Mathletics New South Wales Curriculum

Skill Quests & Activities

Activities



Skill Ques



Stage 1 August 2023

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Stage 1

1 Number and Algebra

1.1 Representing Whole Numbers (A)

MA1-RWN-01		
Applies an understanding of place value and the role of zero to read, write and order two- and		
	three-digit numbers	
Skill Quests	Skills	
Count by ones to 100	Counting forwards & backwards to 100	
	Numbers before & after to 100	
	Counting collections 0 to 100	
Count by ones to 200	Finding numbers on number line to 200	
Identify ordinal numbers	Identifying ordinal numbers up to 31st	
Number patterns	Odd & even number patterns to 100	
	Counting by 2s to 50	
	Counting by 2s to 100	
Compare & order numbers	Comparing & ordering numbers to 100	
Course Topic	Activities Title	
Course Topic Match, name, arrange &	Activities Title Concept of Zero	
Course Topic Match, name, arrange & order numbers	Activities Title Concept of Zero Matching Numbers to 10	
Course Topic Match, name, arrange & order numbers	Activities Title Concept of Zero Matching Numbers to 10 Matching Numbers to 20	
Course Topic Match, name, arrange & order numbers	Activities Title Concept of Zero Matching Numbers to 10 Matching Numbers to 20 Arranging Numbers	
Course Topic Match, name, arrange & order numbers	Activities Title Concept of Zero Matching Numbers to 10 Matching Numbers to 20 Arranging Numbers Number Lines	
Course Topic Match, name, arrange & order numbers	Activities Title Concept of Zero Matching Numbers to 10 Matching Numbers to 20 Arranging Numbers Number Lines Going Up	
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Course Topic Match, name, arrange & order numbers	Activities TitleConcept of ZeroMatching Numbers to 10Matching Numbers to 20Arranging NumbersNumber LinesGoing UpGoing DownBefore, After and Between to 20	
Course Topic Match, name, arrange & order numbers	Activities TitleConcept of ZeroMatching Numbers to 10Matching Numbers to 20Arranging NumbersNumber LinesGoing UpGoing DownBefore, After and Between to 20Before, After & Between to 100	
Course Topic Match, name, arrange & order numbers	Activities TitleConcept of ZeroMatching Numbers to 10Matching Numbers to 20Arranging NumbersNumber LinesGoing UpGoing DownBefore, After and Between to 20Before, After & Between to 100Ordinal Numbers	
Course Topic Match, name, arrange & order numbers	Activities TitleConcept of ZeroMatching Numbers to 10Matching Numbers to 20Arranging NumbersNumber LinesGoing UpGoing DownBefore, After and Between to 20Before, After & Between to 100Ordinal NumbersOdd or Even	
Course Topic Match, name, arrange & order numbers	Activities TitleConcept of ZeroMatching Numbers to 10Matching Numbers to 20Arranging NumbersNumber LinesGoing UpGoing DownBefore, After and Between to 20Before, After & Between to 100Ordinal NumbersOdd or EvenWhich is Bigger?	

MA1-RWN-02 Reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values	
Skill Quests	Skills
Count collections by 10	Counting collections by 10
Place value of 2-digit	Identifying place value up to 2 digits
numbers	Solving problems using place value up to 2 digits
	Model, read, write & count 2-digit numbers
Partition 2-digit numbers	Partitioning 2-digit numbers
	Partitioning 2-digit numbers (non-standard)
Round to nearest 10	Rounding to the nearest 10
Course Topic	Activities Title

Place value to tens & teens	Making Teen Numbers
	Making Numbers Count
	Making Big Numbers Count
	Place Value 1
	Repartition Two-digit Numbers
	1 More, 2 Less
	Model Numbers

1.2 Representing whole numbers (B)

MAI-RWN-UI	
Applies an understanding of place value and the role of zero to read, write and order two- and	
three-digit numbers	
Skill Quests	Skills
Read & write 3-digit	Reading & representing 3-digit numbers
numbers	
Place value of 3-digit	Identifying digit values in 3-digit numbers
numbers	
Compare & order numbers	Comparing & ordering numbers to 1000
to 1000	
Whole numbers to 1000	Counting in ones to 1000
counting in ones	Identifying numbers before & after up to 1000
Count in tens to 1000	Counting in tens with 2- & 3-digit numbers
	Finding numbers 10 before & 10 after up to 1000
Course Topic	Activities Title
Ones, tens & hundreds	Count by Tens
	Nearest 10?
	Nearest 100?
	Place Value 2
	Partition and Rename 1
	Place Value Partitioning
	Smallest and largest numbers

