 represents and interprets analog and digital time in hours, minutes and seconds MA2-NSM-02 	 Mass: Compare objects using the kilogram Time: Represent and read analog time 	 7.1 Time past the hour 12.1 Measuring with kilograms 12.2 Measuring with grams 12.3 Measuring with kilograms and grams 15.1 Time to the hour 19.3 Time to the nearest the hour 23.3 Time to the nearest minute 29.1 Seconds, minutes, hours, days 29.2 Duration of time 	Inv: Kilogram quest Inv: It's on the cards Inv: Top team Inv: Sprouting surprises



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations
0	Statistics and probability	Data A	 A student: collects discrete data and constructs graphs using a given scale MA2-DATA-01 interprets data in tables, dot plots and column graphs MA2-DATA-02 	 Collect discrete data Organise and display data using tables and graphs Interpret and compare data 	 6.1 Collecting and organising data 7.2 Column graphs 7.3 Interpreting graphs 10.1 Picture graphs 11.2 Comparing tables and graphs 28.3 Column graphs
0		Chance A	A student: • records and compares the results of chance experiments MA2-CHAN-01	• Identify possible outcomes from chance experiments	6.2 Predicting possible outcomes6.3 Predicting possible outcomes with spinners



ISBN 978 1 74135 328 0

Stage 2B Syllabus Alignment Guide

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

• develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
)	Number and algebra	Representing numbers using place value B	A student: • applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands MA2-RN-01 • represents and compares decimals up to 2 decimal places using place value MA2-RN-02	 Whole numbers: Order numbers in the thousands Whole numbers: Apply place value to partition, regroup and rename numbers up to 6 digits Whole numbers: Recognise and represent numbers that are 10, 100 or 1000 times as large Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths Decimals: Make connections between fractions and decimal notation 	 Place value to hundred thousands Place value and expanded notation Rounding to ten thousands Place value to tenths Tenths on a number line Multiplying and dividing by 10, 100, 1000 Rounding using a target digit strategy Place value to hundredths Hundredths on a number line Place value and expanded notation 	Inv: Lengthy leaps
)		Additive relations B	 A student: selects and uses mental and written strategies for addition and subtraction involving 2-and 3-digit numbers MA2-AR-01 completes number sentences involving addition and subtraction by finding missing values MA2-AR-02 	 Partition, rearrange and regroup numbers to at least 1000 to solve additive problems Apply addition and subtraction to familiar contexts, including money and budgeting Complete number sentences involving additive relations to find unknown quantities 	 Addition Subtraction Solving problems with bar models Calculating with money Budgets Equivalent number sentences Addition Subtraction Estimation strategies Addition Subtraction Subtraction 	 23.1 Turnarounds and friendly pairs 26.3 Inverse operations 28.1 Addition and subtraction Inv: Time of my life Inv: Puzzling perimeters



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
	Number and algebra	Multiplicative relations B	 A student: represents and uses the structure of multiplicative relations to 10 × 10 to solve problems MA2-MR-01 completes number sentences involving multiplication and division by finding missing values MA2-MR-02 	 Investigate number sequences involving related multiples Use known number facts and strategies Use the structure of the area model to represent multiplication and division Use number properties to find related multiplication facts Operate with multiples of 10 Represent and solve word problems with number sentences involving multiplication or division 	 3.2 Multiplication facts 2, 3, 5, 10 3.3 Multiplication facts 4, 6, 8, 9 4.1 Multiples using algorithms 4.3 Multiplication using the area model 8.3 Multiplication using the area model 10.1 Factors 15.1 Equivalent number sentences 25.1 Division facts 2, 3, 5, 10 25.2 Division facts 4, 6, 8, 9 25.3 Division 26.3 Inverse operations 28.2 Division 	Inv: Time of my life Inv: Super sports stadium
-		Partitioned fractions B	A student: • represents and compares halves, quarters, thirds and fifths as lengths on a number line and their related fractions formed by halving (eighths, sixths and tenths) MA2-PF-01	 Model equivalent fractions as lengths Represent fractional quantities equal to and greater than one 	 20.3 Fractions on a number line 21.1 Equivalent fractions 23.3 Fractions as division 28.3 Mixed numerals 29.1 Mixed numerals and improper fractions 	Inv: Ripper rides Inv: Fraction fun
	Measurement and space	Geometric measure B	 A student: uses grid maps and directional language to locate positions and follow routes MA2-GM-01 measures and estimates lengths in metres, centimetres and millimetres MA2-GM-02 identifies angles and classifies them by comparing to a right angle MA2-GM-03 	 Position: Create and interpret grid maps Position: Use directional language and describe routes with grid maps Length: Use scaled instruments to measure and compare lengths Angles: Compare angles to a right angle 	 Measuring perimeter Calculating perimeter Grid references Maps, pathways and directions Angles Measuring with millimetres Millimetres, centimetres and metres 	Inv: It's only natural Inv: Heritage hunt Inv: Lengthy leaps Inv: Puzzling perimeters Inv: Angle art



