Mathletics
NZ Curriculum Mathematics and Statistics (2026)

Activities (Courses) and Skill Quests

Phase 1, Years 0-3

December, 2025

Mathletics

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NZ Mathematics & Statistics 2026

Activities (Courses) & Skill Quests

December, 2025

Phase 1, Year 0

Number

Number structure

Reading and writing whole numbers up to 20	
📋 Activities	
Number structure: Number to 20	Matching Numbers to 10
	Matching Numbers to 20

Counting forwards or backwards from any whole number between 1 and 10, and then between 1 and 20	
📋 Activities	
Number structure: Number to 20	Counting Up to 20
	Counting Back Within 20

Comparing and ordering whole numbers up to 20 and ordinal numbers up to 5th, using words	
📋 Activities	
Number structure: Number to 20	Order Numbers to 10
	Order Numbers to 20
	More, Less or the Same to 10
	More, Less or the Same to 20

Locating whole numbers on a fully labelled number line	
📋 Activities	
Teacher directed	

Subitising (recognising without counting) the number of objects in a small collection (3–5 objects)	
📋 Activities	
Number structure: Number to 20	Dot Display

Counting collections of up to 10 objects using one-to-one correspondence	
📋 Activities	
Number structure: Number to 20	Count to 5
	How Many?

Recognising when a quantity is greater than, less than, or the same as another quantity	
📋 Activities	
Number structure: Number to 20	More, Less or the Same to 10
	More, Less or the Same to 20

Operations

Memorising addition and subtraction facts up to 5 (e.g. 2+3=5)	
📋 Activities	
Operations: Add & subtract to 10	Adding to 5
	Subtracting From 5

Naming the number before or after a given number in the counting sequence up to 10
▦ **Activities**
Teacher directed

Algebra

Equations & relationships

Copying, continuing, creating, and describing a repeating pattern with two elements (e.g. cat, dog, cat, dog, _____, _____)	
▦ **Activities**	
Patterns & measurement	Complete the pattern

Using ordinal numbers up to 5th place to describe position in a sequence
▦ **Activities**
Teacher directed

Measurement

Measuring

Directly comparing two objects by an attribute (e.g. length, mass (weight), capacity)	
▦ **Activities**	
Patterns & measurement	Everyday Length
	Compare Length 1
	Which Holds More?
	Hot or Cold?
	Balancing Act

Connecting days of the week to familiar events and daily routines (e.g. via the class timetable)
▦ **Activities**
Teacher directed

Naming and ordering the days of the week, including naming the day before and the day after	
▦ **Activities**	
Patterns & measurement	Days of the week

Geometry

Shapes

Identifying, sorting by one attribute, and describing familiar 2D shapes, including triangles, circles, and rectangles (including squares)	
▦ **Activities**	
Geometry: Shape & pathways	Same and Different
	Sort It
	Collect the Shapes

Pathways

Following instructions to move to a familiar location or locate an object	
▦ **Activities**	
Geometry: Shape & pathways	Where is it?

Phase 1, Year 1

Number

Number structure

Reading and writing whole numbers up to 100, and representing them using base 10 structure	
📋 **Activities**	
Number structure: Count, compare & order	Matching Numbers to 20
	Reading Numbers to 30
	Making Numbers Count
	Making Big Numbers Count

Counting forwards or backwards from any whole number between 1 and 20, and then between 1 and 100	
📋 **Activities**	
Number structure: Count, compare & order	Concept of zero
	Counting Forwards
	Counting Backwards
	The Number Line
	Counting Back Within 20
	Before, After and Between to 20

Comparing and ordering whole numbers and ordinal numbers using representations, words, or numerals, and suffixes to 100	
📋 **Activities**	
Number structure: Count, compare & order	More, less or the same to 20
	Order Numbers to 20
	Compare Numbers to 20
	1 to 30
	Arranging Numbers
	Greater or Less to 100
	Ordinal Numbers

Using te reo Māori for numbers up to 30
📋 **Activities**
Teacher directed

Locating numbers on a partially labelled number line (e.g. 17 on a number line labelled in 5s)	
📋 **Activities**	
Number structure: Count, compare & order	The Number Line

Subitising (recognising without counting) smaller groups of objects within a larger collection (e.g. 3 and 5 in a group of 8 objects)	
📋 **Activities**	
Number structure: Count, compare & order	Dot Display

Counting collections of objects using one-to-one correspondence, and then by pairs, for up to 20 objects
📋 **Activities**
Teacher directed

Finding the total number of objects up to 20 by grouping (using pairs, 5s, or 10s)	
📋 **Activities**	
Statistics	Tallies

Counting forwards and backwards in 2s and 10s from any whole number between 0 and 100
📋 **Activities**
Teacher directed

Operations

Memorising addition and subtraction facts up to 10, including 10 + 0= 10 (e.g. 7 + 3 = 10)	
📋 **Activities**	
Operations: Addition & subtraction to 20	Adding to Make 5 and 10
	Adding to Ten
	Subtracting from Ten

