

Scope & Sequence NSW Stage 2 (A) Yearly overview

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 10 000 <ul style="list-style-type: none"> Apply place value to thousands Read, represent and order numbers to 10 000 Partition numbers 	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Numbers to 100 000 <ul style="list-style-type: none"> Apply place value to tens-of-thousands Read, represent and order numbers to 10 000 Partition numbers 	Number and Algebra Big idea: The number system extends infinitely to very large and very small numbers Patterns <ul style="list-style-type: none"> Model, describe and record patterns of multiples Identify and continue increasing and decreasing patterns Explain properties of odd and even numbers Multiply by one and zero 	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: mental strategies <ul style="list-style-type: none"> Apply associative property of addition Solve inverse operations Use flexible strategies to add and subtract: bridging, compensation, levelling and constant difference 	Number and Algebra Big idea: Multiplicative thinking involves flexible use of multiplication and division concepts, strategies and representations Multiplication facts for 2, 4, 5 and 10 <ul style="list-style-type: none"> Model, describe and record patterns of multiples Identify fact families Use commutative property of multiplication 	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"> Describe and compare 2D shapes Identify parallel sides Explain properties of quadrilaterals Identify right angles in shapes 	Number and Algebra Big idea: Fractions represent multiple ideas and can be represented in different ways Fractions review <ul style="list-style-type: none"> Recreate the whole unit from a fractional part
LS 3	Measurement and Space Big idea: What needs to be measured determines the unit of measurement Time <ul style="list-style-type: none"> Calculate duration of events Identify half- and quarter-hour time Read time as past and towards the hour Read analog clocks to the minute 	Measurement and Space Big idea: What needs to be measured determines the unit of measurement Time <ul style="list-style-type: none"> Describe and follow routes using landmarks and directional language Locate positions on grid maps 	Number and Algebra Measurement and Space Big idea: Making and using equal groups Multiplication and division <ul style="list-style-type: none"> Connect grouping to arrays Estimate, measure and record area in cm^2 and m^2 Model square numbers Construct prisms and describe volume in layers Record and compare volumes in numerals and words 	Statistics and Probability Big idea: Data is collected to solve problems Chance (and data review) <ul style="list-style-type: none"> Use the language of chance Record possible outcomes and combinations Conduct chance experiments Collect and display data
	Number and Algebra Big idea: Fractions represent multiple ideas and can be represented in different ways Unit fractions <ul style="list-style-type: none"> Model fractions Identify fraction families Make thirds and fifths of a length 	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 prisms, pyramids and cylinders Construct 3D models Create nets Measure and record capacity using 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"> Measure length using mm, cm and m Estimate lengths and distances Compare and order lengths and distances Record and compare mass using 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	Number and Algebra Statistics and Probability Big idea: Questions can be asked and answered by collecting and interpreting data Data <ul style="list-style-type: none"> 2D Shapes Review Composite 2D shapes Building up 3D objects 	Number and Algebra Measurement and Space Big idea: Angles are the primary structural component of many shapes Angles <ul style="list-style-type: none"> Interpret simple maps Following directions 	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"> Doubling and halving Model halves, quarters and eighths 	Measurement and Space Big idea: Shapes encountered in daily life can be classified by their attributes 2D shape transformations <ul style="list-style-type: none"> Identify and draw lines of symmetry Create tessellating triangle designs: by reflecting, translating and rotating Apply and describe amounts of rotation: half-, quarter- & three-quarter-turns

Scope & Sequence NSW Stage 2 (A) 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 A	Whole numbers: Read, represent and order numbers to thousands	Term 1 LS 1, 2, 5 Term 2 LS 1, 4 Term 3 LS 1, 5 Term 4 LS 1
		Whole numbers: Apply place value to partition and regroup numbers up to 4 digits	Term 1 LS 1, 2 Term 2 LS 1, 2 Term 3 LS 1, 5 Term 4 LS 1, 4
MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers	Additive relations A	Use the principle of equality	Term 1 LS 2 Term 2 LS 1 Term 3 LS 5 Term 4 LS 1
		Recognise and explain the connection between addition and subtraction	Term 1 LS 2 Term 3 LS 5
		Select strategies flexibly to solve addition and subtraction problems of up to 3 digits	Term 1 LS 2 Term 2 LS 1 Term 3 LS 5 Term 4 LS 1
		Represent money values in multiple ways	Term 3 LS 5
MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems	Multiplicative relations A	Generate and describe patterns	Term 1 LS 1, 4 Term 2 LS 2 Term 3 LS 1, 2, 3 Term 4 LS 2, 4, 5
		Use arrays to establish multiplication facts from multiples of 2 and 4, 5 and 10	Term 2 LS 2 Term 3 LS 1, 2, 3 Term 4 LS 4
		Recall multiplication facts of 2 and 4, 5 and 10 and related division facts	Term 1 LS 4 Term 2 LS 2 Term 3 LS 1, 2, 3 Term 4 LS 4
		Represent and solve problems involving multiplication fact families	Term 2 LS 2 Term 3 LS 1 Term 4 LS 4
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 A	Create fractional parts of a length using techniques other than repeated halving	Term 1 LS 4 Term 2 LS 5 Term 4 LS 2
		Model and represent unit fractions, and their multiples, to a complete whole on a number line	Term 4 LS 2
MA2-GM-01 uses grid maps and directional language to locate positions and follow routes	Geometric measure A	Position: Interpret movement on a map Position: Locate positions on grid maps	Term 2 LS 3
MA2-GM-02 measures and estimates lengths in metres, centimetres and millimetres	Geometric measure A	Length: Measure and compare objects using metres, centimetres and millimetres	Term 1 LS 4 Term 3 LS 4 Term 4 LS 2

Outcomes	Focus	Content	Located
MA2-GM-03 identifies angles and classifies them by comparing to a right angle	Geometric measure A	Angles: Identify angles as measures of turn	Term 2 LS 5 Term 4 LS 5
MA2-2DS-01 compares two-dimensional shapes and describes their features	Two-dimensional spatial structure A	2D shapes: Compare and describe features of two-dimensional shapes	Term 1 LS 3 Term 3 LS 2, 3 Term 4 LS 5
MA2-2DS-02 performs transformations by combining and splitting two-dimensional shapes	Two-dimensional spatial structure A	2D shapes: Transform shapes by reflecting, translating and rotating	Term 2 LS 3 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 A	Area: Use square centimetres to measure and estimate the areas of rectangles	Term 3 LS 3
		Area: Use square metres to measure and estimate the areas of rectangles	
MA2-3DS-01 measures, records, compares and estimates the masses of objects using uniform informal units	Three-dimensional spatial structure A	3D objects: Make models of three-dimensional objects to compare and describe key features	Term 2 LS 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 A	Volume: Measure and order containers using litres	Term 2 LS 4 Term 3 LS 3
		Volume: Compare objects using familiar metric units of volume	Term 2 LS 4
MA2-NSM-01 estimates, measures and compares the masses of objects using kilograms and grams	Non-spatial measure A	Mass: Compare objects using the kilogram	Term 3 LS 4
MA2-NSM-02 represents and interprets analog and digital time in hours, minutes and seconds	Non-spatial measure A	Time: Represent and read analog time	Term 1 LS 3 Term 2 LS 5
MA2-DATA-01 collects discrete data and constructs graphs using a given scale	Data A	Collect discrete data	Term 1 LS 5 Term 4 LS 3
		Organise and display data using tables and graphs	Term 1 LS 5 Term 4 LS 3
MA2-DATA-02 interprets data in tables, dot plots and column graphs	Data A	Interpret and compare data	Term 4 LS 3
MA2-CHAN-01 records and compares the results of chance experiments	Chance A	Identify possible outcomes from chance experiments	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 10 000</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands</p> <p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems</p>	<p>Representing numbers using place value A</p> <p>Multiplicative relations A</p>	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits Generate and describe patterns 	<p>Represent numbers using place value (A)</p> <ul style="list-style-type: none"> Place Value - Thousands Expanding Numbers Put in Order 1 Ascending Order Descending Order Which is Bigger? Which is Smaller? Greater Than or Less Than 1 Greater or Less to 100 Place Value 3 Partition and Rename 2 Nearest 1000? Missing Numbers 1 <p>Non-spatial measure: mass & time (A)</p> <ul style="list-style-type: none"> What's the Temperature 	<p>Represent 4-digit numbers</p> <ul style="list-style-type: none"> Reading & representing numbers to 1000 Counting by tens & hundreds to 1000 Comparing & ordering numbers up to 10 000 Partitioning numbers to 4 digits 	<p>Number & Algebra, Whole Number 2-4</p> <ul style="list-style-type: none"> Top score, DOK 2 Partitioning 4-digit numbers, DOK 3 Bank mistake, DOK 3 Alex's number, DOK 3 Find the 4 digits, DOK 3 Football friends, DOK 3 33 beads, DOK 3 <p>Number & Algebra, Addition & Subtraction 2-4</p> <ul style="list-style-type: none"> Magic 9, DOK 3 <p>Number & Algebra, Whole Number 3-5</p> <ul style="list-style-type: none"> Build the number, DOK 3 	<p>Year 3 Series C Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Looking at whole numbers pp 1–6 Place value of whole numbers pp 1–3 <p>Year 4 Series D Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Looking at whole numbers pp 1–8 Place value of whole numbers pp 1–8
<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: mental strategies</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands</p> <p>MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers</p>	<p>Representing numbers using place value A</p> <p>Additive relations A</p>	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 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 	<p>Additive relations: up to 3 digits (A)</p> <ul style="list-style-type: none"> Add Two 2-Digit Numbers Adding to 2-digit numbers Magic Mental Addition Complements to 50 and 100 Add 3 Numbers: Bonds to 100 Compensation - Add Estimate Sums Subtract Tens Magic Mental Subtraction Column Subtraction 2-Digit Differences: Regroup Repartition to Subtract Compensation - Subtract Estimate Differences Bump Add and Subtract Related Facts 1 Bar Model Problems 1 Bar Model Problems 2 Missing Values 	<p>Mental strategies to add or subtract</p> <ul style="list-style-type: none"> Adding using jump strategy to 3 digits Subtracting using jump strategy to 3 digits Add/subtract using jump strategy to 3 digits Adding using bridging to 10 up to 3 digits Subtracting using bridging to 10 up to 3 digits Add/subtract using bridging to 10 up to 3 digits Adding using split strategy to 3 digits Subtracting using split strategy to 3 digits Add/subtract using split strategy to 3 digits Adding using round & compensate to 3 digits Subtracting using round & compensate to 3 digits Add/subtract using round & compensate to 3 digits <p>Select strategies to add or subtract</p> <ul style="list-style-type: none"> Add/subtract using bar model to 3 digits Selecting strategies to add/subtract to 3 digits <p>Addition & subtraction to 3 digits</p> <ul style="list-style-type: none"> Adding & subtracting multiple single-digit numbers Bonds to 100 Connecting addition & subtraction Estimating with addition & subtraction Add/subtract multiples of 10 to 3-digit numbers 	<p>Number & Algebra, Addition & Subtraction 2-4</p> <ul style="list-style-type: none"> Calculate through this maze, DOK 3 Make 200, DOK 3 Magic 9, DOK 3 	<p>Year 3 Series C Addition and Subtraction</p> <ul style="list-style-type: none"> Addition mental strategies pp 1–4 Subtraction mental strategies pp 15–16 <p>Year 4 Series D Addition and Subtraction</p> <ul style="list-style-type: none"> Addition mental strategies pp 1–4 Subtraction mental strategies pp 16–19

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-NSM-02 represents and interprets analog and digital time in hours, minutes and seconds	Two-dimensional spatial structure A Non-spatial measure A	<ul style="list-style-type: none"> 2D shapes: Compare and describe features of two-dimensional shapes Time: Represent and read analog time 	Non-spatial measure: mass & time (A) <ul style="list-style-type: none"> Half Hour Times Five Minute Times 	Represent time using analogue displays <ul style="list-style-type: none"> Representing & reading analogue time displays 	Measurement, Time 2-4 <ul style="list-style-type: none"> Scenic stroll, DOK 3 	Year 3 Series C: Time and Money <ul style="list-style-type: none"> Time O'clock p 14 Time Half Past pp 15–19 Time Quarter Past pp 20–21 Time Quarter To p 22 Time Quarter to and Past p 23 Time- A Day p 24