MA1-RWN-02 Reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values	
Skill Quests	Skills
Partition 3-digit numbers	Partitioning 3-digit numbers
	Partitioning 3-digit numbers (non-standard)
Count in 100s, 10s & 1s	Counting in hundreds, tens & ones
Round to the nearest 100	Rounding numbers up to 1000 to the nearest 100
Whole number – money	Counting & ordering Australian notes & coins
Course Topic	Activities Title
Ones, tens & hundreds	Count by Tens
	Nearest 10?
	Nearest 100?
	Place Value 2
	Partition and Rename 1

Place Value Partitioning
Smallest and largest numbers
1 More, 10 Less

1.3 Combine and separate quantities (A)

MA1-CSQ-01	
Uses number bonds and the relationship between addition and subtraction to solve problems	
involving partitioning	
Skill Quests	Skills
Count by one to add &	Finding the difference between 2 numbers (to 20)
subtract	Counting on & back to 20
	Counting on & back to 100
	Recording & solving number sentences to 20
Addition & subtraction to 10	Modelling & recording combinations that make 5 – 9
	Recognising & recalling bonds to 10
Use strategies to add &	Doubles to 20
subtract	Add & subtract near doubles or doubles
	Adding compatible numbers (doubles or bonds to 10)
	Add & subtract using bridging to 10 up to 100
Explore equality & inequality	Exploring equality & inequality to 10
to 20	Exploring equality & inequality to 20
	Finding fact families for addition & subtraction
	Introducing the commutative property of addition
Course Topic	Activities Title
Addition & subtraction	Model Addition
within 10	Adding to Make 5 and 10
	Adding to 5
	Adding to Ten
	All about Ten
	Addition Facts
	Balance Numbers to 10
	Model Subtraction
	Subtracting From 5
	Subtracting from Ten
	Adding to 10 Word Problems
	Doubles and Halves to 10
	More, Less or the Same to 10

1.4 Combine and separate quantities (B)

MA1-CSQ-01	
Uses number bonds and the relationship between addition and subtraction to solve problems	
involving partitioning	
Skill Quests	Skills
Additive relations	Model & record combinations that make 11 – 20
	Adding zero to a number (up to 20)
	Finding fact families for addition & subtraction

	Commutative property for addition
Add & subtract 2-digit numbers	Using the bar model within 20
	Adding 2-digit & 1-digit numbers
	Using mental strategies to add & subtract (to 100)
	Adding & subtracting tens from a 2-digit number
	Introducing place value to add & subtract (to 200)
	Using place value to add & subtract (to 200)
	Using place value (no models) to add & subtract
	Using place value to add (crossing a 10)
	Subtracting using addition
	Solving word problems with start or change unknown
Use equality to solve	Determining a missing number
problems	Recognising equality to 18
problems Course Topic	Recognising equality to 18 Activities Title
problems Course Topic Moving on with addition &	Recognising equality to 18 Activities Title All about Twenty
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1 Balance Numbers to 20
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1 Balance Numbers to 20 Adding In Any Order
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1 Balance Numbers to 20 Adding In Any Order Addictive Addition
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1 Balance Numbers to 20 Adding In Any Order Addictive Addition Subtraction Facts to 18
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18 Activities Title All about Twenty Related Facts 1 Balance Numbers to 20 Adding In Any Order Addictive Addition Subtraction Facts to 18 Subtract Tens
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18Activities TitleAll about TwentyRelated Facts 1Balance Numbers to 20Adding In Any OrderAddictive AdditionSubtraction Facts to 18Subtract Tens10 More, 10 Less
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18Activities TitleAll about TwentyRelated Facts 1Balance Numbers to 20Adding In Any OrderAddictive AdditionSubtraction Facts to 18Subtract Tens10 More, 10 LessDoubles and Halves to 20
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18Activities TitleAll about TwentyRelated Facts 1Balance Numbers to 20Adding In Any OrderAddictive AdditionSubtraction Facts to 18Subtract Tens10 More, 10 LessDoubles and Halves to 20Fact Families: Add and Subtract
problems Course Topic Moving on with addition & subtraction	Recognising equality to 18Activities TitleAll about TwentyRelated Facts 1Balance Numbers to 20Adding In Any OrderAddictive AdditionSubtraction Facts to 18Subtract Tens10 More, 10 LessDoubles and Halves to 20Fact Families: Add and SubtractAdd and Subtract Problems