Memorising doubles and halves to 10	
📋 **Activities**	
Operations: Addition & subtraction to 20	Doubles and Halves to 10

Naming the number before or after a given number in the counting sequence up to 20	
📋 **Activities**	
Operations: Addition & subtraction to 20	Before, After and Between to 20

Adding and subtracting one- and two-digit numbers up to 20, including 0	
📋 **Activities**	
Operations: Addition & subtraction to 20	Doubles and Halves to 10
	Addictive Addition
	Subtraction Facts to 18

Joining and separating groups of up to 20 objects (e.g. 9 + 6, 7 + _ = 11)	
📋 **Activities**	
Operations: Addition & subtraction to 20	Adding to Make 5 and 10
	Add and Subtract Problems
	Doubles and Halves to 20
	Subtraction Facts to 18

Adding ten to a one-digit number	
📋 **Activities**	
Operations: Addition & subtraction to 20	Making Teen Numbers

Solving one-step problems involving addition and subtraction using objects and pictorial representations	
📋 **Activities**	
Teacher directed	

Multiplying and dividing using equal grouping or counting for products and dividends within 20	
📋 **Activities**	
Operations: Grouping & sharing	Groups
	Grouping in Twos
	Share the Treasure

Rational numbers

Recognising and representing halves and quarters as fractions of sets, quantities, and regions, using equal parts of the whole	
📋 **Activities**	
Rational numbers: Halves & quarters	Halves
	Is it Half?
	Halves and Quarters

Finding a half or quarter of a set using equal sharing and grouping	
📋 **Activities**	
Teacher directed	

Connecting 1/2 and 1/4 through halving	
📋 **Activities**	
Rational numbers: Halves & quarters	Halves and Quarters

Using te reo Māori naming of halves (haurua) and quarters (hauwhā)	
📋 **Activities**	
Teacher directed	

Financial mathematics

Recognising and knowing the value of New Zealand denominations of currency (i.e., coins and notes)	
📋 **Activities**	
Number: Financial maths	Recognise Everyday Money (NZD)

Algebra

Equations & relationships

Completing open number sentences involving addition and subtraction of one-digit numbers (e.g. 2 + 5 = 3+__)	
📋 **Activities**	
Algebra: Equations & relationships	Balance Numbers to 10

Checking the truth of number sentences involving addition and subtraction of one-digit numbers (e.g. 7−5=6−4, true or false?)
🔲 **Activities**
Teacher directed

Copying, continuing, creating, and describing a repeating pattern with three elements	
🔲 **Activities**	
Algebra: Equations & relationships	Simple Patterns
	Missing it!

Identifying missing elements in a pattern (e.g. red, green, blue, red, _____, blue)	
🔲 **Activities**	
Algebra: Equations & relationships	Missing it!

Measurement

Measuring

Comparing the length, mass (weight), or capacity of objects directly or indirectly (e.g. by comparing each of them with another reference object, used repeatedly)	
🔲 **Activities**	
Measurement: Measuring & time	Everyday Length
	Compare Length
	Which Holds More?
	Hot or Cold?
	Balancing Objects

Using comparative language for lengths and heights (longer, shorter, taller) and mass (heavier, lighter)	
🔲 **Activities**	
Measurement: Measuring & time	Everyday Length
	Compare Length

Telling the time on analogue and digital clocks to the hour, using the language of 'o'clock'	
🔲 **Activities**	
Measurement: Measuring & time	Set Time to the Hour

Selecting appropriate units of time to communicate approximate durations in years, months, weeks, days, hours, minutes, or seconds
🔲 **Activities**
Teacher directed

Sequencing events in a day using everyday language of time (e.g. after, before, earlier, later, tomorrow, yesterday, the day after, next)	
🔲 **Activities**	
Measurement: Measuring & time	Days of the Week

Geometry

Shapes

Identifying, describing, and sorting by one attribute familiar 2D and 3D shapes presented in different orientations, including cubes, cylinders, and spheres	
▤ **Activities**	
Geometry: Shape & pathways	Collect the Shapes
	Match the Object

Spatial reasoning

Composing a compound shape using smaller shapes by trial and error, and decomposing a shape into smaller shapes
▤ **Activities**
Teacher directed

Pathways

Following instructions to move to a familiar location or locate an object	
▤ **Activities**	
Geometry: Shape & pathways	Where is it?
	Left or Right?

Using positional language to describe the position and movement of objects (e.g. above, below, left, right, in-front, behind, top, bottom, inside, outside, on, under, next to)	
▤ **Activities**	
Geometry: Shape & pathways	Where is it?
	Left or Right?

Using pictures, diagrams, or stories to describe the positions of objects and places
▤ **Activities**
Teacher directed

Statistics

Developing knowledge from data

Collecting categorical data for an investigative question with limited categories (e.g. Do students in our class have one foot longer than the other?)
▤ **Activities**
Teacher directed

Recording data using tally charts	
▤ **Activities**	
Statistics	Tallies

Visualisation of data

Creating picture graphs for categorical data	
📰 **Activities**	
Statistics	Picture Graphs: Single-Unit Scale

Interpretation of data

Describing a picture graph by giving the frequency for each category	
📰 **Activities**	
Statistics	Picture Graphs: Who has the goods?