LS 4 Big idea Fractions represent multiple ideas and can be represented in different ways Topic Unit fractions	MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems 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) MA2-GM-02 measures and estimates lengths in metres, centimetres and millimetres	Multiplicative relations A Partitioned fractions A Geometric measure A	<ul style="list-style-type: none"> Generate and describe patterns Recall multiplication facts of 2 and 4, 5 and 10 and related division facts 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 Length: Measure and compare objects using metres, centimetres and millimetres 	Partitioned fractions (B) <ul style="list-style-type: none"> Compare Fractions 1a Compare Fractions 1b Comparing Fractions 1 	Halves, quarters, thirds & fifths <ul style="list-style-type: none"> Halves, quarters & eighths Thirds & fifths Working with unit fractions 		Year 3 Rich Learning Task <ul style="list-style-type: none"> Build a number Year 4 Series D Fractions <ul style="list-style-type: none"> Introducing fractions pp 1–12 Year 5 Series E Fractions <ul style="list-style-type: none"> Working with fractions pp 6–11
LS 5 Big idea Questions can be asked and answered by collecting and interpreting data Topic Data	MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands MA2-DATA-01 collects discrete data and constructs graphs using a given scale MA2-DATA-02 interprets data in tables, dot plots and column graphs	Representing numbers using place value A Data A	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Collect discrete data Organise and display data using tables and graphs" 	Data (A) <ul style="list-style-type: none"> Sorting Data Column Graphs Picture Graphs: Single-Unit Scale Pictographs Tallies 	Collect & organise discrete data <ul style="list-style-type: none"> Posing questions & collecting discrete data Organising & displaying discrete data using graphs Read tables, dot plots & column graphs <ul style="list-style-type: none"> Interpreting tables & column graphs Comparing data displays 	Statistics & Data 2-4 <ul style="list-style-type: none"> Transport trouble, DOK 3 What's missing? DOK 3 	Year 4 Series D Chance and Data <ul style="list-style-type: none"> Data pp 10–14 Data – dot plots pp 17–18

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 100 000</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands</p> <p>MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers</p>	<p>Representing numbers using place value A</p> <p>Additive relations A</p>	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits Use the principle of equality Select strategies flexibly to solve addition and subtraction problems of up to 3 digits 		<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>Year 5 Series E Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Looking at whole numbers – reading and writing numbers to 9 999 pp 1–2 Looking at whole numbers – ordering numbers to 9 999 pp 3–4 Place value of whole numbers – place value to 4 digits pp 9–10 Place value of whole numbers – expanded notation pp 11–12
<p>LS 2</p> <p>Big idea Multiplicative thinking involves flexible use of multiplication and division concepts, strategies and representations</p> <p>Topic Multiplication facts for 2, 4, 5 and 10</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands</p> <p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems</p>	<p>Representing numbers using place value A</p> <p>Multiplicative relations A</p>	<ul style="list-style-type: none"> Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 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 	<p>Multiplicative relations (A)</p> <ul style="list-style-type: none"> Counting by Tens Count by Fives Counting by Fives Counting by Twos Count by 2s, 5s and 10s Skip Counting Counting up in 4s Skip Counting with Coins Grouping in Twos Grouping in Fours Grouping in Fives Grouping in Tens Model multiplication to 5×5 Fact Families: Multiply and Divide Multiplication Turnarounds Halve it! 	<p>Multiplicative facts for 2, 4, 5 & 10</p> <ul style="list-style-type: none"> Recalling multiplication & division facts of 2 Recalling multiplication & division facts of 4 Recalling multiplication & division facts of 5 Recalling multiplication & division facts of 10 Solving problems using multiplication facts 		<p>Year 5 Series E Multiplication and Division</p> <ul style="list-style-type: none"> Multiplication facts pp 1–4 <p>Year 4 Series D Multiplication and Division</p> <ul style="list-style-type: none"> Division pp 1–6
<p>LS 3</p> <p>Big idea Visual representations help to understand aspects of the world (chance and position)</p> <p>Topic Position</p>	<p>MA2-GM-01 uses grid maps and directional language to locate positions and follow routes</p> <p>MA2-2DS-02 performs transformations by combining and splitting two-dimensional shapes</p>	<p>Geometric measure A</p> <p>Two-dimensional spatial structure A</p>	<ul style="list-style-type: none"> Position: Interpret movement on a map Position: Locate positions on grid maps 2D shapes: Transform shapes by reflecting, translating and rotating" 	<p>Geometric measure: position (A/B)</p> <ul style="list-style-type: none"> Following Directions Coordinate Meeting Place What Direction was That? Using a key 	<p>Use grid maps to describe position</p> <ul style="list-style-type: none"> Interpreting maps to describe position Locating positions on a map 	<p>Geometry, Symmetry, Transformation & Location 2-4</p> <ul style="list-style-type: none"> A day on the farm, DOK 3 Mighty maze, DOK 4 <p>Geometry, Symmetry, Transformation & Location 3 -5</p> <ul style="list-style-type: none"> Drawing with grids, DOK 3 	<p>Year 4 Series D Shape, Space and Position</p> <ul style="list-style-type: none"> Position pp 1–7 2D shapes pp 5–7

