

# Mathletics NSW Syllabus

## Scope & Sequence



Stage 1, Year 1

Mathletics

Learning sequence	Term one	Term two	Term three	Term four
LS 1	<b>Number and Algebra</b> <b>Big idea:</b> Collections of ten are really useful <b>Numbers to 120</b> <ul style="list-style-type: none"> <li>Review of representing numbers 1-20</li> <li>Count forwards and backwards to 120</li> <li>Skip counting in 10s</li> <li>Round to the nearest 10</li> </ul>	<b>Number and Algebra</b> <b>Measurement and Space</b> <b>Big idea:</b> Equal means equivalent <b>Equivalence</b> <ul style="list-style-type: none"> <li>Commutative property for addition</li> <li>Exploring equality and inequality</li> <li>Families of facts</li> <li>Simple equations</li> </ul>	<b>Number and Algebra</b> <b>Big idea:</b> Collections of ten are really useful <b>Number review</b> Review: <ul style="list-style-type: none"> <li>Term 1, Learning Sequence 1</li> <li>Term 2, Learning Sequence 1</li> </ul>	<b>Number and Algebra</b> <b>Big idea:</b> There are many different situations where addition, subtraction, multiplication and division can be used <b>Everyday operations</b> <ul style="list-style-type: none"> <li>Addition, subtraction, multiplication and division</li> <li>Money</li> </ul>
	<b>Number and Algebra</b> <b>Measurement and Space</b> <b>Big idea:</b> Patterns have something that repeats over and over and over again <b>Simple patterns</b> <ul style="list-style-type: none"> <li>Odd and even numbers</li> <li>Counting by 2's</li> <li>Skip counting in 2's</li> <li>Shape patterns</li> </ul>	<b>Statistics and Probability</b> <b>Number and Algebra</b> <b>Big idea:</b> Data helps describe and wonder about the world <b>Chance and data</b> <ul style="list-style-type: none"> <li>Asking questions</li> <li>Gather data using tally Marks</li> <li>Language of chance</li> </ul>	<b>Number and Algebra</b> <b>Measurement and Space</b> <b>Big idea:</b> Patterns have something that repeats over and over and over again <b>Patterns with 5s, 10s and 3s</b> <ul style="list-style-type: none"> <li>Review counting by 2s &amp; 10s</li> <li>Counting by 3 &amp; 5</li> <li>Skip count in 3 &amp; 5</li> </ul>	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> What needs to be measured determines the unit of measurement <b>Measurement review</b> Review: <ul style="list-style-type: none"> <li>Term 1, Learning Sequence 3</li> <li>Term 2, Learning Sequence 3</li> <li>Term 3, Learning Sequence 4</li> </ul>
	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> What needs to be measured determines the unit of measurement <b>Comparing measurements</b> Use informal units to compare: <ul style="list-style-type: none"> <li>length, area, capacity and mass</li> </ul>	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> What needs to be measured determines the unit of measurement <b>Length and time</b> <ul style="list-style-type: none"> <li>Measuring length</li> <li>Time to the half-hour</li> <li>Halves</li> </ul>	<b>Number and Algebra</b> <b>Big idea:</b> Making and using equal groups <b>Multiplication and division</b> <ul style="list-style-type: none"> <li>Grouping in 2, 3, 4, 5 and 10's</li> <li>Sharing into equal groups</li> <li>Volumes</li> </ul>	<b>Statistics and Probability</b> <b>Number and Algebra</b> <b>Big idea:</b> Data is collected to solve problems <b>Data</b> <ul style="list-style-type: none"> <li>Concrete materials and picture graphs</li> <li>Interpret data displays</li> <li>Time: months and seasons</li> </ul>
LS 4	<b>Number and Algebra</b> <b>Big idea:</b> Smaller numbers can be found hiding in bigger numbers <b>Place Value</b> <ul style="list-style-type: none"> <li>Number bonds to 10</li> <li>Place value to 100</li> <li>Partitioning 2-digit numbers</li> <li>Number bonds to 10</li> </ul>	<b>Number and Algebra</b> <b>Measurement and Space</b> <b>Big idea:</b> Collections of objects can be changed by adding more (combining) or taking some away (separating) <b>Addition and subtraction</b> <ul style="list-style-type: none"> <li>Flexible addition and subtraction strategies: count by one, doubles and near doubles, bridging</li> </ul>	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> What needs to be measured determines the unit of measurement <b>Measuring using uniform units</b> <ul style="list-style-type: none"> <li>Select appropriate units to measure</li> <li>Use uniform informal measurements to measure length, area and capacity</li> </ul>	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> Objects can be sorted and classified in different ways <b>3D objects</b> <ul style="list-style-type: none"> <li>Connecting 2D shapes to 3D objects</li> <li>Recognise 3D objects</li> <li>Sort and describe 3D objects</li> </ul>
	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> New shapes can be made by joining (combining) or partitioning (breaking apart) existing shapes <b>2D Shapes</b> <ul style="list-style-type: none"> <li>Manipulate &amp; represent shapes</li> <li>Turn shapes to fit into spaces</li> <li>Tessellations</li> <li>Tracing around 3D objects to make 2D shapes</li> </ul>	<b>Measurement and Space</b> <b>Number and Algebra</b> <b>Big idea:</b> Sometimes things move and change location <b>Position</b> <ul style="list-style-type: none"> <li>Describe position and movement of oneself (left/right)</li> <li>Position of object in relation to another (in/on, under/over, in front/behind)</li> <li>Ordinal names</li> </ul>	<b>Number and Algebra</b> <b>Measurement and Space</b> <b>Big idea:</b> A fraction (like one half) can mean half of a collection, half of an object or half of a measure. A whole unit can be partitioned into smaller parts <b>Fractions</b> <ul style="list-style-type: none"> <li>Identify halves</li> <li>Create half a length (2 equal parts)</li> <li>Halfway, over halfway</li> </ul>	<b>Number and Algebra</b> <b>Big idea:</b> Problems can be solved and represented in different ways <b>Problem solving with operations</b> <ul style="list-style-type: none"> <li>Using the 4 operations and time to solve contextual problems</li> </ul>

