

Learning sequence	Term one	Term two	Term three	Term four
LS 1	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Numbers to 1 million <ul style="list-style-type: none"> Apply place value to hundreds-of-thousands Read, represent and order numbers to 1 000 000 Partition 6-digit numbers Round to nearest 1 000, 10 000, and 100 000 	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Introducing decimals <ul style="list-style-type: none"> Express decimals as tenths and hundredths Locate, compare & order tenths and hundredths Make connections between fractions and decimal notation 	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Patterns <ul style="list-style-type: none"> Place value review of Base 10 system Patterns Algebra 	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Number review Review: <ul style="list-style-type: none"> Term 1, Learning Sequence 1 Term 2, Learning Sequence 1 Term 3, Learning Sequence 1
	Number and Algebra Big idea: Addition and subtraction problems can be solved by using a variety of strategies Addition and subtraction <ul style="list-style-type: none"> Use quantity values and non-standard partitioning Use algorithms with and without regrouping Choose appropriate strategies Estimate to check solutions 	Number and Algebra Big idea: Multiplicative thinking involves flexible use of multiplication and division concepts, strategies and representations Multiplication and division <ul style="list-style-type: none"> Identify and continue number patterns with multiples Apply commutative and associative properties of multiplication Use flexible partitioning Recall multiplication facts to 10x10 	Measurement and Space Big idea: Understanding relationships between the properties of 2D shapes helps visualise and organise spaces in the world 2D shape properties <ul style="list-style-type: none"> Review properties of 2D shapes Combine common 2D shapes to form other shapes Split other shapes into two or more common shapes 	Number and Algebra Big idea: Fractions represent multiple ideas and can be represented in different ways Fractions applications <ul style="list-style-type: none"> Add and subtract fractions with the same or related denominators Solve word problems involving fractions
LS 3	Measurement and Space Big idea: What needs to be measured determines the unit of measurement Time <ul style="list-style-type: none"> Read and set time on digital devices Determine time remaining Use am and pm notation Relate analogue and digital time 	Measurement and Space Big idea: Visual representations help to understand aspects of the world (chance and position) Position <ul style="list-style-type: none"> Create and interpret grid maps Use compass directions (N, S, E, W) Describe journeys using directional language 	Number and Algebra Measurement and Space Big idea: Multiplicative thinking involves flexible use of multiplication and division concepts, strategies, and representations Linking multiplication to area and volume <ul style="list-style-type: none"> Connect grouping to arrays and area models Estimate, measure & record area in cm² (using grid overlays) and m² Sketch prisms on isometric grids Create models using connecting cubes 	Statistics and Probability Big idea: Questions can be asked and answered by collecting and interpreting data Chance <ul style="list-style-type: none"> Use the terms equally likely, likely and unlikely Compare the likelihood of obtaining outcomes Identify when events are affected by previous events
	Number and Algebra Big idea: Fractions represent multiple ideas and can be represented in different ways Fractions <ul style="list-style-type: none"> Represent equivalence Concrete materials, diagrams and number lines Compare partitioned fractions with same-size whole Regroup fractional parts beyond one 	Number and Algebra Measurement and Space Big idea: What needs to be measured determines the unit of measurement 3D objects and capacity <ul style="list-style-type: none"> Identify features of prisms, pyramids and cylinders: faces, edges, vertices, curved surfaces Sketch 3D objects from different views Measure and record capacity using mL and L Estimate the capacity of containers 	Number and Algebra Measurement and Space Big idea: What needs to be measured determines the unit of measurement Length and mass <ul style="list-style-type: none"> Estimate, measure and compare lengths Identify and measure perimeter Convert between cm and m, and m and cm Record lengths using decimals to 2 places Record and compare mass using g and Kg 	Number and Algebra Big idea: Multiplicative thinking involves flexible use of multiplication and division concepts, strategies, and representations Multiplication and division problems <ul style="list-style-type: none"> Use flexible strategies to solve word problems involving multiplication and division