Answering questions about a picture graph, including which category has the most or least items	
📰 **Activities**	
Statistics	Picture Graphs: Who has the goods?

Phase 1, Year 2

Number

Number structure

Reading and writing whole numbers up to 120, and representing them using base 10 structure	
⊞ Activities	
Number structure: Numbers up to 120	Making Teen Numbers
	Making Numbers Count
	Making Big Numbers Count
	Model Numbers
♛ Skill Quests	
Number structures: Numbers to 120	Reading, writing & representing 2-digit numbers
	Reading & writing numbers to 120

Comparing and ordering whole numbers up to 120	
⊞ Activities	
Number structure: Numbers up to 120	Compare Numbers to 50
	Compare Numbers to 100
	Arranging Numbers
	Before, After & Between to 100
♛ Skill Quests	
Number structures: Compare & order	Comparing & ordering sets up to 50
	Comparing & ordering numbers to 120

Using te reo Māori for numbers up to 100
⊞ Activities
Teacher directed
♛ Skill Quests
Teacher directed

Recognising the place value of each digit in a two-digit number, and a three-digit number up to 120	
⊞ Activities	
Number structure: Numbers up to 120	Making Teen Numbers
	Making Numbers Count
	Making Big Numbers Count
	Model Numbers
♛ Skill Quests	
Number structures: Place value to 120	Identifying place value of 2-digit numbers
	Identifying numbers before & after up to 120
	Partitioning 2-digit numbers

Approximately locating numbers up to 120 on a partially labelled number line (e.g. 61 on a number line labelled in tens)

📰 Activities
Teacher directed

👑 Skill Quests
Teacher directed

Finding the total number of objects up to 120 by separating them into groups (e.g. groups of ten)

📰 Activities
Teacher directed

👑 Skill Quests
Teacher directed

Rounding numbers up to 120 to the nearest 10	
📰 Activities	
Number structure: Numbers up to 120	Nearest 10?
👑 Skill Quests	
Number structures: Round to nearest 10	Rounding numbers to the nearest 10

Counting forwards in 3s from multiples of 3s	
📰 Activities	
Operations: Multiplication & division	Groups of Three
👑 Skill Quests	
Number structures: Count in 3s	Counting forwards in 3s

Counting forwards and backwards in 2s, 5s, and 10s from any whole number between 0 and 120	
📰 Activities	
Number structure: Numbers up to 120	Counting by Twos
	Counting by Fives
	Counting by Tens
Operations: Multiplication & division	Count by 2s, 5s and 10s
👑 Skill Quests	
Number structures: Count collections	Counting collections to 20
	Counting collections in 1s, 2s, 5s, 10s to 50
	Counting collections in 1s, 2s, 5s, 10s to 100
Number structures: Counting strategies	Counting by 1s to 120
	Counting in 10s & 1s
	Counting in 10s, 2-digit numbers on the decade
	Counting in 10s, 2-digit numbers off the decade

Identifying odd and even numbers up to 120	
📰 Activities	
Number structure: Numbers up to 120	Odd or even
👑 Skill Quests	
Number structures: Odd & even numbers	Identifying odd & even numbers to 120

Operations

Memorising addition and subtraction facts up to 20 (e.g. 17 + 3 = 20)	
📖 **Activities**	
Operations: Addition & subtraction	All about Twenty
	Addictive Addition
	Simple Subtraction
	Related Facts 1
	Fact Families: Add and Subtract
	Adding In Any Order
👑 **Skill Quests**	
Operations: Addition facts up to 20	Addition & subtraction facts to 20
	Introducing the commutative property of addition

Memorising doubles and halves to 20	
📖 **Activities**	
Operations: Addition & subtraction	Doubles and Halves to 20
	Doubles and Near Doubles
👑 **Skill Quests**	
Operations: Doubles & halves to 20	Adding doubles up to 20
	Finding halves to 20

Adding and subtracting numbers up to 100 (e.g. 32 + 20 or 32 + 2)	
📖 **Activities**	
Operations: Addition & subtraction	Adding In Any Order
	Doubles and Near Doubles
	Add 3 Numbers Using Bonds to 10
	Adding to 2-digit numbers
	Subtracting tens
👑 **Skill Quests**	
Operations: Add & subtract to 20	Adding & subtracting to 20
	Adding & subtracting zero within 20
	Adding/subtracting using counting on & back to 20
Operations: Add & subtract to 100	Adding/subtracting using counting on & back to 100
	Bridging to ten using models
	Adding & subtracting using jump strategy
	Adding using place value up to 100