Outcomes	Focus	Content	Located
<b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers	<b>Representing whole numbers A</b>	Use counting sequences of ones with two-digit numbers and beyond	Term 1 All LS Term 2 All LS Term 3 All LS Term 4 All LS
		Continue and create number patterns	
Represent numbers on a line			
<b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values		Represent the structure of groups of ten in whole numbers	Term 1 All LS Term 2 All LS Term 3 All LS Term 4 All LS
<b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning	<b>Combining and separating quantities A</b>	Use advanced count-by-one strategies to solve addition and subtraction problems	Term 1 LS 4 Term 2 LS 2, 4 Term 4 LS 1
		Recognise and recall number bonds up to ten	Term 1 LS 4 Term 2 LS 1 Term 3 LS 1 Term 4 LS 1, 5
		Use flexible strategies to solve addition and subtraction problems	Term 1 LS 1, 4 Term 2 LS 1, 4 Term 3 LS 1 Term 4 LS 1, 5
		Represent equality	Term 1 LS 1 Term 2 LS 1, 4 Term 3 LS 1, 3 Term 4 LS 1
<b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems	<b>Forming groups A</b>	Count in multiples using rhythmic and skip counting	Term 1 LS 2 Term 2 LS 4 Term 3 LS 2, 3 Term 4 LS 1
		Use skip counting patterns	Term 1 LS 2 Term 3 LS 2, 3 Term 4 LS 1
		Model and use equal groups of objects to represent multiplication	Term 1 LS 2 Term 2 LS 4 Term 3 LS 2, 3 Term 4 LS 1, 5
		Recognise and represent division	Term 3 LS 3, 5 Term 4 LS 1, 5
<b>MA1-GM-01</b> represents and describes the positions of objects in familiar locations	<b>Geometric measure A</b>	Position: Follow directions to familiar locations	Term 2 LS 5
<b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres		Length: Measure the lengths of objects using uniform informal units	Term 2 LS 3 Term 3 LS 4 Term 4 LS 2
Length: Compare lengths using uniform informal units		Term 1 LS 3 Term 2 LS 3 Term 3 LS 4 Term 4 LS 2	

Outcomes	Focus	Content	Located
<b>MA1-GM-03</b> creates and recognises halves, quarters and eighths as part measures of a whole length	<b>Geometric measure A</b>	Length: Subdivide lengths to find halves and quarters	Term 3 LS 5
<b>MA1-2DS-01</b> recognises, describes and represents shapes including quadrilaterals and other common polygons	<b>Two-dimensional spatial structure A</b>	2D shapes: Recognise and classify shapes using obvious features	Term 1 LS 2, 5 Term 4 LS 4
		2D shapes: Transform shapes with slides and reflections	Term 1 LS 5
<b>MA1-2DS-02</b> measures and compares areas using uniform informal units in rows and columns		Area: Indirectly compare area	Term 1 LS 3
		Area: Measure areas using uniform informal units	Term 1 LS 3, 5 Term 3 LS 4 Term 4 LS 2
<b>MA1-3DS-01</b> recognises, describes and represents familiar three-dimensional objects	<b>Three-dimensional spatial structure A</b>	3D objects: Recognise familiar three-dimensional objects	Term 1 LS 5 Term 3 LS 4 Term 4 LS 2, 4
		3D objects: Sort and describe three-dimensional objects	Term 1 LS 5 Term 4 LS 4
<b>MA1-3DS-02</b> measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units		Volume: Measure and compare the internal volumes (capacities) of containers by filling	Term 1 LS 3 Term 3 LS 4 Term 4 LS 2
		Volume: Measure the internal volume (capacity) of containers by packing	Term 3 LS 4 Term 4 LS 2
		Volume: Construct volumes using cubes	Term 3 LS 3
<b>MA1-NSM-01</b> measures, records, compares and estimates the masses of objects using uniform informal units	<b>Non-spatial measure A</b>	Mass: Investigate mass using an equal-arm balance	Term 1 LS 3 Term 2 LS 1, 4
		Time: Name and order the cycle of months	Term 4 LS 3
<b>MA1-NSM-02</b> describes, compares and orders durations of events, and reads half- and quarter-hour time			
<b>MA1-DATA-01</b> gathers and organises data, displays data in lists, tables and picture graphs	<b>Data A</b>	Ask questions and gather data	Term 2 LS 2 Term 4 LS 3
		Represent data with objects and drawings and describe the displays	Term 2 LS 2 Term 4 LS 3
<b>MA1-CHAN-01</b> recognises and describes the element of chance in everyday events	<b>Chance A</b>	Identify and describe possible outcomes	Term 2 LS 2

