Mathletics Tasmania - Australian Curriculum v9

Activities (Courses) and Skill Quests







Mathletics

Tasmania - Australian Curriculum (v9) Activities (Courses) & Skill Quests January 2025

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Foundation

1 Number

AC9MFN01 name, represent and order numbers including zero to at least 20, using physical and virtual materials and numerals	
Course Topics	Activities
Numbers to 10	Count to 5
	How Many?
	Concept of zero
	Matching numbers to 10
	Ordinal numbers
Numbers to 20	Making teen numbers
	Counting up to 20
	Counting Back Within 20
Numbers to 30	Reading numbers to 30

AC9MFN02	
recognise and name the number of objects within a collection up to 5 using subitising	
Course Topics	Activities
Numbers to 10	Dot Display
Numbers to 20	Matching numbers to 20

AC9MFN03 quantify and compare collections to at least 20 using counting and explain or demonstrate	
reasoning	
Course Topics	Activities
Numbers to 10	Order Numbers to 10
	More, less or the same to 10
Numbers to 20	Before, After and Between to 20
	Order Numbers to 20
	More, less or the same to 20
Numbers to 30	1 to 30
	1st to 31st

AC9MFN04	
partition and combine collections up to 10 using part-part-whole relationships and subitising to	
recognise and name the parts	
Course Topics	Activities
Partition & combine	How many dots?
	Adding to make 5 and 10

AC9MFN05	
represent practical situations involving addition, subtraction and quantification with physical	
and virtual materials and use counting or subitising strategies	
Course Topics	Activities
Partition & combine	Add and subtract using graphs

AC9MFN06	
represent practical situations that involve equal sharing and grouping with physical and virtual	
materia	als and use counting or subitising strategies
Course Topics	Activities
Equal sharing & grouping	Share the treasure
	Divide into equal groups
	Fill the jars

2 Algebra

AC9MFA01	
recognise, copy and continue repeating patterns represented in different ways	
Course Topics	Activities
Patterns	Simple Patterns
	Missing it!
	Colour Patterns
	Complete the Pattern
	Pattern Error

Measurement

AC9MFM01	
identify and compare attributes of objects and events, including	
length, capacity, mass and c	duration, using direct comparisons and communicating reasoning
Course Topics	Activities
Measurement	Everyday Length
	Comparing Length
	Which Holds More?
	Balancing Act

AC9MFM02 sequence days of the week and times of the day including morning, lunchtime, afternoon and night time, and connect them to familiar events and actions	
Course Topics	Activities
Time	Days of the Week
	Days: After and Before
	Weekdays and Weekends
	Tomorrow and Yesterday (Scaffolded)

4 Space

AC9MFSP01	
sort, name and create familiar shapes; recognise and describe familiar shapes within objects in	
the environment, giving reasons	
Course Topics	Activities
Shape & position	Match the Solid 1
	Collect Simple Shapes

AC9MFSP02	
describe the position and location of themselves and objects in relation to other people	
and objects within a familiar space	
Course Topics	Activities
Shape & position	Where is it?

Statistics

AC9MFST01		
collect, sort and compare data represented by objects and images in response to given		
investigative questions that relate to familiar situations		
Course Topics	Activities	
Simple data	Same and Different	
	Sort It	
	Comparing groups of objects	

Year 1

1 Number

AC9M1N01 Recognise, represent and order numbers to at least 120 using physical and virtual materials, numerals, number lines and charts	
Course Topics	Activities
Recognise, represent & order	Going Up
numbers	Going Down
	Counting Forwards
	Counting Backwards
	Before, After & Between to 100
	Arranging Numbers
	Number Lines
	Number Line Order
	Matching Numbers to 10
	Matching Numbers to 20
	Reading Numbers to 30
	1st to 31 st
	More, Less or the Same to 20
	Greater or Less to 100
	Order Numbers to 20
	1 to 30
	Compare Numbers to 20
	Compare Numbers to 50
	Compare Numbers to 100
Topics	Skill Quests
Count numbers to 120	Counting forwards & backwards to 100
	Finding numbers before & after to 100
	Counting forwards & backwards to 120
	Numbers before & after to 120
	Reading, writing & comparing to 120
	Counting in tens & ones
Read & write numbers to 100	Reading & writing 2-digit numbers
Compare & order numbers to	Comparing numbers to 100
100	Ordering numbers to 100
Read, write & order numbers to 200	Reading & writing 3-digit numbers to 200
Identify ordinal numbers to 31st	Identifying ordinal numbers up to 31st