Adding and subtracting 3 one-digit numbers (e.g. 7 + 3 + 6)	
📖 **Activities**	
Operations: Addition & subtraction	Add Three 1-Digit Numbers
👑 **Skill Quests**	
Operations: Add 3 one-digit numbers	Adding 3 one-digit numbers

Adding 100 to a one-digit number	
📖 **Activities**	

Teacher directed

Solving one-step addition and subtraction problems involving numbers up to 100	
📖 **Activities**	
Operations: Addition & subtraction	Problems: Add and Subtract
👑 **Skill Quests**	
Operations: Add/subtract problems to 100	Addition & subtraction problems to 100

Solving multi-step addition and subtraction problems involving numbers up to 20	
📖 **Activities**	
Operations: Addition & subtraction	Add and Subtract Problems
👑 **Skill Quests**	
Operations: Add/sub multi-step problems	Multi-step addition & subtraction problems to 20

Identifying the relationship between skip counting and multiplication facts for 2s, 5s, and 10s	
📖 **Activities**	
Operations: Multiplication & division	Count by 2s, 5s and 10s
👑 **Skill Quests**	
Operations: Skip counting	Skip counting by 2s up to 50
	Skip counting by 5s up to 50
	Skip counting by 10s up to 100
	Skip counting by 2s, 5s & 10s up to 50

Memorising multiplication and corresponding division facts for 2s, 5s, and 10s	
📖 **Activities**	
Operations: Multiplication & division	Groups of Ten
	Groups of Two
	Groups of Five
	Arrays 1
👑 **Skill Quests**	
Operations: Multiply & divide 2, 5 & 10	Multiplication facts for 2
	Division facts for 2
	Multiplication & division facts for 2
	Multiplication facts for 5
	Division facts for 5
	Multiplication & division facts for 5
	Multiplication facts for 10
	Division facts for 10
	Multiplication & division facts for 10
	Multiply & divide by 2, 5 & 10

Multiplying and dividing with products and dividends up to 100	
📖 **Activities**	
Operations: Multiplication & division	Multiplication Arrays

	Divide into Equal Groups
♔ Skill Quests	
Operations: Multiply & divide up to 100	Multiplication strategies
	Division strategies

Rational numbers

Recognising, reading, writing (using symbols and words), and representing halves, thirds, and quarters (1/3,1/4,2/4,1/2,2/3,3/4) as fractions of sets, quantities, and regions, using equal parts of the whole	
▤ Activities	
Rational numbers: Simple fractions	Halves
	Halves and Quarters
♔ Skill Quests	
Rational numbers: Halves/thirds/quarters	Reading, writing & representing halves
	Reading, writing & representing quarters
	Reading, writing & representing thirds
	Finding halves, thirds or quarters of shapes

Recognising the equivalence of 2/4 and 1/2	
▤ Activities	
Rational numbers: Simple fractions	Halves and Quarters
♔ Skill Quests	
Rational numbers: Equivalence 2/4 & 1/2	Recognising equivalence of 2/4 & 1/2

Directly comparing two fractions involving halves, thirds, or quarters	
▤ Activities	
Teacher directed	
♔ Skill Quests	
Rational numbers: Compare fractions	Ordering/comparing halves & quarters up to 3

Finding a half, quarter, or third of a set by identifying groups and patterns (rather than sharing by ones)	
▤ Activities	
Teacher directed	
♔ Skill Quests	
Rational numbers: Fractions of sets	Finding halves & quarters of sets

Finding a whole when given a 1/2,1/3,or 1/4 of a length, shape, or set of objects or quantities	
▤ Activities	
Teacher directed	
♔ Skill Quests	
Teacher directed	

Financial mathematics

Recognising and ordering New Zealand denominations according to their value, making groups of 'like' denominations, and calculating their value	
📖 **Activities**	
Number: Financial maths	Recognise Everyday Money (NZD)
👑 **Skill Quests**	
Financial maths: Recognise & order money	Recognising & sorting denominations

Combining denominations of currency (either all notes or all coins) to make a particular value	
📖 **Activities**	
Number: Financial maths	Who has The Money? (NZD)
👑 **Skill Quests**	
Teacher directed	

Algebra

Equations & relationships

Checking the truth of number sentences involving direct comparisons of whole numbers up to 120 (e.g. 16 > 60, true or false?)	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Equations & relationships: Whole numbers	Checking truth direct comparisons of whole numbers

Checking the truth of number sentences and completing open number sentences involving addition, subtraction, multiplication, or division using tens frames, discrete materials, or number lines (e.g. 18 +__= 17 + 6, 6÷__= 2, 2 + 2 + 2 = 3 × 2, true or false?)	
📖 **Activities**	
Algebra: Equality & relationships	Balance Numbers to 20/Composing Numbers to 20
	Balance Additions to 20/Composing additions to 20
👑 **Skill Quests**	
Equations & relationships: Equality	Exploring equality in addition & subtraction
	Exploring equality in multiplication & division