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 3D objects and capacity</p>	<p>MA2-RN-01 applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands</p> <p>MA2-3DS-01 makes and sketches models and nets of three-dimensional objects including prisms and pyramids</p> <p>MA2-3DS-02 estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres</p>	<p>Representing numbers using place value A</p> <p>Three-dimensional spatial structure A</p>	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands 3D objects: Make models of three-dimensional objects to compare and describe key features Volume: Measure and order containers using litres 	<p>3D spatial structure: 3D objects (A)</p> <ul style="list-style-type: none"> Prisms and Pyramids Collect the Objects Match the Object <p>3D spatial structure: capacity (A)</p> <ul style="list-style-type: none"> How Full? Which Holds More? Filling Fast! 	<p>Identify prisms, pyramids & cylinders</p> <ul style="list-style-type: none"> Identifying prisms Identifying pyramids & cylinders Describing key features of prisms & pyramids Making models of prisms & pyramids Introducing nets of prisms 	<p>Geometry, 3D Shapes 2-4</p> <ul style="list-style-type: none"> Opposite shapes, DOK 4 	<p>Year 4 Series D Shape, Space and Position</p> <ul style="list-style-type: none"> 3D shapes pp 1–3 <p>Year 4 Series D Measurement</p> <ul style="list-style-type: none"> Volume and capacity p 1
<p>LS 5</p> <p>Big idea Angles are the primary structural component of many shapes</p> <p>Topic Angles</p>	<p>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)</p> <p>MA2-GM-03 identifies angles and classifies them by comparing to a right angle</p> <p>MA2-NSM-02 represents and interprets analog and digital time in hours, minutes and seconds</p>	<p>Partitioned fractions A</p> <p>Geometric measure A</p> <p>Non-spatial measure A</p>	<ul style="list-style-type: none"> 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 Angles: Identify angles as measures of turn Time: Represent and read analog time 	<p>Geometric measure: angle (A/B)</p> <ul style="list-style-type: none"> Equal Angles Comparing Angles Right Angle Relation What Type of Angle? Classifying Angles 	<p>Identify & compare angles</p> <ul style="list-style-type: none"> Identifying angles as measures of turn 		<p>Year 5 Series E Space, Shape and Position</p> <ul style="list-style-type: none"> Lines, angles and shapes – angles pp 2–3

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 represent numbers to at least tens of thousands MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems	Representing numbers using place value A Multiplicative relations A	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 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 		Number patterns <ul style="list-style-type: none"> Generating/describing patterns (1, 2, 5, 10, 25) Generating/describing patterns (3, 4, 6, 7, 8, 9) Identifying number patterns Investigating odd & even numbers Understand the property of 0 & 1 in multiplication 		Year 4 Series D Multiplication and Division <ul style="list-style-type: none"> Mental multiplication strategies pp 1–6 Year 3 Series C Patterns and Algebra <ul style="list-style-type: none"> Patterns and functions pp 1–12 Equations and equivalence pp 13–22
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-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems MA2-2DS-01 compares two-dimensional shapes and describes their features MA2-2DS-02 performs transformations by combining and splitting two-dimensional shapes	Multiplicative relations A Two-dimensional spatial structure A	<ul style="list-style-type: none"> 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 2D shapes: Compare and describe features of two-dimensional shapes 2D shapes: Transform shapes by reflecting, translating and rotating 	2D spatial structure: shape & area (A/B) <ul style="list-style-type: none"> What Line am I? Shapes Collect the Shapes Collect More Shapes Collect the Shapes 2 	Identify features of 2D shapes <ul style="list-style-type: none"> Comparing & describing features of quadrilaterals Identifying, classifying & sorting 2D shapes 	Geometry, 2D shapes 2-4 <ul style="list-style-type: none"> Sort these shapes out! DOK 3 Blip and the rectangle, DOK 3 	Year 4 Series D Shape, Space and Position <ul style="list-style-type: none"> 2D shapes p 4 Year 5 Series E Shape, Space and Position <ul style="list-style-type: none"> Lines and angles pp 8–9