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
	Measurement and space	Two-dimensional spatial structure B	 A student: compares two-dimensional shapes and describes their features MA2-2DS-01 performs transformations by combining and splitting two- dimensional shapes MA2-2DS-02 estimates, measures and compares areas using square centimetres and square metres MA2-2DS-03 	 2D shapes: Create two- dimensional shapes that result from combining and splitting common shapes 2D shapes: Create symmetrical patterns and shapes Area: Measure the areas of shapes using the grid structure Area: Compare surfaces using familiar metric units of area 	 10.2 Line symmetry 10.3 Symmetrical patterns 12.2 Area 12.3 Area of irregular shapes 21.3 Tessellation 30.1 Quadrilaterals 30.2 Combining shapes 	Inv: It's only natural Inv: Ripper rides Inv: Angle art
0		Three-dimensional spatial structure B	 A student: makes and sketches models and nets of three-dimensional objects including prisms and pyramids MA2-3DS-01 estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres MA2-3DS-02 	 3D objects: Connect three- dimensional objects and two- dimensional representations Volume: Use scaled instruments to measure and compare capacities (internal volumes) 	7.2 Measuring with litres and millilitres7.3 Converting litres and millilitres14.3 Combining objects	Inv: Plenty of pikelets
		Non-spatial measure B	 A student: estimates, measures and compares the masses of objects using kilograms and grams MA2-NSM-01 represents and interprets analog and digital time in hours, minutes and seconds MA2-NSM-02 	 Mass: Use scaled instruments to measure and compare masses Time: Represent and interpret digital time displays Time: Use am and pm notation 	 7.1 Reading graduated scales 8.1 Measuring with kilograms and grams 30.3 Converting units of time 32.1 Time (am and pm) 32.2 Reading and interpreting timetables 32.3 Time to the nearest minute 	Inv: Plenty of pikelets Inv: Movie marathon



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
0	Statistics and probability	Data B	 A student: collects discrete data and constructs graphs using a given scale MA2-DATA-01 interprets data in tables, dot plots and column graphs MA2-DATA-02 	 Select and trial methods for data collection Construct and interpret data displays with many-to-one scales 	 4.2 Collecting and organising data 16.1 Picture graphs 19.3 Column graphs 20.2 Comparing graphs 	Inv: Movie marathon Inv: Lengthy leaps
		Chance B	A student: • records and compares the results of chance experiments MA2-CHAN-01	 Describe the likelihood of outcomes of chance events Identify when events are affected by previous events 	 14.1 Describing possible outcomes 14.2 Dependent and independent events 24.1 Predicting possible outcomes 	



Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

• develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01

	Strand	Mathematical concept	Outcomes	Content	Topics and investigations
•	Number and algebra	Represents numbers A	 A student: applies an understanding of place value and the role of zero to represent the properties of numbers MA3-RN-01 compares and orders decimals up to 3 decimal places MA3-RN-02 determines percentages of quantities, and finds equivalent fractions and decimals for benchmark percentage values MA3-RN-03 	 Whole numbers: Recognise, represent and order numbers in the millions Whole numbers: Apply place value to partition, regroup and rename numbers to 1 billion Decimals and percentages: Recognise that the place value system can be extended beyond hundredths Decimals and percentages: Compare, order and represent decimals 	 Place value to millions Rounding to ten thousands Place value to thousandths Percentages Place value beyond millions Comparing decimals Percentages Choosing units of measurement Place value and expanded notation Rounding using a target digit strategy
		Additive relations A	A student: • selects and applies appropriate strategies to solve addition and subtraction problems MA3-AR-01	 Apply efficient mental and written strategies to solve addition and subtraction problems Use estimation and place value understanding to determine the reasonableness of solutions 	 2.1 Addition 2.2 Subtraction 3.1 Estimation strategies 14.2 Addition 14.3 Turnarounds and friendly pairs 15.1 Subtraction with zeros 28.3 Estimation strategies