Recognising and describing the unit of repeat in a repeating pattern, and using the unit of repeat and ordinal position in a repeating pattern to predict further elements (e.g. ACDC in the pattern ACDCACDCACDC)	
📖 **Activities**	
Algebra: Equality & relationships	Pattern Error
	Simple Patterns
	Missing it!
👑 **Skill Quests**	
Equations & relationships: Patterns	Recognising repeating patterns
	Reproducing repeating patterns
	Manipulating repeating patterns
	Extending repeating patterns

Measurement

Measuring

Estimating and using an informal unit repeatedly to measure the length, mass (weight), or capacity of an object	
📖 **Activities**	
Measurement: Measuring, time & area	Measuring Length with Blocks
	Compare Length
	Filling Fast!
	Everyday Mass
👑 **Skill Quests**	
Measuring: Informal units of length	Exploring length using informal units
Measuring: Capacity	Exploring capacity using informal units
Measuring: Informal units of mass	Exploring mass using informal units

Comparing and ordering several objects using informal units of length, mass (weight), or capacity	
📖 **Activities**	
Measurement: Measuring, time & area	Compare Length
	Filling Fast!
	Everyday Mass
👑 **Skill Quests**	
Measuring: Compare & order lengths	Comparing & ordering lengths using informal units
Measuring: Compare capacity	Comparing & ordering capacity using informal units

Estimating and measuring length (cm), mass (g), and capacity (mL), using tools with labelled markings and whole-number metric units	
📖 **Activities**	
Measurement: Measuring, time & area	Which Measuring Tool?
	How Long is That?
	How Full?
	How Heavy?
👑 **Skill Quests**	
Measuring: Measure using metric units	Introducing formal units (cm)
	Introducing formal units (g)
	Introducing formal units (ml)

Measuring the perimeter of polygon using metric units	
📖 **Activities**	
Measurement: Measuring, time & area	Perimeter of Shapes
👑 **Skill Quests**	
Measuring: Perimeter	Measuring perimeter in metric units

Turning an object or person and describing how far they have turned, using full, half, quarter, and three-quarter turns as benchmarks	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

Naming and ordering the months and seasons	
🔳 **Activities**	
Measurement: Measuring, time & area	Months of the Year
👑 **Skill Quests**	
Measuring: Months & seasons	Introducing the months of the year
	Introducing the seasons

Describing durations of familiar events using years, months, weeks, and days, or hours, minutes and seconds	
🔳 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Measuring: Describing durations	Introducing calendars
	Recalling days of the week
	Identifying & comparing durations

Telling the time on analogue and digital clocks to the hour, half-hour, and quarter-hour, using the language of 'past' and 'o'clock'	
🔳 **Activities**	
Measurement: Measuring, time & area	Set Time to the Hour
	Set Time to the Half Hour
	Quarter To and Quarter Past
👑 **Skill Quests**	
Measuring: Tell time to quarter hour	Telling the time to the hour & half hour
	Telling the time to the quarter hour

Naming the month before and the month after	
🔳 **Activities**	
Measurement: Measuring, time & area	Months before and after
👑 **Skill Quests**	
Teacher directed	

Using ordinal numbers to identify months of the year	
🔳 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

Geometry

Shapes

Identifying, describing, visualising, and sorting 2D and 3D shapes, including ovals, semicircles, polygons (e.g. hexagons, pentagons), rectangular prisms (cuboids), pyramids, and cones, using the attributes of shapes	
🔳 **Activities**	
Geometry: Shape, space & pathways	Count Sides and Corners
	Collect the Shapes 1
	Collect More Shapes

	Collect the Objects
	How Many Faces?
	How Many Edges?
	How Many Vertices?

👑 Skill Quests	
Shapes: Introduce 2D shapes	Introducing quadrilaterals
	Introducing octagons
	Introducing pentagons
	Introducing hexagons
	Comparing 2D shapes
	Sorting 2D shapes
Shapes: Introduce 3D objects	Introducing spheres
	Introducing cones
	Introducing cubes
	Introducing cylinders
	Identifying & comparing 3D objects
	Sorting 3D shapes

Spatial reasoning

Flipping, sliding, and turning 2D shapes to make a pattern or compose a shape	
📰 **Activities**	
Geometry: Shape, space & pathways	Symmetry
	Flip, slide, turn
👑 **Skill Quests**	
Spatial reasoning: Flip, slide & turn	Introducing turns
	Introducing slides
	Introducing flips
	Flips & slides

Pathways

Following and giving instructions to move to a different location, using direction, distances (e.g. number of steps), and half and quarter turns	
📰 **Activities**	
Geometry: Shape, space & pathways	Left or Right?
	Following Directions
👑 **Skill Quests**	
Pathways: Understand directions	Understanding left & right from opposite direction
Pathways: Follow & give directions	Following & giving directions
	Describing position

Interpreting diagrams to describe the positions of objects and places in relation to other objects and places	
📰 **Activities**	
Geometry: Shape, space & pathways	Left or Right?
	Following Directions
👑 **Skill Quests**	
Teacher directed	