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 1</b> <b>Big idea</b> Collections of ten are really useful  <b>Topic</b> Numbers to 120	<b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values  <b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning	<b>Representing whole numbers A</b>  <b>Combining and separating quantities A</b>	<ul style="list-style-type: none"> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> </ul>	<b>Representing whole numbers (A)</b> <ul style="list-style-type: none"> <li>Concept of Zero</li> <li>Matching Numbers to 10</li> <li>Matching Numbers to 20</li> <li>Before, After and Between to 20</li> <li>Before, After &amp; Between to 100</li> <li>Ordinal Numbers</li> <li>Arranging Numbers</li> <li>Number Lines</li> <li>Number line order</li> <li>Compare Numbers to 50</li> <li>Compare Numbers to 100</li> <li>Which is Bigger?</li> <li>Which is Smaller?</li> </ul> <b>Forming groups (A)</b> <ul style="list-style-type: none"> <li>Counting by Tens</li> </ul>	<b>Count by ones to 100</b> <ul style="list-style-type: none"> <li>Counting forwards &amp; backwards to 100</li> <li>Numbers before &amp; after to 100</li> <li>Counting collections 0 to 100</li> </ul> <b>Count by ones to 200</b> <ul style="list-style-type: none"> <li>Finding numbers on number line to 200</li> </ul> <b>Identify ordinal numbers</b> <ul style="list-style-type: none"> <li>Identifying ordinal numbers up to 31st</li> </ul> <b>Count in multiples of 2, 3, 5, 10</b> <ul style="list-style-type: none"> <li>Skip count by 10s</li> </ul> <b>Compare &amp; order numbers</b> <ul style="list-style-type: none"> <li>Comparing &amp; ordering numbers to 100</li> </ul> <b>Round to nearest 10</b> <ul style="list-style-type: none"> <li>Rounding to the nearest 10</li> </ul> <b>Count collections by 10</b> <ul style="list-style-type: none"> <li>Counting collections by 10</li> </ul>		<b>(Y1-A) Numbers and Patterns</b> <ul style="list-style-type: none"> <li>Read numerals 1-10 on pp 1-6, 10-14</li> <li>Numbers 1 to 5 pp 7-9</li> <li>Numbers to 10 pp 15-20</li> <li>Numbers to 20 pp 21-31</li> <li>Numbers to 30 pp 32-36</li> <li>Ordinal numbers pp 41-44</li> </ul> <b>(Y1) Rich Learning Task</b> <ul style="list-style-type: none"> <li>Walking back and forth</li> </ul> <b>(Y2-B) Numbers</b> <ul style="list-style-type: none"> <li>Numbers to 20 pp 1-13</li> <li>Numbers to 50 pp 14-22</li> <li>Numbers to 100 pp 23-28</li> <li>Skip counting by 10s pp 49-52</li> <li>Ordinal numbers pp 54-61</li> </ul>
<b>LS 2</b> <b>Big idea</b> Patterns have something that repeats over and over and over again  <b>Topic</b> Simple patterns	<b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values  <b>MA1-2DS-01</b> recognises, describes and represents shapes including quadrilaterals and other common polygons	<b>Forming groups A</b>  <b>Representing whole numbers A</b>  <b>Two-dimensional spatial structure A</b>	<ul style="list-style-type: none"> <li>Count in multiples using rhythmic and skip counting</li> <li>Use skip counting patterns</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>2D shapes: Recognise and classify shapes using obvious features</li> </ul>	<b>Representing whole numbers (A)</b> <ul style="list-style-type: none"> <li>Going Up</li> <li>Going Down</li> <li>Odd or even</li> </ul> <b>Forming groups (A)</b> <ul style="list-style-type: none"> <li>Counting by Twos</li> <li>Grouping in Twos</li> <li>Count Forward Patterns</li> <li>Count Backward Patterns</li> </ul> <b>2D spatial structure: 2D shapes (A)</b> <ul style="list-style-type: none"> <li>Simple Patterns</li> <li>Complete the pattern</li> </ul>	<b>Number patterns</b> <ul style="list-style-type: none"> <li>Odd &amp; even number patterns to 100</li> <li>Counting by 2s to 50</li> <li>Counting by 2s to 100</li> </ul> <b>Count in multiples of 2, 3, 5, 10</b> <ul style="list-style-type: none"> <li>Skip count by 2s</li> </ul> <b>Two-dimensional shapes</b> <ul style="list-style-type: none"> <li>Patterns with shapes</li> </ul>		<b>(Y1-A) Numbers and Patterns</b> <ul style="list-style-type: none"> <li>Patterns pp 45-54</li> </ul> <b>(Y2-B) Numbers</b> <ul style="list-style-type: none"> <li>Skip counting by 2s pp 44-46</li> <li>Skip counting odd and even numbers pp 47-48</li> </ul> <b>(Y2-B) Patterns and Relationships</b> <ul style="list-style-type: none"> <li>Continuing patterns pp 1-16</li> </ul> <b>(Y3-C) Numbers</b> <ul style="list-style-type: none"> <li>Skip counting by 2s pp 44-45</li> <li>Skip counting odd and even numbers pp 50-51</li> </ul>