LS 5	Statistics and Probability Big idea: Questions can be asked and answered by collecting and interpreting data Data <ul style="list-style-type: none"> Create, refine and conduct surveys to collect categorical or numerical data Use many-to-one scales Create column graphs Interpret and evaluate effectiveness of various data displays 	Number and Algebra Measurement and Space Big idea: Angles are the primary structural component of many shapes Angles <ul style="list-style-type: none"> Compare angles to a right angle Describe angles in comparison to quarter-turns 	Number and Algebra Big idea: Addition and subtraction problems can be solved by using a variety of strategies Addition and subtraction problems <ul style="list-style-type: none"> Use flexible strategies to solve word problems involving addition and subtraction Use addition and subtraction to solve problems involving money and budgeting 	Measurement and Space Big idea: Shapes encountered in daily life can be classified by their attributes Transformations of 2D shapes <ul style="list-style-type: none"> Create and record tessellating designs using triangles or quadrilaterals: reflecting, translating and rotating Apply and describe amounts of rotation: half, quarter and three-quarter-turns

Scope & Sequence NSW Stage 2 (B) Outcome map

Outcomes	Focus	Content	Located
MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands	Representing numbers using place value B	Whole numbers: Order numbers in the thousands	Term 1 LS 1 Term 2 LS 4 Term 4 LS 1
		Whole numbers: Apply place value to partition, regroup and rename numbers up to 6 digits	Term 1 LS 1, 2 Term 2 LS 2 Term 3 LS 1, 5 Term 4 LS 1, 4
		Whole numbers: Recognise and represent numbers that are 10, 100 or 1000 times as large	Term 1 LS 1, 2 Term 2 LS 1, 2 Term 3 LS 1, 5 Term 4 LS 1, 4
MA2-RN-02 represents and compares decimals up to 2 decimal places using place value	Representing numbers using place value B	Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths	Term 3 LS 4 Term 2 LS 1 Term 3 LS 1, 4 Term 4 LS 1
		Decimals: Make connections between fractions and decimal notation	Term 1 LS 4 Term 2 LS 1 Term 3 LS 1 Term 4 LS 1, 2
MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers	Additive relations B	Partition, rearrange and regroup numbers to at least 1000 to solve additive problems	Term 1 LS 2 Term 2 LS 1 Term 3 LS 5 Term 4 LS 1
		Apply addition and subtraction to familiar contexts, including money and budgeting	Term 3 LS 5
MA2-AR-02 completes number sentences involving addition and subtraction by finding missing values	Additive relations B	Complete number sentences involving additive relations to find unknown quantities	Term 3 LS 5
MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems	Multiplicative B	Investigate number sequences involving related multiples	Term 1 LS 1 Term 2 LS 2 Term 3 LS 1 Term 4 LS 4
		Use known number facts and strategies	Term 1 LS 1 Term 2 LS 2 Term 3 LS 1 Term 4 LS 4
		Use the structure of the area model to represent multiplication and division	Term 2 LS 2 Term 3 LS 3 Term 4 LS 4
		Use number properties to find related multiplication facts	Term 2 LS 2 Term 3 LS 3 Term 4 LS 4
		Operate with multiples of 10	Term 1 LS 1 Term 2 LS 2 Term 3 LS 3 Term 4 LS 4
MA2-MR-02 completes number sentences involving multiplication and division by finding missing values	Multiplicative	Represent and solve word problems with number sentences involving multiplication or division	Term 2 LS 2 Term 3 LS 3 Term 4 LS 4

Outcomes	Focus	Content	Located
MA2-PF-01 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)	Partitioned fractions B	Model equivalent fractions as lengths	Term 1 LS 4 Term 4 LS 2
		Represent fractional quantities equal to and greater than one	Term 1 LS 4 Term 2 LS 5 Term 4 LS 2
MA2-GM-01 uses grid maps and directional language to locate positions and follow routes	Geometric measure B	Position: Create and interpret grid maps	Term 2 LS 3
		Position: Use directional language and describe routes with grid maps	Term 2 LS 3
MA2-GM-02 measures and estimates lengths in metres, centimetres and millimetres	Geometric measure B	Length: Use scaled instruments to measure and compare lengths	Term 1 LS 4 Term 3 LS 4 Term 4 LS 2
MA2-GM-03 identifies angles and classifies them by comparing to a right angle	Geometric measure B	Angles: Compare angles to a right angle	Term 2 LS 5 Term 4 LS 5
MA2-2DS-01 compares two-dimensional shapes and describes their features	Two-dimensional spatial structure B	2D shapes: Create two-dimensional shapes that result from combining and splitting common shapes	Term 1 LS 3 Term 3 LS 2 Term 4 LS 5
MA2-2DS-02 performs transformations by combining and splitting two-dimensional shapes	Two-dimensional spatial structure B	2D shapes: Create symmetrical patterns and shapes	Term 3 LS 2 Term 4 LS 5
MA2-2DS-03 estimates, measures and compares areas using square centimetres and square metres	Two-dimensional spatial structure B	Area: Measure the areas of shapes using the grid structure	Term 3 LS 2, 3 Term 4 LS 5
		Area: Compare surfaces using familiar metric units of area	Term 3 LS 2, 3 Term 4 LS 5