NSW Syllabus Alignment Guide Stage 3



Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
Number ar algebra	nd Multiplicative relations A	 A student: selects and applies appropriate strategies to solve multiplication and division problems MA3-MR-01 constructs and completes number sentences involving multiplicative relations, applying the order of operations to calculations MA3-MR-02 	 Determine products and factors Use partitioning and place value to multiply 2-, 3- and 4-digit numbers by one-digit numbers Select and apply mental and written strategies to multiply 2- and 3-digit numbers by 2-digit numbers Represent and solve division problems with whole number remainders Select and apply strategies to divide a number with 3 or more digits by a one-digit divisor Use estimation and rounding to check the reasonableness of answers to calculations 	 Fact families for multiplication and division Estimation strategies Multiplication using the area model Multiplication using split and multiply Multiplication – 3 digits × 1 digit Inverse operations Division Division Division with remainders Division with remainders Multiplication – 4 digits × 1 digit Multiplication – 4 digits × digit Multiplication by tens and hundreds 	 25.1 Multiplication using the area model 25.2 Multiplication – 3 digits × 2 digits 28.3 Estimation strategies Inv: Factor frenzy Inv: Down the drain Inv: Twinkle twinkle Inv: Never a cross word
	Representing quantity fractions A	 A student: compares and orders fractions with denominators of 2, 3, 4, 5, 6, 8 and 10 MA3-RQF-01 determines ¹/₂, ¹/₄, ¹/₅ and ¹/₁₀ of measures and quantities MA3-RQF-02 	 Recognise the role of the number 1 as representing the whole Compare and order common unit fractions Solve problems involving addition and subtraction of fractions with the same denominator 	 19.3 Comparing and ordering fractions 20.1 Adding and subtracting fractions 20.2 Equivalent fractions 20.3 Adding and subtracting fractions 	Inv: Dynamic dominoes



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
0	Measurement and space	Geometric measure A	 A student: locates and describes points on a coordinate plane MA3-GM-01 selects and uses the appropriate unit and device to measure lengths and distances including perimeters MA3-GM-02 measures and constructs angles, and identifies the relationships between angles on a straight line and angles at a point MA3-GM-03 	 Position: Explore the Cartesian coordinate system Length: Use metres and kilometres for length and distances Length: Measure lengths to find perimeters Angles: Estimate, measure and compare angles using degrees Angles: Use a protractor to measure and identify types of angles 	 4.3 Coordinates and directions 10.3 Calculating perimeter 11.2 Perimeter of rectangles 14.1 Measuring with kilometres 19.1 Coordinates to locate position 23.1 Classifying angles 23.2 Measuring angles 0° to 180° 32.3 Measuring angles 0° to 360° 	Inv: Race around Australia Inv: Radical renovation Inv: Score a duck Inv: Twinkle twinkle
		Two-dimensional spatial structure A	 A student: investigates and classifies two- dimensional shapes, including triangles and quadrilaterals based on their properties MA3-2DS-01 selects and uses the appropriate unit to calculate areas, including areas of rectangles MA3-2DS-02 combines, splits and rearranges shapes to determine the area of parallelograms and triangles MA3-2DS-03 	 2D shapes: Classify two-dimensional shapes and describe their properties Area: Use hectares and square kilometres as units of measurement for area Area: Calculate the areas of rectangles using familiar metric units 	11.3 Area of rectangles	Inv: Radical renovation