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 3</b> <b>Big idea</b> What needs to be measured determines the unit of measurement <b>Topic</b> Comparing measurements	<b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances ... <b>MA1-2DS-02</b> measures and compares areas using uniform ... <b>MA1-3DS-02</b> measures, records, compares and estimates internal volumes ... <b>MA1-NSM-01</b> measures, records, compares and estimates the masses ... <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Geometric measure A</b> <b>Three-dimensional spatial structure A</b> <b>Non-spatial measure A</b> <b>Two-dimensional spatial structure A</b> <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Length: Compare lengths using uniform informal units</li> <li>Volume: Measure and compare the internal volumes (capacities) of containers by filling</li> <li>Mass: Investigate mass using an equal-arm balance</li> <li>Area: Indirectly compare area</li> <li>Area: Measure areas using uniform informal units</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>Non-spatial measure: mass (A)</b> <ul style="list-style-type: none"> <li>Balancing Act</li> <li>Everyday Mass</li> </ul> <b>3D spatial structure: volume (A)</b> <ul style="list-style-type: none"> <li>Comparing Volume</li> </ul> <b>Geometric measure: length (A)</b> <ul style="list-style-type: none"> <li>Comparing length</li> </ul>	<b>Length using informal units</b> <ul style="list-style-type: none"> <li>Comparing &amp; ordering lengths using informal units</li> </ul> <b>Volume &amp; capacity</b> <ul style="list-style-type: none"> <li>Exploring volume &amp; capacity using informal units</li> <li>Compare &amp; order volume/capacity (informal units)</li> </ul> <b>Mass</b> <ul style="list-style-type: none"> <li>Investigating mass with equal-arm balance</li> </ul>		<b>(Y1-A) Measurement</b> <ul style="list-style-type: none"> <li>Mass pp 16–23</li> <li>Volume &amp; capacity pp 24–35</li> </ul> <b>(Y2-B) Measurement</b> <ul style="list-style-type: none"> <li>Length pp 1–14</li> <li>Mass pp 15–25</li> <li>Volume &amp; capacity pp 26–33</li> </ul>
<b>LS 4</b> <b>Big idea</b> Smaller numbers can be found hiding in bigger numbers <b>Topic</b> Place value	<b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ... <b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve ...	<b>Representing whole numbers A</b> <b>Combining and separating quantities A</b>	<ul style="list-style-type: none"> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Use advanced count-by-one strategies to solve addition and subtraction problems</li> <li>Recognise and recall number bonds up to ten</li> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> </ul>	<b>Representing whole numbers: place value (A)</b> <ul style="list-style-type: none"> <li>Making Teen Numbers</li> <li>Making Numbers Count</li> <li>Making Big Numbers Count</li> <li>Place Value 1</li> <li>Repartition Two-digit Numbers</li> <li>1 More, 2 Less</li> <li>Model Numbers</li> </ul> <b>Combine and separate quantities (A)</b> <ul style="list-style-type: none"> <li>All about Ten</li> </ul>	<b>Place value of 2-digit numbers</b> <ul style="list-style-type: none"> <li>Identifying place value up to 2 digits</li> <li>Solving problems using place value up to 2 digits</li> <li>Model, read, write &amp; count 2-digit numbers</li> </ul> <b>Partition 2-digit numbers</b> <ul style="list-style-type: none"> <li>Partitioning 2-digit numbers</li> <li>Partitioning 2-digit numbers (non-standard)</li> </ul> <b>Addition &amp; subtraction to 10</b> <ul style="list-style-type: none"> <li>Recognising &amp; recalling bonds to 10</li> </ul>		<b>(Y2-B) Numbers</b> <ul style="list-style-type: none"> <li>Place value to 99 pp 29–41</li> </ul>
<b>LS 5</b> <b>Big idea</b> New shapes can be made by joining (combining) or partitioning (breaking apart) existing shapes <b>Topic</b> 2D shapes	<b>MA1-2DS-01</b> recognises, describes and represents shapes including ... <b>MA1-2DS-02</b> measures and compares areas using uniform ... <b>MA1-3DS-01</b> recognises, describes and represents familiar 3D objects ... <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Two-dimensional spatial structure A</b> <b>Three-dimensional spatial structure A</b> <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>2D shapes: Recognise and classify shapes using obvious features</li> <li>2D shapes: Transform shapes with slides and reflections</li> <li>Area: Measure areas using uniform informal units</li> <li>3D objects: Recognise familiar three-dimensional objects</li> <li>3D objects: Sort and describe three-dimensional objects</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>2D spatial structure: 2D shapes (A)</b> <ul style="list-style-type: none"> <li>Collect Simple Shapes</li> <li>Count Sides and Corners</li> <li>Collect the Shapes 2</li> <li>Flip, Slide, Turn</li> <li>Symmetry</li> </ul>	<b>Two-dimensional shapes</b> <ul style="list-style-type: none"> <li>Regular &amp; irregular triangles</li> <li>Sorting quadrilaterals from other 2D shapes</li> <li>Identifying, sorting &amp; naming octagons</li> <li>Identifying, sorting &amp; naming pentagons</li> <li>Identifying, sorting &amp; naming hexagons</li> <li>Identifying &amp; naming simple 2D shapes</li> <li>Comparing, describing &amp; sorting simple 2D shapes</li> <li>Representing &amp; describing regular polygons</li> </ul> <b>Slides, flips &amp; reflections</b> <ul style="list-style-type: none"> <li>Translations of shapes</li> <li>Recognising line symmetry</li> </ul>		<b>(Y1-A) Space and Shape Review:</b> <ul style="list-style-type: none"> <li>Straight/curved lines p 1</li> <li>Closed/open p 2</li> <li>2D shapes pp 3–14</li> </ul> <b>(Y2-B) Space and Shape</b> <ul style="list-style-type: none"> <li>Shapes pp 1–14</li> <li>Symmetry pp 15–16</li> <li>Flip, Slide &amp; turn pp 17–18</li> </ul> <b>(Y3-C) Space and Shape</b> <ul style="list-style-type: none"> <li>Sorting 2D shapes pp 6–14</li> <li>Tessellation pp 15–16</li> <li>Symmetry p 17</li> </ul>