MA2-3DS-01 makes and sketches models and nets of three-dimensional objects including prisms and pyramids	Three-dimensional spatial structure B	3D objects: Connect three-dimensional objects and two-dimensional representations	Term 2 LS 3, 4 Term 3 LS 3
MA2-3DS-02 estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres	Three-dimensional spatial structure B	Volume: Use scaled instruments to measure and compare capacities (internal volumes)	Term 2 LS 4
MA2-NSM-01 estimates, measures and compares the masses of objects using kilograms and grams	Non-spatial measure B	Mass: Use scaled instruments to measure and compare masses	Term 3 LS 4
MA2-NSM-02 represents and interprets analog and digital time in hours, minutes and second	Non-spatial measure B	Time: Represent and interpret digital time displays	Term 1 LS 3
		Time: Use am and pm notation	Term 1 LS 3
MA2-DATA-01 collects discrete data and constructs graphs using a given scale	Data B	Select and trial methods for data collection	Term 1 LS 5 Term 4 LS 3
MA2-DATA-02 interprets data in tables, dot plots and column graphs	Data B	Construct and interpret data displays with many-to-one scales	Term 1 LS 5 Term 4 LS 3
MA2-CHAN-01 records and compares the results of chance experiments	Chance B	Describe the likelihood of outcomes of chance events	Term 4 LS 3
		Identify when events are affected by previous events	Term 4 LS 3

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
<p>LS 1</p> <p>Big idea The number system extends infinitely to very large and very small numbers</p> <p>Topic Numbers to 1 million</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to ...</p> <p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10 ...</p>	<p>Representing numbers using place value B</p> <p>Multiplicative relations B</p>	<ul style="list-style-type: none"> 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 Investigate number sequences involving related multiples Use known number facts and strategies Operate with multiples of 10 	<p>B. Moving on with whole numbers & decimals</p> <ul style="list-style-type: none"> Expanded Notation Numbers in Words Partition and Rename 3 Rounding Numbers Numbers from Words to Digits 1 Missing Numbers 2 	<p>Represent 5-digit numbers</p> <ul style="list-style-type: none"> Reading, representing & ordering numbers to 10 000 Rounding numbers to 10 000 Partitioning 5-digit numbers 	<p>Number & Algebra, Whole Number 2-4</p> <ul style="list-style-type: none"> Swap the digits, DOK 2 <p>Number & Algebra, Whole Number 3-5</p> <ul style="list-style-type: none"> Exploring a 5-digit number, DOK 2 Target numbers!, DOK 3 Too much information, DOK 3 <p>Number & Algebra, Whole Number 4-6</p> <ul style="list-style-type: none"> Mysterious numbers, DOK 2 Clued in, DOK 2 Big number split, DOK 3 	<p>Year 5 Series E Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Looking at whole numbers – read and write numbers to 999 999 pp 1–2 Looking at whole numbers – order numbers to 999 999 pp 3–4 Place value of whole numbers – place value to 6 digits pp 13–14
<p>LS 2</p> <p>Big idea Addition and subtraction problems can be solved by using a variety of strategies</p> <p>Topic Addition and subtraction</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to ...</p> <p>MA2-AR-01 selects and uses mental and written strategies for addition ...</p>	<p>Representing numbers using place value B</p> <p>Additive relations B</p>	<ul style="list-style-type: none"> 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 Partition, rearrange and regroup numbers to at least 1000 to solve additive problems 	<p>B. Moving forward with addition & subtraction</p> <ul style="list-style-type: none"> Split Add and Subtract Pyramid Puzzles 1 Pyramid Puzzles 2 Partition Puzzles 1 Partition Puzzles 2 Addition Properties Strategies for Column Addition Columns that Add Column Addition 1 Missing Numbers 	<p>Addition & subtraction to 4 digits</p> <ul style="list-style-type: none"> Add/subtract using non-standard partitioning Add/subtract multiples of 100, 1000 & 10 000 Using algorithms to add (without regrouping) Using algorithms to add (with regrouping) Using algorithms to add (with & without regrouping) Using algorithms to subtract (without regrouping) Using algorithms to subtract (with regrouping) Rounding to estimate answers Choosing efficient strategies for addition Choosing efficient strategies for subtraction <p>Solve number sentences with add/subtract</p> <ul style="list-style-type: none"> Solving addition & subtraction number sentences 	<p>Number & Algebra, Addition & Subtraction 2-4</p> <ul style="list-style-type: none"> Choosing chores, DOK 4 <p>Number & Algebra, Addition & Subtraction 3-5</p> <ul style="list-style-type: none"> Missing numbers! DOK 3 All boxed up, DOK 2 Navigate the number maze, DOK 3 Shuffle those numbers! DOK 3 Explore an addition game, DOK 3 	<p>Year 5 Series E Addition and Subtraction</p> <ul style="list-style-type: none"> Addition mental strategies – jump strategy pp 1–2 Addition mental strategies – split strategy pp 3–4 Addition mental strategies – compensation strategy pp 5–8 Subtraction mental strategies – jump strategy pp 9–10 Subtraction mental strategies – split strategy pp 11–12 Subtraction mental strategies – compensation strategy pp 13–17