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
	Measurement and space	Three-dimensional spatial structure A	 A student: visualises, sketches and constructs three-dimensional objects, including prisms and pyramids, making connections to two-dimensional representations MA3-3DS-01 selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities MA3-3DS-02 	 3D objects: Compare, describe and name prisms and pyramids 3D objects: Connect three- dimensional objects with two- dimensional representations Volume: Choose appropriate units of measurement for capacity Volume: Use displacement to investigate volumes of irregular solids Volume: Connect decimal representations to the metric system 	25.3 Choosing units of measurement26.1 Measuring with litres and millilitres32.2 Nets of objects	Inv: Down the drain Inv: Baffling blocks
0		Non-spatial measure A	 A student: selects and uses the appropriate unit and device to measure the masses of objects MA3-NSM-01 measures and compares duration, using 12- and 24-hour time and am and pm notation MA3-NSM-02 	 Mass: Choose appropriate units of measurement for mass Mass: Connect decimal representations to the metric system Time: Compare 12- and 24- hour time systems and convert between them 	 3.2 24-hour time 3.3 Reading timetables 4.1 Australian time zones 8.1 Measuring mass 25.3 Choosing units of measurement 	Inv: Race around Australia Inv: Breakfast club Inv: Finals fever
	Statistics and probability	Data A	 A student: constructs graphs using many- to-one scales MA3-DATA-01 interprets data displays, including timelines and line graphs MA3-DATA-02 	 Collect categorical and discrete numerical data by observation or survey Choose and use appropriate tables and graphs Describe and interpret different datasets in context 	 6.1 Line graphs 6.2 Categorical and numerical data 8.2 Dot plots 8.3 Column graphs 26.2 Ordinal data 26.3 The mode 	Inv: Breakfast club Inv: Down the drain
		Chance A	A student: • conducts chance experiments and quantifies the probability MA3-CHAN-01	• List outcomes of chance experiments involving equally likely outcomes and represent probabilities	30.1 Measures of probability30.2 Comparing probability	Inv: Score a duck



ISBN 978 1 74135 328 0

Stage 3B Syllabus Alignment Guide

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

• develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01



Strand	Mathematical concept	Outcomes	Content	Topics and investigations
Number and algebra	Represents numbers B	 A student: applies an understanding of place value and the role of zero to represent the properties of numbers MA3-RN-01 compares and orders decimals up to 3 decimal places MA3-RN-02 determines percentages of quantities, and finds equivalent fractions and decimals for benchmark percentage values MA3-RN-03 	 Whole numbers: Locate and represent integers on a number line Decimals and percentages: Make connections between benchmark fractions, decimals and percentages Decimals and percentages: Determine percentage discounts of 10%, 25% and 50% 	 Positive and negative numbers Renaming fractions as percentages Rounding decimals Renaming fractions as percentages Discount Percentages Positive and negative numbers
	Additive relations B	A student: • selects and applies appropriate strategies to solve addition and subtraction problems MA3-AR-01	 Choose and use efficient strategies to solve addition and subtraction problems Applies known strategies to add and subtract decimals 	 6.3 Multi-step problems – add and subtract 7.1 Estimation strategies 16.1 Decimal addition to tenths 16.2 Decimal subtraction to tenths 16.3 Decimal addition to hundredths 17.1 Decimal subtraction to hundredths 16.3 Decimal subtraction to hundredths 17.1 Decimal subtraction to hundredths 17.1 Decimal subtraction to hundredths 17.1 Decimal subtraction to hundredths



Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
Number and algebra	Multiplicative relations B	 A student: selects and applies appropriate strategies to solve multiplication and division problems MA3-MR-01 constructs and completes number sentences involving multiplicative relations, applying the order of operations to calculations MA3-MR-02 	 Select and apply strategies to solve problems involving multiplication and division with whole numbers Multiply and divide decimals by powers of 10 Use equivalent number sentences involving multiplication and division to find unknown quantities Represent and describe number patterns formed by multiples Explore the use of brackets and the order of operations to write number sentences 	 2.1 Fractions as division 3.2 Multiplication 3.3 Division 4.1 Investigating patterns 4.2 Patterns in a table of values 4.3 Inverse operations to check calculations 7.1 Estimation strategies 14.1 Function machines 14.2 Order of operations 14.3 Balancing equations 19.2 Decimal multiplication 23.3 Inverse operations to solve problems 	 25.3 Multiply decimals by 10, 100, 1000 26.1 Decimal multiplication 28.2 Patterns and rules Inv: Lilja's locked level Inv: Clever containers
	Representing quantity fractions B	 A student: compares and orders fractions with denominators of 2, 3, 4, 5, 6, 8 and 10 MA3-RQF-01 determines ¹/₂, ¹/₄, ¹/₅ and ¹/₁₀ of measures and quantities MA3-RQF-02 	 Recognise that a fraction can represent a division Compare common fractions with related denominators Build up to the whole from a given fractional part Use equivalence to add and subtract fractional quantities Find fractional quantities of whole numbers (halves, quarters, fifths and tenths) 	 Comparing and ordering fractions Fractions as division Equivalent fractions Adding and subtracting fractions Adding and subtracting fractions 	Inv: Educational entrepreneur



Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
Measurement and space	Geometric measure B	 A student: locates and describes points on a coordinate plane MA3-GM-01 selects and uses the appropriate unit and device to measure lengths and distances including perimeters MA3-GM-02 measures and constructs angles, and identifies the relationships between angles on a straight line and angles at a point MA3-GM-03 	 Position: Use the 4 quadrants of the coordinate plane Length: Connect decimal representations to the metric system Length: Convert between common metric units of length Length: Solve problems involving the comparison of lengths using appropriate units Angles: Investigate angles on a straight line and angles at a point Angles: Investigate the relationships formed by the intersection of straight lines 	 6.1 Properties of angles 7.2 Metric system of measurement 7.3 Perimeter of rectangles 8.3 Area and perimeter 19.1 Coordinates in one quadrant 24.2 Properties of shapes 32.2 Coordinates in four quadrants 32.3 Transformations with coordinates 	Inv: Happy hippos Inv: Curious coordinates Inv: Clever containers
	Two-dimensional spatial structure B	 A student: investigates and classifies two- dimensional shapes, including triangles and quadrilaterals based on their properties MA3-2DS-01 selects and uses the appropriate unit to calculate areas, including areas of rectangles MA3-2DS-02 combines, splits and rearranges shapes to determine the area of parallelograms and triangles MA3-2DS-03 	 2D shapes: Dissect two-dimensional shapes and rearrange them using translations, reflections and rotations Area: Find the area of composite figures Area: Calculate the area of a parallelogram using subdivision and rearrangement Area: Determine the area of a triangle 	 8.1 Area of rectangles 8.2 Area of composite rectangles 24.3 Tessellations 30.3 Transformations 	Inv: Happy hippos Inv: Octi-origami



	Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
-	Measurement and space	Three-dimensional spatial structure B	 A student: visualises, sketches and constructs three-dimensional objects, including prisms and pyramids, making connections to two-dimensional representations MA3-3DS-01 selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities MA3-3DS-02 	 3D objects: Construct prisms and pyramids Volume: Use cubic metres for measurement of volume Volume: Recognise the multiplicative structure for finding volume Volume: Find the volumes of rectangular prisms in cubic centimetres and cubic metres 		
		Non-spatial measure B	 A student: selects and uses the appropriate unit and device to measure the masses of objects MA3-NSM-01 measures and compares duration, using 12- and 24-hour time and am and pm notation MA3-NSM-02 	 Mass: Convert between common metric units of mass Time: Solve problems involving duration, using 12- and 24- hour time 	 7.2 Metric system of measurement 10.1 Reading timetables 21.2 Reading and interpreting timetables 21.3 Calculating duration 23.2 Measuring with tonnes and kilograms 	Inv: Fantasy flight
	Statistics and probability	Data B	 A student: constructs graphs using many- to-one scales MA3-DATA-01 interprets data displays, including timelines and line graphs MA3-DATA-02 	 Interpret and compare a range of data displays Interpret data presented in digital media and elsewhere 	 Side-by-side column graphs Line graphs Stacked line graphs Bar charts Mode and range Comparing graphs 	 17.2 Misleading data and graphs 17.3 Causes of bias Inv: Unique you Inv: Record breaker Inv: Practice makes perfect Inv: Weird or wonderful weather



Strand	Mathematical concept	Outcomes	Content	Topics and investigations	
Statistics and probability	Chance B	A student: • conducts chance experiments and quantifies the probability MA3-CHAN-01	 Compare observed frequencies of outcomes with expected results Create random generators and describe probabilities using fractions Conduct chance experiments with both small and large 	29.1 Comparing probability29.2 Expected probability29.3 Observed probability30.1 Repeated probabilityexperiments	Inv: Practice makes perfect
			numbers of trials		