AC9M1N02		
Partition one- and two-digit numbers in different ways using physical and virtual materials,		
including partitioning two-digit numbers into tens and ones		
Course Topics	Activities	
Place value to 2 digits	Making Teen Numbers	
	Place Value 1	

	Repartition Two-digit Numbers
	Nearest Ten?
Topics	Skill Quests
Recognise & recall bonds to	Recognising & recalling bonds to 10
10	
Place value of 2-digit	Identifying place value up to 2 digits
numbers	Solving problems using place value up to 2 digits
Partition 2-digit numbers	Partitioning 2-digit numbers (standard)
	Partitioning 2-digit numbers (non-standard)

AC9M1N03 Quantify sets of objects, to at least 120, by partitioning collections into equal groups using number knowledge and skip counting	
Course Topics	Activities
Count in groups	Making Numbers Count
	Making Big Numbers Count
Topics	Skill Quests
Skip counting	Skip counting by 2s
	Skip counting by 5s
	Skip counting by 10s
	Skip counting with money
	Skip counting by 2s, 5s & 10s
Count collections	Counting collections 0 to 100
	Using groups of 10 to count large collections
Count money	Counting Australian notes & coins

AC9M1N04	
Add and subtract numbers within 20, using physical and virtual materials, part-part-whole	
knowledge	e to 10 and a variety of calculation strategies
Course Topics	Activities
Add & subtract within 20	Model Addition
	Adding to 5
	Adding to Ten
	Adding to Make 5 and 10
	Commutative Property of Addition
	Addictive Addition
	Add 3 Numbers Using Bonds to 10
	Add 3 Single Digit Numbers
	Doubles and Near Doubles
	Model Subtraction
	Subtracting From 5
	Subtracting from Ten
	Subtracting from 20
	Simple Subtraction
	All about Ten
	All about Twenty
	Doubles and Halves to 10
	Doubles and Halves to 20
	Balance Numbers to 20
	1 More, 2 Less

Topics	Skill Quests
Combinations that add up to	Model & record combinations that make 5 – 9
20	Model & record combinations that make 11 – 20
	Add zero to a number (up to 20)
Addition & subtraction	Introducing the commutative property of addition
strategies	Adding doubles up to 20
	Adding & subtracting near doubles
	Relating counting to adding & subtracting
	Adding & subtracting within 10 fluently
	Finding the difference between 2 numbers (to 20)
	Adding compatible numbers (doubles or bonds to 10)
Explore equality & inequality	Exploring equality & inequality up to 10 & 20

AC9M1N05

Use mathematical modelling to solve practical problems involving additive situations, including simple money transactions; represent the situations with diagrams, physical and virtual materials, and use calculation strategies to solve the problem	
Course Topics	Activities
Add & subtract problems	Who's got the Money?
within 20	Adding to 10 Word Problems
	Add and Subtract Problems
	Problems: Addition and Subtraction
	Adding In Any Order
Topics	Skill Quests
Add & subtract practical problems	Solving addition & subtraction word problems to 20

AC9M1N06 Use mathematical modelling to solve practical problems involving equal sharing and grouping; represent the situations with diagrams, physical and virtual materials, and use calculation strategies to solve the problem	
Course Topics	Activities
Multiply & divide by grouping	Share the Treasure
	Divide Into Equal Groups
	Fill the Jars
	Grouping in Twos
	Grouping in Fives
	Grouping in Tens
Topics	Skill Quests
Explore arrays & repeated	Exploring arrays (no x symbol)
addition	Using repeated addition to multiply
Equal sharing & grouping	Solving equal group problems
	Grouping & skip counting to multiply
	Sharing to divide up to 20
	Grouping to divide
	Solving grouping & sharing problems

2 Algebra

AC9M1A01 Recognise, continue and create pattern sequences, with numbers, symbols, shapes and objects, formed by skip counting, initially by twos, fives and tens	
Course Topics	Activities
Skip Counting Patterns	Count by 2s, 5s and 10s
	Counting on a 100 grid
	Count Forward Patterns
	Count Backward Patterns
	Skip Counting
	Skip Counting with Coins
Topics	Skill Quests
Pattern sequences	Relating number & object patterns
	Exploring number patterns (1, 2, 5, 10)
	Additive & subtractive patterns (within 5)
	Shape patterns