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
LS 3 Big idea What needs to be measured determines the unit of measurement Topic Time	MA2-2DS-01 compares two-dimensional shapes and describes their features MA2-AR-01 represents and interprets analog and digital time in hours ...	Two-dimensional spatial structure B Non-spatial measure B	<ul style="list-style-type: none"> 2D shapes: Create two-dimensional shapes that result from combining and splitting common shapes Time: Represent and interpret digital time displays Time: Use am and pm notation 	B. More non spatial measure: mass & time <ul style="list-style-type: none"> What is the Time? Quarter To and Quarter Past 	Represent time using digital displays <ul style="list-style-type: none"> Representing & reading digital time displays Using AM and PM notation 	Measurement Time 2-4 <ul style="list-style-type: none"> Time for T.V. , DOK 3 Mystery birthdate, DOK 3 Measurement, Time 3-5 <ul style="list-style-type: none"> Comparing different measures of time, DOK 2 The mysteries of time, DOK 2 	Year 4 Series D Time <ul style="list-style-type: none"> Telling time – digital pp 3–6 Measuring time – am and pm p 7
LS 4 Big idea Fractions represent multiple ideas and can be represented in different ways Topic Fractions	MA2-RN-02 represents and compares decimals up to 2 decimal places using ... MA2-PF-01 represents and compares halves, quarters, thirds and fifths as ... MA2-GM-02 measures and estimates lengths in metres, centimetres and ...	Representing numbers using place value B Partitioned fractions B Geometric measure B	<ul style="list-style-type: none"> Decimals: Make connections between fractions and decimal notation Model equivalent fractions as lengths Represent fractional quantities equal to and greater than one Length: Use scaled instruments to measure and compare lengths 	B. Moving forward with partitioned fractions <ul style="list-style-type: none"> Compare Fractions 1a Compare Fractions 1b Comparing Fractions 1 	Understand equivalent fractions <ul style="list-style-type: none"> Modelling equivalent fractions 	Number & Algebra, Fractions 2-4 <ul style="list-style-type: none"> Decorate using fractions, DOK 2 Number & Algebra, Fractions 3-5 <ul style="list-style-type: none"> Running a fraction of the race, DOK 2 	Year 4 Series D Fractions <ul style="list-style-type: none"> Types of fractions – equivalent fractions pp 12–14
LS 5 Big idea Questions can be asked and answered by collecting and interpreting data Topic Data	MA2-DATA-01 collects discrete data and constructs graphs using a given ... MA2-DATA-02 interprets data in tables, dot plots and column graphs	Data B	<ul style="list-style-type: none"> Select and trial methods for data collection Construct and interpret data displays with many-to-one scales 	B. Moving forward with data <ul style="list-style-type: none"> Picture Graphs: with scale & half symbols Reading from a Column Graph Making Picture Graphs: With Scale 	Interpret data with many-to-one scales <ul style="list-style-type: none"> Interpreting displays with many-to-one scales 	Statistics & data 2-4 <ul style="list-style-type: none"> Fruitful investigation, DOK 3 Statistics & data 3-5 <ul style="list-style-type: none"> Watch out! DOK 2 Create a picture graph, DOK 3 	Year 4 Series D Chance and Data <ul style="list-style-type: none"> Data – asking questions and collecting data pp 12–13 Data – tallies p 14 Data – column graphs pp 15–16 Data – picture graphs pp 17–18

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
LS 1 Big idea The number system extends infinitely to very large and very small numbers Topic Introducing decimals	MA2-RN-01 applies an understanding of place value and the role of zero ... MA2-RN-02 represents and compares decimals up to 2 decimal places using ... MA2-AR-01 selects and uses mental and written strategies for addition ...	Representing numbers using place value B Additive relations B	<ul style="list-style-type: none"> 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 Partition, rearrange and regroup numbers to at least 1000 to solve additive problems 	B. Moving on with whole numbers & decimals <ul style="list-style-type: none"> Decimals on the Number Line Decimals from Words to Digits 1 Decimal Place Value Decimal Order 1 	Represent decimals to hundredths <ul style="list-style-type: none"> Introducing decimal tenths Introducing decimal hundredths Comparing & ordering decimals to hundredths Partitioning decimal hundredths Connecting decimals to common fractions Connecting decimals & fractions up to hundredths 	Number & Algebra, Whole Number 2-4 <ul style="list-style-type: none"> Swap the digits, DOK 2 Number & Algebra, Whole Number 3-5 <ul style="list-style-type: none"> Exploring a 5-digit number, DOK 2 Target numbers!, DOK 3 Too much information, DOK 3 Number & Algebra, Whole Number 4-6 <ul style="list-style-type: none"> Mysterious numbers, DOK 2 Clued in, DOK 2 Big number split, DOK 3 	Year 5 Series E Fractions, Decimals, and Percentages <ul style="list-style-type: none"> Fractions, decimals and percentages – tenths p 17 Fractions, decimals and percentages – tenths and hundredths pp 18–19