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 1</b> <b>Big idea</b> Equal means equivalent  <b>Topic</b> Equivalence	<b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values  <b>MA1-NSM-01</b> measures, records, compares and estimates the masses of objects using uniform informal units	<b>Combining and separating quantities A</b>  <b>Non-spatial measure A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> <li>Mass: Investigate mass using an equal-arm balance</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Recognise and recall number bonds up to ten</li> </ul>	<b>Combine and separate quantities (A)</b> <ul style="list-style-type: none"> <li>Model Addition</li> <li>Adding to Ten</li> <li>Addition Facts</li> <li>Model Subtraction</li> <li>Subtracting from Ten</li> <li>Subtraction from 20</li> <li>Adding to 10 Word Problems</li> <li>Balance Numbers to 20</li> <li>More, Less or the Same to 10</li> <li>Commutative Property of Addition</li> <li>Related Facts 1</li> </ul>	<b>Addition &amp; subtraction to 10</b> <ul style="list-style-type: none"> <li>Modelling &amp; recording combinations that make 5 – 9</li> </ul> <b>Explore equality &amp; inequality to 20</b> <ul style="list-style-type: none"> <li>Exploring equality &amp; inequality to 10</li> <li>Explore equality &amp; inequality to 20</li> <li>Finding fact families for addition &amp; subtraction</li> <li>Introducing the commutative property of addition</li> </ul>		<b>(Y1-A) Operations with Number</b> <ul style="list-style-type: none"> <li>Addition to 5 pp 1–7</li> <li>Addition to 10 pp 8–20</li> <li>Subtraction to 5 pp 21–28</li> <li>Subtraction to 10 pp 29–36</li> </ul> <b>(Y2-B) Operations with Number</b> <ul style="list-style-type: none"> <li>Addition /counting on to 20 pp 1–8</li> <li>Addition on number line pp 9–10</li> <li>Missing addends pp 12–14</li> <li>Subtraction pp 25–28</li> <li>Counting back &amp; counting on pp 29–31</li> <li>Find the difference p 32</li> <li>Subtraction facts to 10 p 39</li> <li>Subtraction facts to 15 p 40</li> <li>Addition and subtraction counting on 20–50 pp 45–46</li> <li>Addition and subtraction to 10 (explore) pp 47–52</li> <li>Addition turnarounds pp 23–24</li> <li>Relating addition and subtraction pp 35–37</li> <li>Addition and subtraction fact families pp 41–44</li> </ul> <b>(Y1-A) Numbers and Patterns</b> <ul style="list-style-type: none"> <li>Equality pp 55–60</li> </ul> <b>(Y2-B) Patterns and Relationships</b> <ul style="list-style-type: none"> <li>Equivalence pp 17–21</li> <li>Addition combinations pp 22–30</li> </ul> <b>(Y1) Rich Learning Task</b> <ul style="list-style-type: none"> <li>Lady Bug Crawl</li> </ul>
<b>LS 2</b> <b>Big idea</b> Data helps describe and wonder about the world  <b>Topic</b> Chance and data	<b>MA1-DATA-01</b> gathers and organises data, displays data in lists, tables and picture graphs  <b>MA1-CHAN-01</b> recognises and describes the element of chance in everyday events  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ...  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...  <b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve ...	<b>Data A</b>  <b>Chance A</b>  <b>Representing whole numbers A</b>  <b>Combining and separating quantities A</b>	<ul style="list-style-type: none"> <li>Ask questions and gather data</li> <li>Represent data with objects and drawings and describe the displays</li> <li>Identify and describe possible outcomes</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Use advanced count-by-one strategies to solve addition and subtraction problems</li> </ul>	<b>Data: collect &amp; interpret data (A)</b> <ul style="list-style-type: none"> <li>Tallies</li> <li>Read Graphs</li> <li>Picture Graphs: Who has the Goods?</li> <li>Picture Graphs: More or Less</li> <li>Picture Graphs: Single-Unit Scale</li> </ul> <b>Chance (A)</b> <ul style="list-style-type: none"> <li>Will it Happen?</li> <li>Most Likely and Least Likely</li> </ul>	<b>Ask questions to gather data</b> <ul style="list-style-type: none"> <li>Asking suitable questions for data collection</li> </ul> <b>Track gathered data</b> <ul style="list-style-type: none"> <li>Completing tally charts</li> </ul> <b>Chance – possible outcomes</b> <ul style="list-style-type: none"> <li>Using the everyday language of chance</li> </ul>	<b>Chance &amp; Probability 2-4</b> <ul style="list-style-type: none"> <li>Sock sort (DOK 3)</li> <li>Selective sleepover (DOK 3)</li> </ul>	<b>(Y1-A) Time, Money and Data</b> <ul style="list-style-type: none"> <li>Sorting, collecting data pp 31–35</li> </ul> <b>(Y2-B) Chance and Data Data</b> <ul style="list-style-type: none"> <li>What is it? pp 7–8</li> <li>Collecting and representing data pp 9–17</li> </ul> <b>Chance</b> <ul style="list-style-type: none"> <li>Possible/impossible pp 1–6</li> </ul>