AC9M1A02 Recognise, continue and create repeating patterns with numbers, symbols, shapes and objects, identifying the repeating unit	
Course Topics	Activities
Patterns	Simple Patterns
	Missing it!
	Colour Patterns
	Complete the Pattern
	Pattern Error
Topics	Skill Quests
Repeating patterns	Exploring repeating numeric patterns
	Recognising repeating patterns
	Manipulating repeating patterns
	Extending repeating patterns
	Describing & creating repeating patterns
	Exploring repeating patterns with objects

3 Measurement

AC9M1M01 Compare directly and indirectly and order objects and events using attributes of length, mass, capacity and duration, communicating reasoning	
Course Topics	Activities
Measuring & comparing length	Comparing Length
	Comparing Volume
	Filling Fast!
	Everyday Mass
	Balancing Objects

Topics	Skill Quests
Identify measurable attributes	Introducing the attribute of length
	Introducing the attribute of mass
Compare lengths	Indirect comparisons of lengths
Explore, compare & order	Exploring capacity using informal units
capacity	Comparing & ordering capacity, informal units
Explore, compare & order mass	Comparing & ordering mass, informal units

AC9M1M02	
Measure the length of shapes and objects using informal units, recognising that units need to	
be uniform and used end-to-end	
Course Topics	Activities
	Measuring length with blocks
	Everyday Length
Topics	Skill Quests
Explore & measure length	Exploring informal units of length & distance

AC9M1M03	
Describe the duration and seq	uence of events using years, months, weeks, days and hours
Course Topics	Activities
Measuring time	Days of the Week
	Days: After and Before
	Tomorrow and Yesterday (without scaffold)
	Weekdays and Weekends
	Set Time to the Hour
	Hour Times
Topics	Skill Quests
Duration & sequence of events	Introducing the months of the year
	Working with years & months
	Comparing & sequencing intervals of time
	Describing duration

4 Space

AC9M1SP01	
Make, compare and classify familiar shapes; recognise familiar shapes and objects in the	
environment, identify	ying the similarities and differences between them
Course Topics	Activities
Shape and space	Match the Solid 1
	Collect Simple Shapes
	Count Sides and Corners
	Where is it?
Topics	Skill Quests
Introduction to two-	Sorting quadrilaterals from other 2D shapes
dimensional shapes	Comparing 2D shapes

AC9M1SP02 Give and follow directions to move people and objects to different locations within a space	
Course Topics	Activities
Shape and space	Left or Right?
	Halves
	Is it Half?
Topics	Skill Quests
Position & direction	Position using left, right & ordinal numbers
	Giving directions to others

Statistics

AC9M1ST01		
Acquire and record data for categorical variables in various ways including using digital tools,		
objects, images, drawings, lists, tally marks and symbols		
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Gather & record data	Asking suitable questions for data collection	
	Completing tally charts	
	Gathering, sorting & recording data	

AC9M1ST02 Represent collected data for a categorical variable using one-to-one displays and digital tools where appropriate; compare the data using frequencies and discuss the findings	
Course Topics	Activities
Read, represent & interpret data	Read Graphs
	Picture Graphs: Who has the Goods?
	Picture Graphs: More or Less
	Picture Graphs: Single-Unit Scale
	Making Picture Graphs: With Scale
	Tallies
Topics	Skill Quests
Represent & read data	Representing data in a simple display
	Reading simple data displays using objects
	Picture graphs
	Ordering category data

Year 2

1 Number

AC9M2N01 Recognise, represent and order numbers to at least 1000 using physical and virtual materials, numerals and number lines	
Course Topics	Activities
Read, write, compare & order	Missing Numbers 1
numbers	Which is Bigger?
	Which is Smaller?
	Greater Than or Less Than?
	Concept of Zero
	Ascending Order
	Descending Order
	Number Lines
Topics	Skill Quests
Count to 1000	Counting in ones up to 1000
	Identifying numbers before & after up to 1000
Count in tens	Counting in tens with 2- & 3-digit numbers
	Finding numbers 10 before & 10 after, up to 1000
Place value up to 3 digits	Reading & representing 3-digit numbers
	Identifying place value in 3-digit numbers
Compare & order numbers to	Comparing numbers to 1000
1000	Ordering numbers to 1000

AC9M2N02 Partition, rearrange, regroup and rename two- and three-digit numbers using standard and non-standard groupings; recognise the role of a zero digit in place value notation	
Course Topics	Activities
Place value	Place Value 2
	Place Value to Thousands
	Model Numbers
	Expanding Numbers
	Partition and Rename 1
	Place Value Partitioning
	Repartition Two-digit Numbers
Topics	Skill Quests
Hundreds, tens & ones	Counting in hundreds, tens & ones
Partition 2- & 3-digit numbers	Partitioning 3-digit numbers (standard)
	Partitioning 3-digit numbers (non-standard)
Round numbers to nearest 100	Rounding numbers up to 1000 to the nearest 100