LS 2 Big idea Multiplicative thinking involves flexible use of multiplication and division concepts, strategies and representations Topic Multiplication and division	MA2-RN-01 applies an understanding of place value and the role of zero ... MA2-MR-01 represents and uses the structure of multiplicative relations to 10 ... MA2-MR-02 completes number sentences involving multiplication ...	Representing numbers using place value B Multiplicative relations B	<ul style="list-style-type: none"> 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 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 	B. More multiplication & division <ul style="list-style-type: none"> Multiples of Increasing Patterns Decreasing Patterns Grouping in Threes Grouping in Sixes Grouping in Nines Dividing Threes Dividing Sixes Dividing Nines Dividing Sevens Dividing Eights Multiplication Turn-Abouts Related Facts 2 Times Tables Mental Methods Division Bar model $\times \div$ Grid Methods 1 Find the Missing Number 2 Missing Numbers: \times and \div facts 	Number sequences <ul style="list-style-type: none"> Investigating number sequences with multiplication Use doubling to multiply <ul style="list-style-type: none"> Use doubling to multiply by 8 Multiplication facts: 3, 6, 7, 8, 9 <ul style="list-style-type: none"> Multiplication & division facts for 3 Multiplication & division facts for 6 Multiplication & division facts for 7 Multiplication & division facts for 8 Multiplication & division facts for 9 Multiplication fact families up to 10 x 10 Multiply by multiples of 10 <ul style="list-style-type: none"> Multiplying by a multiple of 10 	Number & Algebra, Multiplication & Division 4-6 <ul style="list-style-type: none"> Multiple relationships, DOK 2 Steps to success, DOK 2 Number & Algebra, Patterns 4-6 <ul style="list-style-type: none"> Multiple patterns, DOK 3 	Year 4 Series D Multiplication and Division <ul style="list-style-type: none"> Multiplication facts – 8 times table p 5 Multiplication facts – 3 and 6 times tables pp 6–7 Using known facts – 9 times table p 8 Using known facts – 7 times table p 9 Mental multiplication strategies – multiplying by 10 and 100 – pp 13–14 Mental division strategies – dividing by 10 and 100 p 29

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
LS 3 Big idea Visual representations help to understand aspects of the world (chance and position) Topic Position	MA2-GM-01 uses grid maps and directional language to locate positions ... MA2-3DS-01 makes and sketches models and nets of three-dimensional ...	Geometric measure B Three-dimensional spatial structure B	<ul style="list-style-type: none"> Position: Create and interpret grid maps Position: Use directional language and describe routes with grid maps 3D objects: Connect three-dimensional objects and two-dimensional representations 	A/B Position <ul style="list-style-type: none"> Following Directions Coordinate Meeting Place What Direction was That? Using a key 	Use maps & compass directions <ul style="list-style-type: none"> Creating & interpreting grid maps Using directional language (cardinal compass) 	Geometry, Symmetry, Transformation & Location 3-5 <ul style="list-style-type: none"> Map the way, DOK 2 Routes on a map, DOK 3 Program the robot, DOK 3 Geometry, Symmetry, Transformation & Location 4-6 <ul style="list-style-type: none"> A journey back in time, DOK 2 Island towns, DOK 3 Which way? DOK 3 	Year 4 Series D Space, Shape and Position <ul style="list-style-type: none"> Position – grids and coordinates p 21 Position – using a map p 22 Position – compass directions pp 23–24 Year 5 Series E Position Directions – using a compass pp 13–14 Directions – maps pp 15–16
LS 4 Big idea What needs to be measured determines the unit of measurement Topic 3D objects and capacity	MA2-RN-01 applies an understanding of place value and the role of zero ... MA2-3DS-01 makes and sketches models and nets of three-dimensional ... MA2-3DS-02 estimates, measures and compares capacities (internal volumes) ...	