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 10×10 to solve problems MA2-2DS-01 compares two-dimensional shapes and describes their features MA2-2DS-02 performs transformations by combining and splitting two-dimensional shapes MA2-3DS-01 makes and sketches models and nets of three-dimensional objects including prisms and pyramids MA2-3DS-02 estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres	Multiplicative relations A Two-dimensional spatial structure A Three-dimensional spatial structure A	<ul style="list-style-type: none"> 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 2D shapes: Compare and describe features of two-dimensional Area: Use square centimetres to measure and estimate the areas of rectangles Area: Use square metres to measure and estimate the areas of rectangles 3D objects: Make models of three-dimensional objects to compare and describe key features Volume: Compare objects using familiar metric units of volume 	Multiplicative relations (A) <ul style="list-style-type: none"> Arrays 1 Arrays 2 2D spatial structure: shape & area (A/B) <ul style="list-style-type: none"> Area of Shapes Equal Areas 3D spatial structure: capacity (A) <ul style="list-style-type: none"> Comparing Volume 	Calculate area of a rectangle <ul style="list-style-type: none"> Using cm^2 to measure areas of rectangles Using m^2 to measure areas of rectangles Measure capacity & volume <ul style="list-style-type: none"> Measuring & comparing volumes using cubic blocks 	Number & Algebra, Multiplication & Division 2-4 <ul style="list-style-type: none"> Party time, DOK 2 Measurement, Volume & Capacity 2-4 <ul style="list-style-type: none"> Cube faces, DOK 3 	Year 3 Rich Learning Task <ul style="list-style-type: none"> Freckles Year 5 Series E Length, Area and Perimeter <ul style="list-style-type: none"> Area 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 place value</p> <p>MA2-GM-02 measures and estimates lengths in metres, centimetres and millimetres</p> <p>MA2-NSM-01 estimates, measures and compares the masses of objects using kilograms and grams</p>	<p>Representing numbers using place value B</p> <p>Geometric measure A</p> <p>Non-spatial measure A</p>	<ul style="list-style-type: none"> Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths Length: Measure and compare objects using metres, centimetres and millimetres Mass: Compare objects using the kilogram 	<p>Geometric measure: length (A/B)</p> <ul style="list-style-type: none"> How Long is That? Measuring Length Perimeter of Shapes Converting cm and mm Centimetres and Metres <p>Non-spatial measure: mass & time (A)</p> <ul style="list-style-type: none"> Everyday Mass 	<p>Use metric measurements for lengths</p> <ul style="list-style-type: none"> Measuring in m, cm, mm Selecting measures for length (m, cm, mm) Comparing length measurements Ordering length measurements <p>Measure mass in kg & g</p> <ul style="list-style-type: none"> Introducing a formal measure for weight (kg) 	<p>Measurement, Length 2-4</p> <ul style="list-style-type: none"> Measured to perfection (mm), DOK 2 Paw prints, DOK 3 	<p>Year 4 Series D Measurement</p> <ul style="list-style-type: none"> Units of length pp 1–5
<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 represent numbers to at least tens of thousands</p> <p>MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers</p>	<p>Representing numbers using place value A</p> <p>Additive relations A</p>	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 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 	<p>Additive relations: up to 3 digits (A)</p> <ul style="list-style-type: none"> How much Change? 	<p>Select strategies to add or subtract</p> <ul style="list-style-type: none"> Using addition & subtraction with money halving 		<p>Year 5 Series E Addition and Subtraction</p> <ul style="list-style-type: none"> Addition mental strategies pp 12–13 Subtraction mental strategies pp 24–25