1.5 Forming groups (A)

MA1-FG-01	
Uses the structure of equal groups to solve multiplication problems, and shares or groups to	
solve division problems	
Skill Quests	Skills
Count in multiples of 2, 3, 5,	Skip count by 2s
10	Skip count by 3s
	Skip count by 5s
	Skip count by 10s
	Skip count by 2s, 5s & 10s
Use equal grouping to multiply	Using groups & skip counting to solve problems
	Using "groups of" to represent multiplication
	Exploring "groups of" in arrays (no x symbol)
Recognise & represent	Sharing objects to divide
division	Grouping objects to divide
Explore halves	Finding half of a set or quantity (no symbols)
	Finding half of a set or quantity (symbols)
Explore leftovers	Fair shares with/without remainders
Course Topic	Activities Title

Grouping & sharing patterns	Counting by Twos
	Counting by Fives
	Counting by Tens
	Share the Treasure
	Groups
	Fill the Jars
	Grouping in Twos
	Grouping in Fives
	Grouping in Tens
	Count by 2s, 5s and 10s
	Counting on a 100 grid
	Grouping in Threes
	Grouping in Fours
	Divide Into Equal Groups

1.6 Forming groups (B)

MA1-FG-01		
Uses the structure of equal groups to solve multiplication problems, and shares or groups to		
Skill Queste	solve division problems	
Skill Quests	SKIIIS	
multiplication as equal		
groups	Using the commutative property of multiplication	
Halves, quarters & eighths	Exploring the meaning of fraction symbols	
	Finding quarters of sets or shapes (no symbols)	
	Finding quarters of sets or shapes (symbols)	
	Finding halves & quarters (no symbols)	
	Finding halves & quarters (symbols)	
	Finding eighths of objects or shapes	
	Finding halves, quarters & eighths of shapes	
Multiply & divide using	Dividing by sharing & grouping	
equal groups	Using repeated subtraction to divide	
	Solving simple multiplication problems (2, 5, 10x)	
Course Topic	Activities Title	
Model multiplication to 5×5	Model multiplication to 5×5	
Multiplication Arrays	Multiplication Arrays	
Arrays 1	Arrays 1	
Multiplication Turnarounds	Multiplication Turnarounds	
Dividing Twos	Dividing Twos	
Dividing Fives	Dividing Fives	
Dividing Tens	Dividing Tens	
Dividing Threes	Dividing Threes	
Dividing Fours	Dividing Fours	

2 Measurement and space

2.1 Geometric measure (A) (Position)

MA1-GM-01 Represents and describes the positions of objects in familiar locations	
Skill Quests	Skills
Position & direction	Position using left & right
	Following directions
	Describing a path
Course Topic	Activities Title
Position	Where is it?

2.2 Geometric measure (A) (Length)

MA1-GM-02	
Measures, records, compares and estimates lengths and distances using uniform informal	
units, as well as metres and centimetres	
Skill Quests	Skills
Length using informal units	Measuring with informal units
Course Topic	Activities Title
Informal & formal length	Measuring Length

MA1-GM-03 Creates and recognises balves, quarters and eighths as part measures of a whole length	
Skill Quests Skills	
Subdivision to find halves &	Finding halves & quarters
quarters	
Course Topic	Activities Title
Teacher directed	Teacher directed

2.3 Geometric measure (B) (Position)

MA1-GM-01	
Represents and describes the positions of objects in familiar locations	
Skill Quests	Skills
Position with maps	Reading simple maps
	Following a path
Course Topic	Activities Title
Teacher directed	Teacher directed

2.4 Geometric measure (B) (Length)

MA1-GM-02 Measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres cords, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres

Skill Quests	Skills
Compare lengths - informal units	Comparing & ordering lengths using informal units
Measure using formal units	Introducing formal units for length (m)
	Measuring using formal units for length (cm)
Halves, quarters & eighths	Relating eighths to repeated halving
Course Topic	Activities Title
Informal & formal length	Measuring Length