Representing numbers using place value B Three-dimensional spatial structure B	<ul style="list-style-type: none"> Whole numbers: Order numbers in the thousands 3D objects: Connect three-dimensional objects and two-dimensional representations Volume: Use scaled instruments to measure and compare capacities (internal volumes) 	B. Moving forward with 3d objects <ul style="list-style-type: none"> Relate Shapes and Solids Faces, Edges, and Vertices 1 How Many Faces? How many Edges? How many Vertices? Faces, Edges and Vertices Naming 3D Objects B. Moving on with capacity <ul style="list-style-type: none"> Using a Litre Millilitres and Litres Litre Conversions 	Connect 3D objects with nets <ul style="list-style-type: none"> Representing & drawing 3D objects Read scaled instruments in L & mL <ul style="list-style-type: none"> Using scaled instruments for capacities (L & mL) Select appropriate measures for capacity (L & mL) 	Geometry, 3D Shapes 2-4 <ul style="list-style-type: none"> Faces, edges and vertices, DOK 3 Geometry, 3D Shapes 3-5 <ul style="list-style-type: none"> Net animals, DOK 2 	Year 4 Series D Space, Shape and Position <ul style="list-style-type: none"> Investigating 3D shapes – properties of shapes p 10 Investigating 3D shapes – drawing 3D shapes pp 11–12 Investigating 3D shapes – different viewpoints p 13 Investigating 3D shapes – nets pp 15–17 Year 4 Series D Volume, Capacity and Mass <ul style="list-style-type: none"> Volume and capacity – litres pp 1–2 Volume and capacity – millilitres pp 3–4 Volume and capacity – measuring volume with cubic centimetres pp 5–8
LS 5 Big idea Angles are the primary structural component of many shapes Topic Angles	MA2-PF-01 represents and compares halves, quarters, thirds and fifths as ... MA2-GM-03 identifies angles and classifies them by comparing to a right angle	Partitioned fractions B Geometric measure B	<ul style="list-style-type: none"> Represent fractional quantities equal to and greater than one Angles: Compare angles to a right angle 	A/B Angles <ul style="list-style-type: none"> Equal Angles Comparing Angles Right Angle Relation What Type of Angle? Classifying Angles 	Classify angles <ul style="list-style-type: none"> Classifying angles 	Geometry, Angles 2-4 <ul style="list-style-type: none"> Right angle sort, DOK 3 Flag flying, DOK 4 	Year 5 Series E Geometry <ul style="list-style-type: none"> Lines and angles – lines p 2 Lines and angles – introducing angles p 3 Lines and angles – measuring angles pp 4–5

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
LS 1 Big idea The number system extends infinitely to very large and very small numbers Topic Patterns	MA2-RN-01 applies an understanding of place value and the role of zero to ... MA2-RN-02 represents and compares decimals up to 2 decimal places using ... MA2-MR-01 represents and uses the structure of multiplicative relations to 10 ...	Representing numbers using place value B Multiplicative relations B	<ul style="list-style-type: none"> 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 Investigate number sequences involving related multiples Use known number facts and strategies Operate with multiples of 10 	B. More multiplication & division <ul style="list-style-type: none"> Multiplying by 10, 100, 1000 	Represent 5-digit numbers <ul style="list-style-type: none"> Recognising numbers that are 10, 100, 1000 bigger 	Number & Algebra, Whole Number 2-4 <ul style="list-style-type: none"> Swap the digits, DOK 2 Number & Algebra, Whole Number 3-5 <ul style="list-style-type: none"> Exploring a 5-digit number, DOK 2 Target numbers!, DOK 3 Too much information, DOK 3 Number & Algebra, Whole Number 4-6 <ul style="list-style-type: none"> Mysterious numbers, DOK 2 Clued in, DOK 2 Big number split, DOK 3 	Year 4 Series D Multiplication and Division <ul style="list-style-type: none"> Mental multiplication strategies – multiplying by 10 and 100 pp 13–14 Mental division strategies – dividing by 10 and 100 p 29 Year 4 Series D Patterns and Algebra <ul style="list-style-type: none"> Patterns and functions pp 1–12 Equations and equivalence pp 13–21
LS 2 Big idea Understanding relationships between the properties of 2D shapes helps visualise and organise spaces in the world Topic 2D shape properties	MA2-2DS-01 compares two-dimensional shapes and describes their features MA2-2DS-02 performs transformations by combining and splitting ... MA2-2DS-03 estimates, measures and compares areas using square centimetres ...	Two-dimensional spatial structure B	<ul style="list-style-type: none"> 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 	A/B 2D shape & area <ul style="list-style-type: none"> What Line am I? Shapes Collect the Shapes Collect More Shapes Collect the Shapes 2 	Identify shapes in composite polygons <ul style="list-style-type: none"> Creating shapes from combining & splitting shapes 	Geometry, 2D Shapes 2-4 <ul style="list-style-type: none"> Shape cutter, DOK 2 Transformer shapes, DOK 3 Triangle tiles, DOK 3 	