NSW New Syllabus (2023) S1 Year 1

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 3</b> <b>Big idea</b> What needs to be measured determines the unit of measurement <b>Topic</b> Length and time	<b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances ... <b>MA1-NSM-02</b> describes, compares and orders durations of events, and reads half- and quarter-hour time <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Geometric measure A</b>  <b>Non-spatial measure</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Length: Measure the lengths of objects using uniform informal units</li> <li>Length: Compare lengths using uniform informal units</li> <li>Time: Tell time to the half-hour</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>Geometric measure: length (A)</b> <ul style="list-style-type: none"> <li>Measuring Length with Blocks</li> <li>Measuring Length</li> </ul> <b>Non-spatial measure: duration (A)</b> <ul style="list-style-type: none"> <li>Hour Times</li> <li>Half Hour Times</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half Hour</li> <li>Quarter To and Quarter Past</li> </ul>	<b>Length using informal units</b> <ul style="list-style-type: none"> <li>Measuring with informal units</li> </ul> <b>Tell the time - half hours</b> <ul style="list-style-type: none"> <li>Telling time to the hour &amp; half hour (analogue)</li> <li>Telling time to the hour &amp; half hour (digital)</li> </ul>		<b>(Y1-A) Measurement</b> <ul style="list-style-type: none"> <li>Length pp 1–15</li> </ul> <b>(Y1-A) Time, Money and Data</b> <ul style="list-style-type: none"> <li>O'clock times (analogue/digital) pp 14–17</li> </ul> <b>(Y2-B) Time and Money</b> <ul style="list-style-type: none"> <li>Clocks pp 11–13</li> <li>Half past pp 14–16</li> </ul>
<b>LS 4</b> <b>Big idea</b> Collections of objects can be changed by adding more (combining) or taking some away (separating) <b>Topic</b> Addition and subtraction	<b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve ... <b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication ... <b>MA1-NSM-01</b> measures, records, compares and estimates the masses ... <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Combining and separating quantities A</b>  <b>Forming groups A</b>  <b>Representing whole numbers A</b>  <b>Non-spatial measure A</b>	<ul style="list-style-type: none"> <li>Use advanced count-by-one strategies to solve addition and subtraction problems</li> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> <li>Count in multiples using rhythmic and skip counting</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Mass: Investigate mass using an equal-arm balance</li> </ul>	<b>Combine and separate quantities (A)</b> <ul style="list-style-type: none"> <li>Doubles and Halves to 10</li> <li>Doubles and Near Doubles</li> <li>Simple Subtraction</li> <li>Add 3 Numbers: Bonds to Multiples of 10</li> <li>Add 3 Single Digit Numbers</li> </ul>	<b>Additive relations</b> <ul style="list-style-type: none"> <li>Adding zero to a number (up to 20)</li> </ul> <b>Count by one to add &amp; subtract</b> <ul style="list-style-type: none"> <li>Finding the difference between 2 numbers (to 20)</li> <li>Counting on &amp; back to 20</li> <li>Counting on &amp; back to 100</li> <li>Recording &amp; solving number sentences to 20</li> </ul> <b>Use strategies to add &amp; subtract</b> <ul style="list-style-type: none"> <li>Doubles to 20</li> <li>Add &amp; subtract near doubles or doubles</li> <li>Adding compatible numbers (doubles or bonds to 10)</li> <li>Add &amp; subtract using bridging to 10 up to 100</li> </ul>	<b>Number &amp; Algebra, Addition &amp; Subtraction, 2-4</b> <ul style="list-style-type: none"> <li>The key to adding (numbers to 20) <b>(DOK 2)</b></li> </ul>	<b>(Y2-B) Operations with Number</b> <ul style="list-style-type: none"> <li>Addition doubles pp 15–18</li> <li>Subtraction doubles p 38</li> </ul>
<b>LS 5</b> <b>Big idea</b> Sometimes things move and change location <b>Topic</b> Position	<b>MA1-GM-01</b> represents and describes the positions of objects in familiar ... <b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances ... <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Geometric measure A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Position: Follow directions to familiar locations</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>Geometric measure: position (A)</b> <ul style="list-style-type: none"> <li>Where is it?</li> <li>Left or Right?</li> <li>Following Directions</li> </ul>	<b>Position &amp; direction</b> <ul style="list-style-type: none"> <li>Position using left &amp; right</li> <li>Following directions</li> <li>Describing a path</li> </ul>		<b>(Y1-A) Space and Shape</b> <ul style="list-style-type: none"> <li>Position - above/below, next to, in/on, on/off, under/over, near/far pp 23–27</li> <li>Directions p 28</li> </ul> <b>(Y2-B) Shape and Space</b> <ul style="list-style-type: none"> <li>Position language pp 31–33</li> <li>Paths and directions pp 34–38</li> </ul>

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 1</b> <b>Big idea</b> Collections of ten are really useful <b>Topic</b> Number review	<b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ... <b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve ...	<b>Representing whole numbers A</b>  <b>Combining and separating quantities A</b>	<ul style="list-style-type: none"> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Recognise and recall number bonds up to ten</li> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> </ul>	<b>Review earlier content</b>	<b>Review earlier content</b>		
<b>LS 2</b> <b>Big idea</b> Patterns have something that repeats over and over and over again <b>Topic</b> Patterns with 5s, 10s and 3s	<b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ... <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Forming groups A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Represent the structure of groups of ten in whole numbers</li> <li>Count in multiples using rhythmic and skip counting</li> <li>Use skip counting patterns</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> </ul>	<b>Forming groups (A)</b> <ul style="list-style-type: none"> <li>Counting by Fives</li> <li>Count by 2s, 5s and 10s</li> <li>Grouping in Fives</li> <li>Grouping in Tens</li> <li>Grouping in Threes</li> </ul>	<b>Count in multiples of 2, 3, 5, 10</b> <ul style="list-style-type: none"> <li>Skip count by 3s</li> <li>Skip count by 5s</li> <li>Skip count by 2s, 5s &amp; 10s</li> </ul>		<b>(Y2-B) Numbers</b> <ul style="list-style-type: none"> <li>Skip count in 5s pp 42–43</li> <li>Skip count in 2s, 5s or 10s p 53</li> </ul> <b>(Y3-C) Numbers</b> <ul style="list-style-type: none"> <li>Skip counting by 5s p 46</li> <li>Skip counting by 2s, 5s &amp; 10s pp 47–49</li> </ul> <b>(Y3-C) Patterns and Relationships</b> <ul style="list-style-type: none"> <li>Skip counting by 2s &amp; 5s p 11</li> </ul>
<b>LS 3</b> <b>Big idea</b> Making and using equal groups <b>Topic</b> Multiplication and division	<b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems <b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values <b>MA1-3DS-02</b> measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units	<b>Forming groups A</b>  <b>Combining and separating quantities A</b>  <b>Representing whole numbers A</b>  <b>Three-dimensional spatial structure A</b>	<ul style="list-style-type: none"> <li>Use skip counting patterns</li> <li>Count in multiples using rhythmic and skip counting</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Recognise and represent division</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Represent equality</li> <li>Volume: Construct volumes using cubes</li> </ul>	<b>Forming groups (A)</b> <ul style="list-style-type: none"> <li>Counting on a 100 grid</li> <li>Grouping in Fours</li> <li>Share the Treasure</li> <li>Groups</li> <li>Fill the Jars</li> <li>Divide Into Equal Groups</li> </ul> <b>3D spatial structure: volume (A)</b> <ul style="list-style-type: none"> <li>How many blocks?</li> </ul>	<b>Use equal grouping to multiply</b> <ul style="list-style-type: none"> <li>Using groups &amp; skip counting to solve problems</li> <li>Using "groups of" to represent multiplication</li> <li>Exploring "groups of" in arrays (no x symbol)</li> </ul> <b>Recognise &amp; represent division</b> <ul style="list-style-type: none"> <li>Sharing objects to divide</li> <li>Grouping objects to divide</li> </ul> <b>Explore leftovers</b> <ul style="list-style-type: none"> <li>Fair shares with/without remainder</li> </ul>		<b>(Y1-A) Operations with Number</b> <ul style="list-style-type: none"> <li>Grouping and sharing pp 37–44</li> </ul> <b>(Y2-B) Operations with Number</b> <ul style="list-style-type: none"> <li>Multiplication equal groups pp 55–63</li> <li>Division sharing pp 64–66</li> <li>Division remainders p 67</li> <li>Division grouping pp 68–69</li> </ul> <b>(Y3-C) Operations with Numbers</b> <ul style="list-style-type: none"> <li>Multiplying by 5s p 63</li> </ul>