2.5 Two-dimensional spatial structure (A)

MA1-2DS-01	
Recognises, describes and represents shapes including quadrilaterals and other common	
	polygons
Skill Quests	Skills
Two-dimensional shapes	Regular & irregular triangles
	Sorting quadrilaterals from other 2D shapes
	Identifying, sorting & naming octagons
	Identifying, sorting & naming pentagons
	Identifying, sorting & naming hexagons
	Identifying & naming simple 2D shapes
	Comparing, describing & sorting simple 2D shapes
	Representing & describing regular polygons
	Patterns with shapes
Slides, flips & reflections	Translations of shapes
	Recognising line symmetry
Course Topic	Activities Title
Quadrilaterals & polygons	Simple Patterns
	Complete the Pattern
	Flip, Slide, Turn
	Shapes
	Symmetry
	Area of Shapes

MA1-2DS-02	
Measures and compares areas using uniform informal units in rows and columns	
Skill Quests	Skills
Area	Comparing & measuring area using informal units
Course Topic	Activities Title
Quadrilaterals & polygons	Simple Patterns
	Complete the Pattern
	Flip, Slide, Turn
	Shapes
	Symmetry
	Area of Shapes

2.6 Two-dimensional spatial structure (B)

MA1-2DS-01 Recognises, describes and represents shapes including quadrilaterals and other common polygons	
Skill Quests	Skills
Turns (rotations)	Introducing turns
Course Topic	Activities Title
Quadrilaterals & polygons	Simple Patterns
	Complete the Pattern
	Flip, Slide, Turn
	Shapes
	Symmetry
	Area of Shapes

MA1-2DS-02 Measures and compares areas using uniform informal units in rows and columns	
Skill Quests	Skills
Measure area	Measuring & estimating area using square units
Course Topic	Activities Title
Quadrilaterals & polygons	Simple Patterns
	Complete the Pattern
	Flip, Slide, Turn
	Shapes
	Symmetry
	Area of Shapes

2.7 Three-dimensional spatial structure (A) (3D objects)

MA1-3DS-01	
Recognises, descr	ibes and represents familiar three-dimensional objects
Skill Quests	Skills
Recognise three-	Recognising & describing spheres
dimensional objects	Recognising & describing cubes
	Recognising & describing cylinders
	Recognising & describing prisms (no formal names)
Explore three-dimensional	Exploring surfaces & faces
objects	
Course Topic	Activities Title
Teacher directed	Teacher directed

2.8 Three-dimensional spatial structure (A) (Volume)

MA1-3DS-02	
Measures, records, compares and estimates internal volumes (capacities) and volumes using	
uniform informal units	
Skill Quests	Skills
Volume & capacity	Exploring volume & capacity using informal units

	Measuring volume & capacity (informal units)
	Compare & order volume/capacity (informal units)
Course Topic	Activities Title
Volume	How many blocks?
	Comparing Volume
	How Full?
	Which Holds More?
	Filling Fast!

2.9 Three-dimensional spatial structure (B) (3D objects)

MA1-3DS-01	
Recognises, describes and represents familiar three-dimensional objects	
Skill Quests	Skills
3D objects	Comparing 2D shapes & 3D objects
	Identifying faces, edges & vertices on 3D objects
	Describing & sorting 3D objects
Course Topic	Activities Title
Faces, edges & vertices	How many Edges?
	How many Vertices?
	Faces, Edges and Vertices
	Faces, Edges, and Vertices 1

2.10 Three-dimensional spatial structure (B) (Volume)

MA1-3DS-02 Measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units.	
Skill Quests	Skills
Measure volume & capacity	Measuring volume & capacity (informal units)
Compare & order volume & capacity	Compare & order volume/capacity (informal units)
	Comparing & ordering volume using blocks
	Comparing & ordering volume using displacement
Course Topic	Activities Title
Volume	How many Blocks?
	Comparing Volume
	How Full?
	Which Holds More?
	Filling Fast!