AC9M2N03 Recognise and describe one-half as one of 2 equal parts of a whole and connect halves, quarters and eighths through repeated halving	
Course Topics	Activities
Halves & quarters	Halves
	Is it Half?
	Halves and Quarters
	Doubles and Halves to 10
	Doubles and Halves to 20
	Doubles and Near Doubles
Topics	Skill Quests
Halves & quarters	Finding half of a set or quantity (no symbols)
	Finding quarters of sets or shapes (no symbols)
	Finding halves & quarters (no symbols)
Halves, quarters & eighths	Finding eighths of objects or shapes
	Finding halves, quarters & eighths of shapes

AC9M2N04	
Add and subtract one- and two-digit numbers, representing problems using number sentences	
and solve using part-part-	whole reasoning and a variety of calculation strategies
Course Topics	Activities
Add & Subtract	Model Addition
	Model Subtraction
	Adding to 2-digit Numbers
	Complements to 10, 20, 50
	Complements to 50 and 100
	Add 3 Numbers: Bonds to Multiples of 10
	Magic Mental Addition
	Subtract Tens
	Related Facts 1
	Partition Puzzles 1
Topics	Skill Quests
Add & subtract mental	Add & subtract by counting on/back up to 100
strategies to 100	Add & subtract using bridging to 10 up to 100
	Add & subtract using jump strategy
	Adding using place value up to 100
	Using mental strategies to add & subtract (to 100)
Add & subtract strategies over	Adding using place value up to 200
100	Adding & subtracting using place value
	Adding using place value (crossing a ten)
	Subtracting using addition
	Adding & subtracting using rounding & compensating

AC9M2N05	
Multiply and divide by one-digit numbers using repeated addition, equal grouping, arrays and	
partitioning to support a variety of calculation strategies	
Course Topics	Activities
Multiplication & Division	Arrays 1
	Arrays 2
	Model Multiplication to 5×5

	Counting by Twos
	Counting by Fives
	Counting by Tens
	Count by 2s, 5s and 10s
	Dividing Twos
	Dividing Fives
	Dividing Tens
	Skip Counting with Coins
Topics	Skill Quests
Topics Arrays & repeated addition	Skill Quests Using repeated addition to multiply
	Using repeated addition to multiply
Arrays & repeated addition	Using repeated addition to multiply Exploring arrays (no x symbol)
Arrays & repeated addition Commutative property	Using repeated addition to multiply Exploring arrays (no x symbol)
Arrays & repeated addition Commutative property multiplication	Using repeated addition to multiply Exploring arrays (no x symbol) Using the commutative property of multiplication

AC9M2N06 Use mathematical modelling to solve practical problems involving additive and multiplicative situations, including money transactions; represent situations and choose calculation strategies; interpret and communicate solutions in terms of the situation	
Course Topics	Activities
Problems with four operations	Word Problems: Add and Subtract
	Problems: Add and Subtract
	How much Change?
Topics	Skill Quests
Add & subtract practical	Solving word problems with start or change unknown
problems	Writing simple number sentences
	Solving contextual problems
Multiply & divide practical	Solving simple multiplication problems (2,5,10x)
problems	Solving contextual problems

2 Algebra

AC9M2A01 Recognise, describe and create additive patterns that increase or decrease by a constant amount, using numbers, shapes and objects, and identify missing elements in the pattern	
Course Topics	Activities
Algebra-Patterns & missing	Increasing Patterns
numbers	Decreasing Patterns
	Odd or Even
	Pattern Error
Topics	Skill Quests
Addition & subtraction	Identify, describe & continue number sequences
sequences	Add or subtract patterns (within 10) up to 100
	Additive visual patterns

AC9M2A02 Recall and demonstrate proficiency with addition facts to 20; extend and apply facts to develop related subtraction facts	
Course Topics	Activities
Algebra-Patterns & missing	Missing Numbers
numbers	Fact Families: Add and Subtract
	Balance Additions to 20
Topics	Skill Quests
Addition & subtraction relationship	Finding fact families for addition & subtraction
Addition & subtraction facts to	Adding & subtracting within 20 fluently
20	Number bonds to 20