Statistics

Developing knowledge from data

Collecting categorical data for an investigative question with limited categories (e.g. What are the favourite pets of students in our class?)	
🔲 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Statistics: Collect data	Collecting data

Sorting categorical data into categories and considering if 'other' should be a category for sorting rare responses	
🔲 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

Recording data using tally charts	
🔲 **Activities**	
Statistics	Tallies
👑 **Skill Quests**	
Statistics: Use tally charts	Introducing tally charts

Visualisation of data

Creating data visualisations for categorical data	
🔲 **Activities**	
Statistics	Making Picture Graphs: With Scale
👑 **Skill Quests**	
Statistics: Create data visualisations	Creating data visualisations

Interpretation of data

Describing data visualisations using the variable name and the context and giving the frequency for each category	
🔲 **Activities**	
Statistics	Picture Graphs: with scale & half symbols
👑 **Skill Quests**	
Teacher directed	

Answering questions about data visualisations, including which category has the most or least items	
🔲 **Activities**	
Statistics	Picture Graphs: with scale & half symbols
👑 **Skill Quests**	
Statistics: Answer questions about data	Answering questions about data

Phase 1, Year 3

Number

Number structure

Reading and writing whole numbers up to 1,000, and representing them using base 10 structure	
📖 Activities	
Number structure: Whole number & place value	Place Value 2
👑 Skill Quests	
Number structures: Read & write numbers	Reading & writing 3-digit numbers

Comparing and ordering whole numbers up to 1,000	
📖 Activities	
Number structure: Whole number & place value	Which is Bigger?
	Which is Smaller?
	Smallest and largest numbers
👑 Skill Quests	
Number structures: Compare & order	Comparing & ordering numbers to 1000

Recognising the place value of each digit in a three-digit number	
📖 Activities	
Number structure: Whole number & place value	Place Value 2
	Smallest and largest numbers
👑 Skill Quests	
Number structures: Place value to 1000	Using place value with 3-digit numbers
	Partitioning 3-digit numbers
	Finding 10 or 100 before & after up to 1000
	Finding the number of tens
	Solving place value problems

Finding the total number of objects beyond 120 by first separating them into groups (e.g. groups of 10 or 100)
📖 Activities
Teacher directed
👑 Skill Quests
Teacher directed

Rounding numbers to the nearest 10 or 100	
📖 Activities	
Number structure: Whole number & place value	Nearest 10?
	Nearest 100?
👑 Skill Quests	
Number structures: Round numbers	Rounding numbers to nearest 10 (up to 1000)
	Rounding numbers to nearest 100 (up to 1000)

Estimating the answer to a calculation	
📘 **Activities**	
Operations: Addition & subtraction	Estimate Sums
	Estimate Differences
👑 **Skill Quests**	
Number structures: Estimate answers	Rounding & estimating with addition
	Rounding & estimating with subtraction

Counting forwards and backwards in 2s, 3s, 4s, 5s, and 8s from multiples of these numbers (e.g. 20, 15, 10, 5; 8, 16, 24, 32)	
📘 **Activities**	
Number structure: Whole number & place value	Counting by Twos
	Counting by Fives
👑 **Skill Quests**	
Number structures: Count in multiples	Counting in 2s from any multiple
	Counting in 3s from any multiple
	Counting in 4s from any multiple
	Counting in 5s from any multiple
	Counting in 8s from any multiple

Counting forwards and backwards in 10s and 100s from any whole number between 0 and 1000	
📘 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Number structures: Count in 10s or 100s	Counting in 100s, 10s & 1s up to 1000
	Counting forwards & backwards in 10s
	Counting forwards & backwards in 100s

Operations

Finding the complement of a number to 100 (e.g. 34 + _ = 100)	
📘 **Activities**	
Operations: Addition & subtraction	Add 3 Numbers: Bonds to Multiples of 10
	Complements to 50 and 100
👑 **Skill Quests**	
Operations: Complements to 100	Finding the complement of numbers to 100

Adding and subtracting numbers up to 1000 (e.g. 329 + 3, 329 + 80, 329 – 200, 137+ 54)	
📘 **Activities**	
Operations: Addition & subtraction	Doubles and Halves to 20
	Doubles and Near Doubles
	Commutative Property of Addition
	Add 3 Numbers: Bonds to Multiples of 10
	Add Two 2-Digit Numbers
	2-Digit Differences
	Magic mental addition
	Magic mental subtraction

	Jump Add and Subtract
	Estimate Sums
	Estimate Differences

👑 **Skill Quests**	
Operations: Add & subtract	Adding & subtracting within 20 fluently
	Adding using associative property
	Adding & subtracting multiples of 10
	Adding & subtracting multiples of 100
	Adding & subtracting with number line (2-digits)
	Adding & subtracting with number line (3-digits)
	Adding & subtracting using models
	Bridging to 10 with models
	Bridging to 10
	Bridging to 10 up to 3-digits
	Rounding to add & subtract using 2-digit numbers
Operations: Add & subtract vertically	Vertical addition (no renaming)
	Vertical addition (with renaming)
	Vertical subtraction (no renaming)
	Vertical subtraction (with renaming)