LS 3 Big idea Multiplicative thinking involves flexible use of multiplication and division concepts, strategies, and representations Topic Linking multiplication to area and volume	MA2-MR-01 represents and uses the structure of multiplicative relations to 10 ... MA2-MR-02 completes number sentences involving multiplication and ... MA2-2DS-03 estimates, measures and compares areas using square centimetres ... MA2-3DS-01 makes and sketches models and nets of three-dimensional ...	Multiplicative relations B Two-dimensional spatial structure B Three-dimensional spatial structure B	<ul style="list-style-type: none"> 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 Area: Measure the areas of shapes using the grid structure Area: Compare surfaces using familiar metric units of area 3D objects: Connect three-dimensional objects and two-dimensional representations 	A/B 2D shape & area <ul style="list-style-type: none"> Area of Shapes Equal Areas B. Moving on with capacity <ul style="list-style-type: none"> How many Blocks? Volume of Solids and Prisms - 1 cm³ blocks 	Calculate area using grid structure <ul style="list-style-type: none"> Measuring area of shapes using the grid structure Comparing surfaces using metric units of area 	Measurement, Area 2-4 <ul style="list-style-type: none"> Planning that pool, DOK 3 Measurement, Volume & Capacity 3-5 <ul style="list-style-type: none"> Face stickers, DOK 3 Measurement, Volume & Capacity 5-7 <ul style="list-style-type: none"> Constructing cubes, DOK 2 	Year 4 Series D Length, Perimeter and Area <ul style="list-style-type: none"> Area – square centimetres pp 15–16 Area – square metres pp 17–18 Year 5 Series E Length, Perimeter and Area <ul style="list-style-type: none"> Area – introducing area pp 25–26 Area puzzles p 31 Year 4 Series D Volume, Capacity and Mass <ul style="list-style-type: none"> Volume and capacity – measuring volume with cubic centimetres p 5

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
<p>LS 4</p> <p>Big idea What needs to be measured determines the unit of measurement</p> <p>Topic Length and mass</p>	<p>MA2-RN-02 represents and compares decimals up to 2 decimal places using ...</p> <p>MA2-GM-02 measures and estimates lengths in metres, centimetres and ...</p> <p>MA2-NSM-01 estimates, measures and compares the masses of objects using ...</p>	<p>Representing numbers using place value B</p> <p>Geometric measure B</p> <p>Non-spatial measure B</p>	<ul style="list-style-type: none"> Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths Length: Use scaled instruments to measure and compare lengths Mass: Use scaled instruments to measure and compare masses 	<p>A/B Length</p> <ul style="list-style-type: none"> How Long is That? Measuring Length Perimeter of Shapes Converting cm and mm Centimetres and Metres <p>B. More non spatial measure: Mass & Time</p> <ul style="list-style-type: none"> How Heavy? Ordering Mass (g) 	<p>Convert lengths & calculate perimeters</p> <ul style="list-style-type: none"> Converting between metric lengths Calculating the perimeter of quadrilaterals <p>Read scaled instruments in kg & g</p> <ul style="list-style-type: none"> Measuring mass in grams Measuring & comparing mass in g & kg 	<p>Measurement, Length 2-4</p> <ul style="list-style-type: none"> Robot race, DOK 2 Parking problems, DOK 3 Metres or centimetres? DOK 3 <p>Measurement, Mass 2-4</p> <ul style="list-style-type: none"> Placing pumpkins, DOK 2 Beryl the St Bernard, DOK 3 	<p>Year 4 Series D Length, Area and Perimeter</p> <ul style="list-style-type: none"> Perimeter – measuring shapes pp 8–9 Perimeter – calculating perimeter pp 10–11 Perimeter – perimeter word problems pp 12–14 <p>Year 5 Series E Length, Perimeter and Area</p> <ul style="list-style-type: none"> Units of length – m, cm, mm pp 1–2 Units of length – metres to kilometres pp 5–6 <p>Year 4 Series D Volume, Capacity and Mass</p> <ul style="list-style-type: none"> Mass – kilograms and grams pp 10–13
<p>LS 5</p> <p>Big idea Addition and subtraction problems can be solved by using a variety of strategies</p> <p>Topic Addition and subtraction problems</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to ...</p> <p>MA2-AR-01 selects and uses mental and written strategies for addition ...</p> <p>MA2-AR-02 completes number sentences involving addition and ...</p>	<p>Representing numbers using place value B</p> <p>Additive relations B</p>	<ul style="list-style-type: none"> 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 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 		<p>Addition & subtraction to 4 digits</p> <ul style="list-style-type: none"> Adding & subtracting money 	<p>Number & Algebra, Money 2-4</p> <ul style="list-style-type: none"> Bike for sale, DOK 3 Fruit salad, DOK 3 	<p>Year 5 Series E Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> Calculating – adding decimal fractions p 31 <p>Year 5 Series E Adding and Subtracting</p> <ul style="list-style-type: none"> Written methods – adding and subtracting decimals p 22 Written methods – word problems p 23

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
LS 1 Big idea The number system extends infinitely to very large and very small numbers Topic Number review	MA2-RN-01 applies an understanding of place value and the role of zero to ... MA2-RN-02 represents and compares decimals up to 2 decimal places using ... MA2-AR-01 selects and uses mental and written strategies for addition ...	Representing numbers using place value B Additive relations B	<ul style="list-style-type: none"> 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 Partition, rearrange and regroup numbers to at least 1000 to solve additive problems 	Refer to: <ul style="list-style-type: none"> Term 1, Learning Sequence 1 Term 2, Learning Sequence 1 Term 3, Learning Sequence 1 			