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<p><b>LS 4</b></p> <p><b>Big idea</b> What needs to be measured determines the unit of measurement</p> <p><b>Topic</b> Measuring using uniform units</p>	<p><b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres</p> <p><b>MA1-2DS-02</b> measures and compares areas using uniform informal units in rows and columns</p> <p><b>MA1-3DS-01</b> recognises, describes and represents familiar three-dimensional objects</p> <p><b>MA1-3DS-02</b> measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units</p> <p><b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers</p> <p><b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values</p>	<p><b>Geometric measure A</b></p> <p><b>Two-dimensional spatial structure A</b></p> <p><b>Three-dimensional spatial structure A</b></p> <p><b>Representing whole numbers A</b></p>	<ul style="list-style-type: none"> <li>Length: Measure the lengths of objects using uniform informal units</li> <li>Length: Compare lengths using uniform informal units</li> <li>Length: Compare and order lengths, using appropriate uniform informal units</li> <li>Area: Measure areas using uniform informal units</li> <li>Area: Compare rectangular areas using uniform square units of an appropriate size in rows and columns</li> <li>3D objects: Recognise familiar three-dimensional objects</li> <li>Volume: Measure and compare the internal volumes (capacities of containers by filling</li> <li>Volume: Measure the internal volume (capacity) of containers by packing</li> <li>Volume: Compare containers based on internal volume (capacity) by filling and packing</li> <li>Volume: Compare volumes using uniform informal units</li> <li>Mass: Compare the masses of objects using an equal arm balance</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Use counting sequences of ones and tens flexibly</li> <li>Form, regroup and rename three-digit numbers</li> </ul>	<p><b>Geometric measure: length (A)</b></p> <ul style="list-style-type: none"> <li>How Long is That?</li> <li>Ordering Lengths (cm)</li> </ul> <p><b>2D spatial structure: 2D shapes (A)</b></p> <ul style="list-style-type: none"> <li>Area of Shapes</li> </ul> <p><b>3D spatial structure: volume (A)</b></p> <ul style="list-style-type: none"> <li>How Full?</li> <li>Which Holds More?</li> <li>Filling Fast!</li> </ul>	<p><b>Area</b></p> <ul style="list-style-type: none"> <li>Comparing &amp; measuring area using informal units</li> </ul> <p><b>Volume &amp; capacity</b></p> <ul style="list-style-type: none"> <li>Measuring volume &amp; capacity (informal units)</li> </ul>		
<p><b>LS 5</b></p> <p><b>Big idea</b> A fraction (like one half) can mean half of a collection, half of an object or half of a measure. A whole unit can be partitioned into smaller parts</p> <p><b>Topic</b> Fractions</p>	<p><b>MA1-GM-03</b> creates and recognises halves, quarters and eighths as part measures of a whole length</p> <p><b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve ...</p> <p><b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ...</p> <p><b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...</p>	<p><b>Geometric measure A</b></p> <p><b>Forming groups A</b></p> <p><b>Representing whole numbers A</b></p>	<ul style="list-style-type: none"> <li>Length: Subdivide lengths to find halves and quarters</li> <li>Recognise and represent division</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>		<p><b>Subdivision to find halves &amp; quarters</b></p> <ul style="list-style-type: none"> <li>Finding halves &amp; quarters</li> </ul> <p><b>Explore halves</b></p> <ul style="list-style-type: none"> <li>Finding half of a set or quantity (no symbols)</li> <li>Finding half of a set or quantity (symbols)</li> </ul>		<p><b>Y1-A Numbers and Patterns</b></p> <ul style="list-style-type: none"> <li>Fractions pp 37–40</li> </ul> <p><b>Y2-B Numbers</b></p> <ul style="list-style-type: none"> <li>Fractions - halves pp 62–67</li> </ul> <p><b>Y3-C Numbers</b></p> <ul style="list-style-type: none"> <li>Fractions equal parts pp 57–68</li> </ul>

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<p><b>LS 1</b></p> <p><b>Big idea</b> There are many different situations where addition, subtraction, multiplication and division can be used</p> <p><b>Topic</b> Everyday operations</p>	<p><b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning</p> <p><b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems</p> <p><b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers</p> <p><b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values</p>	<p><b>Combining and separating quantities A</b></p> <p><b>Forming groups A</b></p> <p><b>Representing whole numbers A</b></p>	<ul style="list-style-type: none"> <li>Use advanced count-by-one strategies to solve addition and subtraction problems</li> <li>Recognise and recall number bonds up to ten</li> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Represent equality</li> <li>Count in multiples using rhythmic and skip counting</li> <li>Use skip counting patterns</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Recognise and represent division</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<p><b>Combine and separate quantities (A)</b></p> <ul style="list-style-type: none"> <li>Problems: Addition and Subtraction</li> </ul> <p><b>Representing whole numbers (A)</b></p> <ul style="list-style-type: none"> <li>Everyday money</li> </ul>	<p><b>Explore leftovers</b></p> <ul style="list-style-type: none"> <li>Fair shares with/without remainders</li> </ul>		<p><b>Y2-B Time and Money</b></p> <ul style="list-style-type: none"> <li>Money pp 20–35</li> </ul>
<p><b>LS 2</b></p> <p><b>Big idea</b> What needs to be measured determines the unit of measurement</p> <p><b>Topic</b> Measurement review</p>	<p><b>MA1-GM-02</b> measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres</p> <p><b>MA1-2DS-02</b> measures and compares areas using uniform informal units in rows and columns</p> <p><b>MA1-3DS-01</b> recognises, describes and represents familiar three-dimensional objects</p> <p><b>MA1-3DS-02</b> measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units</p> <p><b>MA1-RWN-01</b> applies an understanding of place value and the role of zero to read, write and order two-and three-digit numbers</p> <p><b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values</p>	<p><b>Geometric measure A</b></p> <p><b>Two-dimensional spatial structure A</b></p> <p><b>Three-dimensional spatial structure A</b></p> <p><b>Representing whole numbers A</b></p>	<ul style="list-style-type: none"> <li>Length: Measure the lengths of objects using uniform informal units</li> <li>Length: Compare lengths using uniform informal units</li> <li>Area: Measure areas using uniform informal units</li> <li>3D objects: Recognise familiar three-dimensional objects</li> <li>Volume: Measure and compare the internal volumes (capacities) of containers by filling</li> <li>Volume: Measure the internal volume (capacity) of containers by packing</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<p><b>Review earlier content</b></p>	<p><b>Review earlier content</b></p>		