Solving one-step addition and subtraction problems involving numbers up to 1000	
📖 **Activities**	
Operations: Addition & subtraction	Bar Model Problems 1
👑 **Skill Quests**	
Operations: Solve one-step +- problems	Solving one-step add/sub problems to 1000

Solving multi-step addition and subtraction problems involving numbers up to 100	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

Multiplying or dividing using equal sharing, grouping, repeated addition or subtraction, or known facts	
📖 **Activities**	
Operations: Multiplication & division	Multiplication Arrays
	Arrays 2
	Frog Jump Multiplication
	Share the Treasure
	Fill the Jars
	Frog Jump Division
👑 **Skill Quests**	
Operations: Arrays & repeated addition	Introducing arrays & repeated addition
Operations: Divide by sharing & grouping	Dividing by sharing & grouping (up to 50)
	Using repeated subtraction to divide
	Exploring multiplication & division by 2
	Exploring multiplication & division by 10
	Exploring multiplication & division by 5
	Exploring multiplication & division by 3
	Multiplication & division problems (2,5,10)

Memorising multiplication and corresponding division facts for 2s, 3s, 4s, 5s, 8s, and 10s	
📋 **Activities**	
Operations: Multiplication & division	Groups of Ten
	Groups of Two
	Groups of Five
	Groups of Three
	Groups of Four
	Groups of Eight
	Dividing Twos
	Dividing Fives
	Dividing Tens
	Dividing Threes
	Dividing Fours
	Dividing Eights
👑 **Skill Quests**	
Operations: Facts for 2, 5 & 10 (x ÷)	Recalling multiplication & division facts for 2
	Recalling multiplication & division facts for 10
	Recalling multiplication & division facts for 5
Operations: Facts for 3, 4 & 8 (x ÷)	Exploring multiplication & division facts for 3
	Recalling multiplication & division facts for 3
	Exploring multiplication & division facts for 4
	Recalling multiplication & division facts for 4
	Exploring multiplication & division facts for 8
	Recalling multiplication & division facts for 8

Multiplying a one- or two-digit number by a one-digit number (e.g. 4 × 6; 2 × 23)	
📋 **Activities**	
Operations: Multiplication & division	Multiplication Arrays
	Arrays 2
👑 **Skill Quests**	
Operations: Multiplication strategies	Multiplying 1-digit by tens using place value
	Using strategies to multiply 1-digit numbers
	Multiplying using the associative property
	Multiplying 2-digit by 1-digit using place value
	Multiplying 2-digit by 1-digit using doubling

Dividing whole numbers by a one-digit divisor with no remainders (e.g. 24 ÷ 3, 32 ÷ 4)	
📋 **Activities**	
Operations: Multiplication & division	Frog Jump Multiplication
	Share the Treasure
	Fill the Jars
	Frog Jump Division
👑 **Skill Quests**	
Operations: Division strategies	Relating multiplication & division facts
	Exploring division to 10 x 10 using models
	Dividing using place value & known facts
Operations: Mult/div problems	Solving mult/div problems using sharing/grouping
	Multiplying & dividing word problems (2,3, 4, 5,10)

Rational numbers

Reading, writing, and representing fractions of sets, quantities, and measurements on a number line, and of regions, using small denominators	
📰 Activities	
Rational numbers: Simple fractions	Thirds and Sixths
	Shade fractions
	Model Fractions
	Part-Whole Rods 1
	Identifying Fractions on a Number Line
	Partition into equal parts
👑 Skill Quests	
Rational numbers: Thirds, fifths, sixths	Introducing thirds
	Introducing fifths
	Introducing sixths

Counting in unit fractions up to 1	
📰 Activities	
Rational numbers: Simple fractions	Identifying Fractions on a Number Line
👑 Skill Quests	
Rational numbers: Count unit fractions	Counting in unit fractions up to 1

Comparing unit fractions with denominators up to 12	
📰 Activities	
Teacher directed	
👑 Skill Quests	
Rational numbers: Compare unit fractions	Comparing unit fractions

Comparing non-unit fractions with the same denominator up to 12	
📰 Activities	
Rational numbers: Simple fractions	Compare fractions 1a
👑 Skill Quests	
Rational numbers: Compare non-unit frac	Comparing non-unit fractions

Identifying when two fractions are equivalent, using representations	
📰 Activities	
Rational numbers: Simple fractions	Equivalent Fraction Wall 1
👑 Skill Quests	
Rational numbers: Equivalent fractions	Identifying equivalent fractions

Adding and subtracting fractions with the same denominator within a whole (e.g. 1/8 + 2/8 + 3/8 = 6/8)	
📰 Activities	
Rational numbers: Simple fractions	Add Subtract Fractions 1
👑 Skill Quests	
Rational numbers: Add/subtract fractions	Adding & subtracting fractions, same denominators