LS 2 Big idea Fractions represent multiple ideas and can be represented in different ways Topic Fractions applications	MA2-RN-02 represents and compares decimals up to 2 decimal places using ... MA2-PF-01 represents and compares halves, quarters, thirds and fifths as ... MA2-GM-02 measures and estimates lengths in metres, centimetres and ...	Representing numbers using place value B Partitioned fractions B Geometric measure B	<ul style="list-style-type: none"> Decimals: Make connections between fractions and decimal notation Model equivalent fractions as lengths Represent fractional quantities equal to and greater than one Length: Use scaled instruments to measure and compare lengths 			Number & Algebra, Fractions 2-4 <ul style="list-style-type: none"> The grasshoppers who jumped a fraction, DOK 2 How many hats and socks? DOK 2 How many scarves and hats? DOK 2 	Year 5 Series E Fractions, Decimals and Percentages <ul style="list-style-type: none"> Calculating – adding and subtracting fractions with like denominators pp 26–29
LS 3 Big idea Questions can be asked and answered by collecting and interpreting data Topic Chance	MA2-DATA-01 collects discrete data and constructs graphs using a given ... MA2-DATA-02 interprets data in tables, dot plots and column graphs MA2-CHAN-01 records and compares the results of chance experiments	Data B Chance B	<ul style="list-style-type: none"> Select and trial methods for data collection Construct and interpret data displays with many-to-one scales Describe the likelihood of outcomes of chance events Identify when events are affected by previous events 	B. More chance <ul style="list-style-type: none"> Introductory probability Chance Gauge What are the Chances? 	Describe the likelihood of outcomes <ul style="list-style-type: none"> Using the language of probability Identifying events affected by previous events 	Chance & Probability 3-5 <ul style="list-style-type: none"> Roll of the dice, DOK 4 	Year 4 Series D Chance and Data <ul style="list-style-type: none"> Chance – ordering events pp 1–2 Chance – probability pp 3–5 Chance – fair and unfair p 6 Chance – coin investigation p 7 Chance - two dice investigation pp 8–9

LS & Topic	Outcomes	Focus	Content	Course Topic & Activities	Skill Quests	Challenges	Ebooks
<p>LS 4</p> <p>Big idea Multiplicative thinking involves flexible use of multiplication and division concepts, strategies and representations</p> <p>Topic Multiplication and division problems</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to ...</p> <p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10 ...</p> <p>MA2-MR-02 completes number sentences involving multiplication and ...</p>	<p>Representing numbers using place value B</p> <p>Multiplicative relations B</p>	<ul style="list-style-type: none"> 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 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 	<p>B. More multiplication & division</p> <ul style="list-style-type: none"> Problems: Times and Divide 	<p>Solve multiplication & division problems</p> <ul style="list-style-type: none"> Find the missing number in mult/division problems Multiplication & division word problems Multiplication & division strategies 	<p>Number & Algebra, Multiplication & Division 3-5</p> <ul style="list-style-type: none"> Pair numbers to reach the product, DOK 2 Pick your numbers, DOK 2 	<p>Year 5 Series E Multiplication and Division</p> <ul style="list-style-type: none"> Written methods – solving problems pp 27–28
<p>LS 5</p> <p>Big idea Questions can be asked and answered by collecting and interpreting data</p> <p>Topic Data</p>	<p>MA2-GM-03 identifies angles and classifies them by comparing to a right angle</p> <p>MA2-2DS-01 compares two-dimensional shapes and describes their features</p> <p>MA2-2DS-02 performs transformations by combining and splitting ...</p> <p>MA2-2DS-03 estimates, measures and compares areas using square centimetres ...</p>	<p>Geometric measure B</p> <p>Two-dimensional spatial structure B</p>	<ul style="list-style-type: none"> Angles: Compare angles to a right angle 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 	<p>A/B Transformations</p> <ul style="list-style-type: none"> Symmetry Symmetry or Not? Flip, Slide, Turn Transformations Rotational Symmetry 	<p>Tessellations</p> <ul style="list-style-type: none"> Creating symmetrical patterns & shapes 	<p>Geometry, Symmetry, Transformation & Location 4-6</p> <ul style="list-style-type: none"> Tessellations, DOK 3 	<p>Year 5 Series E Geometry</p> <ul style="list-style-type: none"> Transformation, tessellation and symmetry – symmetry pp 16–18 Transformation, tessellation and symmetry – transformation pp 19–20 Transformation, tessellation and symmetry – tessellation pp 21–23