2.11 Non-spatial measure (A) (Mass)

MA1-NSM-01	
Measures, records, compares and estimates the masses of objects using uniform informal units	
Skill Quests	Skills
Mass	Investigating mass with equal-arm balance
Course Topic	Activities Title
Mass	Balancing Act

Everyday Mass

2.12 Non-spatial measure (A) (Time)

MA1-NSM-02	
Describes, compares and orders durations of events, and reads half- and quarter-hour time	
Skill Quests	Skills
Time - calendars	Months of the year
	Know the seasons
	Using a calendar to identify the date
Tell the time - half hours	Telling time to the hour & half hour (analogue)
	Telling time to the hour & half hour (digital)
Course Topic	Activities Title
Duration	Months of the Year
	Manatha Aftan and Dafana
	Months After and Before
	Using a Calendar
	Using a Calendar Seasons (AU/NZ)
	Months After and Before Using a Calendar Seasons (AU/NZ) Hour Times
	Month's After and Before Using a Calendar Seasons (AU/NZ) Hour Times Half Hour Times
	Months After and Before Using a Calendar Seasons (AU/NZ) Hour Times Half Hour Times Tell Time to the Hour (UK)
	Month's After and Before Using a Calendar Seasons (AU/NZ) Hour Times Half Hour Times Tell Time to the Hour (UK) Tell Time to the Half Hour (UK)

2.13 Non-spatial measure B (Mass)

MA1-NSM-01	
Measures, records, compares and estimates the masses of objects using uniform informal units	
Skill Quests	Skills
Compare & order mass	Comparing & ordering mass using informal units
Course Topic	Activities Title
Teacher directed	Teacher directed

2.14 Non-spatial measure B (Time)

MA1-NSM-02	
Describes, compares and orders durations of events, and reads half- and quarter-hour time	
Skill Quests	Skills
Time – calendars	Using calendars to solve simple problems
Time – formal units	Choosing appropriate units of time
	Using hours to measure time
	Using hours to measure time
	Using seconds to measure time
	Comparing hours, minutes & seconds
Tell time - half & quarter	Telling time to the half & quarter hour
hours	
Course Topic	Activities Title
Duration	Months of the Year
	Months After and Before

	Using a Calendar
	Seasons (AU/NZ)
	Hour Times
	Half Hour Times
	Tell Time to the Hour (UK)
	Tell Time to the Half Hour (UK)
	Quarter To and Quarter Past

3 Statistics and Probability

3.1 Data (A)

MA1-DATA-01	
Gathers and organises data, displays data in lists, tables and picture graphs	
Skill Quests	Skills
Ask questions to gather	Asking suitable questions for data collection
data	
Track gathered data	Completing tally charts
Course Topic	Activities Title
Gather, organise & interpret	Tallies
data	Read Graphs
	Picture Graphs: Who has the Goods?
	Making Picture Graphs: With Scale
	Picture Graphs: More or Less
	Picture Graphs: Single-Unit Scale

MA1-DATA-02	
Reasons about representations of data to describe and interpret the results	
Skill Quests	Skills
Represent data	Representing data in a simple display
	Ordering category data
Describe data displays	Reading simple data displays using objects
	Answer questions related to simple data displays
	Reading & interpreting simple picture graphs
Course Topic	Activities Title
Gather, organise & interpret	Tallies
data	Read Graphs
	Picture Graphs: Who has the Goods?
	Making Picture Graphs: With Scale
	Picture Graphs: More or Less
	Picture Graphs: Single-Unit Scale

3.2 Data (B)

MA1-DATA-01	
Gathers and organises data, displays data in lists, tables and picture graphs	
Skill Quests	Skills
Use tables & lists	Representing & reading data in tables or lists
Course Topic	Activities Title
Gather, organise & interpret	Tallies
data	Read Graphs
	Picture Graphs: Who has the Goods?
	Making Picture Graphs: With Scale
	Picture Graphs: More or Less
	Picture Graphs: Single-Unit Scale

MA1-DATA-02		
Reasons about representations of data to describe and interpret the results		
Skill Quests	Skills	
Create & interpret data	Using a tally chart, table or picture graph	
displays		
Course Topic	Activities Title	
Gather, organise & interpret data	Tallies	
	Read Graphs	
	Picture Graphs: Who has the Goods?	
	Making Picture Graphs: With Scale	
	Picture Graphs: More or Less	

3.3 Chance (A)

MA1-CHAN-01		
Recognises and describes the element of chance in everyday events		
Skill Quests	Skills	
Chance - possible outcomes	Using the everyday language of chance	
Course Topic	Activities Title	
Probability	Will it Happen?	
	Most Likely and Least Likely	

3.4 Chance (B)

MA1-CHAN-01		
Recognises and describes the element of chance in everyday events		
Skill Quests	Skills	
Chance - basic language	Using basic probability language	
Course Topic	Activities Title	
Probability	Will it Happen?	
	Most Likely and Least Likely	



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