AC9M2A03 Recall and demonstrate proficiency with multiplication facts for twos; extend and apply facts to develop the related division facts using doubling and halving	
Course Topics	Activities
Halves & quarters	Counting by Twos
	Doubles and Halves to 10
	Doubles and Halves to 20
	Doubles and Near Doubles
Multiplication & division	Counting by Twos
Topics	Skill Quests
Multiplication & division facts for	Recalling & using multiplication facts for 2
2	Recalling & using division facts for 2
	Multiplying & dividing by 2

3 Measurement

AC9M2M01 Measure and compare objects based on length, capacity and mass using appropriate uniform informal units and smaller units for accuracy when necessary	
Course Topics	Activities
Measure informally	Measuring Length with Blocks
	Compare length
	Balancing Act
	Comparing Volume
Topics	Skill Quests
Understand & measure length	Comparing & ordering lengths using informal units
Understand & measure capacity	Estimate & measure capacity using informal units
& volume	Comparing & ordering volume
Understand & measure mass	Comparing & ordering mass using informal units

AC9M2M02 Identify common uses and represent halves, quarters and eighths in relation to shapes, objects and events	
Course Topics	Activities
Measure informally	How Full?
	Halve it!
Topics	Skill Quests
Understand halves, quarters &	Finding half of a set or quantity
eighths	Finding quarters of a set or quantity
	Finding eighths of a set or quantity
	Practical situations

AC9M2M03		
Identify the date and deterr	Identify the date and determine the number of days between events using calendars	
Course Topics	Activities	
Days, weeks, months &	Months of the Year	
calendars	Months After and Before	
	Seasons (AU/NZ)	
	Using a Calendar	
	Tomorrow and Yesterday (without scaffold)	
	Weekdays and Weekends	
Topics	Skill Quests	
Months of the year	Months of the year	
Use a calendar	Using a calendar to identify the date	
	Using calendars to solve simple problems	

AC9M2M04 Recognise and read the time represented on an analog clock to the hour, half-hour and quarter-hour	
Course Topics	Activities
Time to Half & Quarter hour	Tell Time to the Half Hour
	Set Time to the Half Hour
	Quarter To and Quarter Past
Topics	Skill Quests
Recognise & read time up to	Telling time to the hour & half hour (analogue)
quarter hour	Telling time to the hour & half hour (digital)
	Telling time to the half & quarter hour

AC9M2M05	
Identify, describe and demonstrate quarter, half, three-quarter and full measures of turn in	
everyday situations	
Course Topics	Activities
Shape space & measure	Sides, Angles and Diagonals
Topics	Skill Quests
Turns of shapes	Turns of shapes

4 Space

AC9M2SP01 Recognise, compare and classify shapes, referencing the number of sides and using spatial	
	pposite", "parallel", "curved" and "straight"
Course Topics	Activities
Shape space & measure	Collect the Polygons
	Collect the Objects
Topics	Skill Quests
Recognise & classify 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
Identify types of lines	Identifying vertical & horizontal lines
	Identifying parallel lines
Recognise & classify 3D objects	Exploring surfaces & faces
	Recognising & describing spheres
	Recognising & describing cones
	Recognising & describing cubes
	Recognising & describing cylinders
	Recognising, sorting & naming 3D objects
	Recognising & describing prisms (no formal names)
	Comparing 2D shapes & 3D objects
	Identifying faces, edges & vertices on 3D objects
	Faces, edges, vertices & surfaces of 3D objects

AC9M2SP02 Locate positions in two-dimensional representations of a familiar space; move positions by following directions and pathways	
Course Topics	Activities
Shape space & measure	Map Coordinates
	Where is it?
	Left or Right?
Topics	Skill Quests
Read maps	Reading simple maps

Statistics

AC9M2ST01 Acquire data for categorical variables through surveys, observation, experiment and using digital tools; sort data into relevant categories and display data using lists and tables	
Course Topics	Activities
Tables & Lists	Sorting Data
	Sort It
	Interpreting Tables
	Read Graphs

Topics	Skill Quests
Gather data	Answer questions related to simple data displays

AC9M2ST02 Create different graphical representations of data using software where appropriate; compare the different representations, identify and describe common and distinctive features in response to questions	
Course Topics	Activities
Tables & Lists	Picture Graphs: Who has the Goods?
	Picture Graphs: More or Less
	Making Picture Graphs: With Scale
	Tallies
Topics	Skill Quests
Create displays of data	Reading & interpreting simple picture graphs
	Representing & reading data in tables or lists
	Using a tally chart, table, picture graph



For more information about Mathletics, contact our friendly team.

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