LS & Topic	Outcomes	Focus	Content	Activities (courses)	Skill Quests	Challenges	Ebooks
<b>LS 3</b> <b>Big idea</b> Data is collected to solve problems  <b>Topic</b> Data	<b>MA1-DATA-01</b> gathers and organises data, displays data in lists, tables and picture graphs  <b>MA1-NSM-02</b> describes, compares and orders durations of events, and reads half- and quarter-hour time  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ...  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Data A</b>  <b>Non-spatial measure A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Ask questions and gather data</li> <li>Represent data with objects and drawings and describe the displays</li> <li>Time: Name and order the cycle of months</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>Non-spatial measure: duration (A)</b> <ul style="list-style-type: none"> <li>Months of the Year</li> <li>Months After and Before</li> <li>Using a Calendar</li> <li>Seasons (AU/NZ)</li> </ul> <b>Data: collect &amp; interpret data (A)</b> <ul style="list-style-type: none"> <li>Making Picture Graphs: With Scale</li> </ul>	<b>Time: calendars</b> <ul style="list-style-type: none"> <li>Months of the year</li> <li>Know the seasons</li> <li>Using a calendar to identify the date</li> </ul> <b>Represent data</b> <ul style="list-style-type: none"> <li>Representing data in a simple display</li> <li>Ordering category data</li> </ul> <b>Describe data displays</b> <ul style="list-style-type: none"> <li>Reading simple data displays using objects</li> <li>Answer questions related to simple data displays</li> <li>Reading &amp; interpreting simple picture graphs</li> </ul>		<b>(Y1-A) Money and Data</b> Review: <ul style="list-style-type: none"> <li>Day/night/morning/afternoon/ yesterday/today/tomorrow pp 1–5</li> <li>Days of the week pp 6–10</li> <li>Seasons p 11</li> <li>Long/short time p 12</li> <li>Pictographs pp 36–39</li> </ul>
<b>LS 4</b> <b>Big idea</b> Objects can be sorted and classified in different ways  <b>Topic</b> 3D objects	<b>MA1-3DS-01</b> recognises, describes and represents familiar 3D objects ...  <b>MA1-2DS-01</b> recognises, describes and represents shapes including ...  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ...  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Three-dimensional spatial structure A</b>  <b>Two-dimensional spatial structure A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>3D objects: Recognise familiar three-dimensional objects</li> <li>3D objects: Sort and describe three-dimensional objects</li> <li>2D shapes: Recognise and classify shapes using obvious features</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> </ul>	<b>3D spatial structure: 3D objects (A)</b> <ul style="list-style-type: none"> <li>Match the Solid 1</li> <li>Match the Solid 2</li> <li>Relate Shapes and Solids</li> <li>How Many Faces?</li> </ul>	<b>Recognise three-dimensional objects</b> <ul style="list-style-type: none"> <li>Recognising &amp; describing spheres</li> <li>Recognising &amp; describing cubes</li> <li>Recognising &amp; describing cylinders</li> <li>Recognising &amp; describing prisms (no formal names)</li> </ul> <b>Explore three-dimensional objects</b> <ul style="list-style-type: none"> <li>Exploring surfaces &amp; faces</li> </ul>		<b>(Y1-A) Space and Shape</b> <ul style="list-style-type: none"> <li>3D shapes pp 15–22</li> </ul> <b>(Y2-B) Shape and Space</b> <ul style="list-style-type: none"> <li>3D objects pp 19–39</li> </ul>
<b>LS 5</b> <b>Big idea</b> Problems can be solved and represented in different ways  <b>Topic</b> Problem solving with operations	<b>MA1-CSQ-01</b> uses number bonds and the relationship between addition and subtraction to solve ...  <b>MA1-FG-01</b> uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems  <b>MA1-RWN-01</b> applies an understanding of place value and the role of zero ...  <b>MA1-RWN-02</b> reasons about representations of whole numbers to 1000 ...	<b>Combining and separating quantities A</b>  <b>Forming groups A</b>  <b>Representing whole numbers A</b>	<ul style="list-style-type: none"> <li>Use flexible strategies to solve addition and subtraction problems</li> <li>Model and use equal groups of objects to represent multiplication</li> <li>Recognise and represent division</li> <li>Use counting sequences of ones with two-digit numbers and beyond</li> <li>Continue and create number patterns</li> <li>Represent numbers on a line</li> <li>Represent the structure of groups of ten in whole numbers</li> <li>Recognise and recall number bonds up to ten</li> </ul>	<b>Teacher directed</b>	<b>Teacher directed</b>		<b>(Y2-B) Operations with Number</b> <ul style="list-style-type: none"> <li>Addition word problems p 11</li> <li>Addition and subtraction mixed word problems pp 53–54</li> </ul>

# Mathletics

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