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 represent numbers to at least tens of thousands MA2-AR-01 selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers	Representing numbers using place value A Additive relations A	<ul style="list-style-type: none"> Whole numbers: Read, represent and order numbers to thousands Whole numbers: Apply place value to partition and regroup numbers up to 4 digits Use the principle of equality Select strategies flexibly to solve addition and subtraction problems of up to 3 digits 	Refer to: <ul style="list-style-type: none"> Term 1, Learning Sequence 1 Term 2, Learning Sequence 1 Term 3, Learning Sequence 1 			Year 6 Series F Reading and Understanding Whole Numbers <ul style="list-style-type: none"> Looking at whole numbers pp 1–3 Year 6 Series F Addition and Subtraction <ul style="list-style-type: none"> Addition Mental Strategies pp 1–8 Subtraction Mental Strategies pp 9–16
LS 2 Big idea Fractions represent multiple ideas and can be represented in different ways Topic Fractions review	MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems 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) MA2-GM-02 measures and estimates lengths in metres, centimetres and millimetres	Multiplicative relations A Partitioned fractions A Geometric measure A	<ul style="list-style-type: none"> Generate and describe patterns Recall multiplication facts of 2 and 4, 5 and 10 and related division facts 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 Length: Measure and compare objects using metres, centimetres and millimetres 	Refer to : <ul style="list-style-type: none"> Term 1, Learning Sequence 4 			Year 5 Series E Multiplication and Division <ul style="list-style-type: none"> Multiplication facts – 5 and 10 times tables pp 1–2 Multiplication facts – 2 and 4 times tables pp 3–4 Year 4 Series D Measurement <ul style="list-style-type: none"> Units of Length pp 1–5
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 scale MA2-DATA-02 interprets data in tables, dot plots and column graphs MA2-CHAN-01 records and compares the results of chance experiments	Data A Chance A	<ul style="list-style-type: none"> Collect discrete data Organise and display data using tables and graphs Interpret and compare data Identify possible outcomes from chance experiments 	Chance (A) <ul style="list-style-type: none"> Most Likely and Least Likely How many Combinations? Will it Happen? 	Chance concepts <ul style="list-style-type: none"> Identifying outcomes from chance experiments 	Chance & Probability 2-4 <ul style="list-style-type: none"> Picking plums, DOK 3 Multiple mayhem, DOK 3 	Year 4 Series D Chance and Data <ul style="list-style-type: none"> Data pp 15–21 Year 5 Series E Chance and Data <ul style="list-style-type: none"> Chance pp 1–2

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 represent numbers to at least tens of thousands</p> <p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems</p>	<p>Represents numbers using place value A</p> <p>Multiplicative relations A</p>	<ul style="list-style-type: none"> Whole numbers: Apply place value to partition and regroup numbers up to 4 digits 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 	<p>Multiplicative relations (A)</p> <ul style="list-style-type: none"> Grouping in Sevens Grouping in Eights 		<p>Number & Algebra, Multiplication & Division 2-4</p> <ul style="list-style-type: none"> A wheel problem, DOK 3 	<p>Year 4 Series D Multiplication and Division</p> <ul style="list-style-type: none"> Introducing multiplication groups of 5 pp 1-4 Introducing Multiplication - 10 times tables pp 5-6 Introducing multiplication – multiplying numbers by 0 and 1 p 7 Multiplication facts – 2 times table pp 8-9 Multiplication facts – 4 times table pp 10-11
<p>LS 5</p> <p>Big idea Shapes encountered in daily life can be classified by their attributes</p> <p>Topic 2D shape transformations</p>	<p>MA2-MR-01 represents and uses the structure of multiplicative relations to 10×10 to solve problems</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 two-dimensional shapes</p>	<p>Multiplicative relations A</p> <p>Geometric measure A</p> <p>Two-dimensional spatial structure A</p>	<ul style="list-style-type: none"> Generate and describe patterns Angles: Identify angles as measures of turn 2D shapes: Compare and describe features of two-dimensional shapes 2D shapes: Transform shapes by reflecting, translating and rotating 	<p>2D spatial structure: transformations (A/B)</p> <ul style="list-style-type: none"> Symmetry Symmetry or Not? Flip, Slide, Turn Transformations Rotational Symmetry 	<p>Perform transformations</p> <ul style="list-style-type: none"> Transforming shapes by translation & reflections Recognising line symmetry Transforming shapes by rotation 	<p>Geometry, Symmetry, Transformation & Location 2-4</p> <ul style="list-style-type: none"> Flutter bye, DOK 4 	<p>Year 4 Series D Space Shape and Position</p> <ul style="list-style-type: none"> Investigating 2D shapes – symmetry and tessellation pp 9-10