Finding a unit fraction of a whole number by connecting to division (e.g.1/3 of 15 is found by 15÷3)	
▤ Activities	
Rational numbers: Simple fractions	Unit Fractions
	Fractions of a collection 1
♛ Skill Quests	
Rational numbers: Unit fraction of whole	Finding a unit fraction of a whole

Finding the whole when given a unit fraction by connecting to repeated addition or multiplication (e.g. if 14 of a set is 3, the whole set is 4×3=12)	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Rational numbers: Find the whole	Finding the whole from the part

Financial mathematics

Representing currency values of mixed dollars and cents without using decimal notation (e.g. $2 and 50 cents)	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Financial maths: Represent NZ currency	Representing & using NZ notes & coins

Making amounts of money using one- and two-dollar coins and 5-, 10-, 20-, 50-, and 100-dollar notes	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Teacher directed	

Using addition and subtraction to give change	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Financial maths: Give change	Using addition & subtraction to give change

Algebra

Equations & relationships

Checking the truth of number sentences involving direct comparisons of whole numbers up to 1,000 (e.g. 313 < 330, true or false?)	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Equations: Comparisons of whole numbers	Checking truth through comparing whole numbers

Checking the truth of number sentences and completing open number sentences involving addition, subtraction, multiplication, or division (e.g. 217 −__ = 105, 12 ÷ 3 = 5 − 2, true or false?)	
🔲 **Activities**	
Algebra: Equations & relationships	Problems: Add and Subtract
	Fact Families: Multiply and Divide
👑 **Skill Quests**	
Equations: Complete open number sentence	Completing open number sentences add/sub
	Completing open number sentences mult/div
	Completing open number sentences all 4 operations

Recognising, continuing, and creating growing number patterns	
🔲 **Activities**	
Algebra: Equations & relationships	Count Forward Patterns
	Count by Tens
	Count by Twos
	Count by Fives
👑 **Skill Quests**	
Relationships: Growing number patterns	Exploring growing number patterns

Measurement

Measuring

Estimating and measuring length (cm and m), mass (g and kg), and capacity (mL and L), using tools with labelled markings and whole-number metric units	
🔲 **Activities**	
Measuring, perimeter, area & time	How Long is That?
	How Heavy is it?
	How Full?
👑 **Skill Quests**	
Measuring: Units of length (cm & m)	Introducing formal units (cm)
	Introducing formal units (m)
Measuring: Units of mass (kg)	Introducing formal units (kg)
Measuring: Units of capacity (L)	Introducing formal units (L)
	Introducing formal units (mL)

Comparing and ordering objects using whole-number metric units of length, mass, or capacity	
🔲 **Activities**	
Measuring, perimeter, area & time	Ordering Lengths (cm)
	Ordering Mass (g)
	Ordering Volumes (l)
👑 **Skill Quests**	
Measuring: Compare & order lengths	Comparing & ordering m & cm
	Selecting appropriate length units

Measuring the perimeter of polygon using metric units	
🔲 **Activities**	

Measuring, perimeter, area & time	Perimeter of Shapes
👑 **Skill Quests**	
Measuring: Perimeter with metric units	Measuring perimeter in metric units

Measuring the area of rectangles using squares of equal size	
📖 **Activities**	
Measuring, perimeter, area & time	Area of Shapes
👑 **Skill Quests**	
Measuring: Area with square units	Measuring perimeter in metric units

Turning an object or person and describing how far they have turned, using full, half, quarter, and three-quarter turns as benchmarks	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Measuring: Describe the measure of turn	Describing half, quarter & three-quarter turns

Identifying the duration of events using years, months, weeks, days, hours, minutes, and seconds	
📖 **Activities**	
Measuring, perimeter, area & time	Months of the Year
	Days: After and Before
	Seasons (AU/NZ)
	Using a Calendar
👑 **Skill Quests**	
Measuring: Identify duration - calendars	Identifying duration using calendars

Telling the time on analogue and digital clocks to the nearest 5 minutes and the nearest minute, using the language of minutes past the hour and to the hour	
📖 **Activities**	
Measuring, perimeter, area & time	Five Minute Times
	What is the Time?
👑 **Skill Quests**	
Measuring: Tell time to the minute	Telling time to the quarter hour
	Telling time to nearest five minutes
	Telling time to the minute

Describing the differences in duration between units of time (e.g. days vs weeks, months vs years)	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Measuring: Differences in duration	Describing differences in duration

Geometry

Shapes

Identifying, describing, visualising and sorting regular polygons with up to 10 sides	
📋 **Activities**	
Geometry: Shape, space & pathways	Count Sides and Corners
	Collect More Shapes
👑 **Skill Quests**	
Shapes: Describe & sort polygons	Describing & sorting regular polygons

Spatial reasoning

Recognising lines of symmetry in patterns or pictures, and creating or completing symmetrical patterns or pictures	
📋 **Activities**	
Geometry: Shape, space & pathways	Symmetry
👑 **Skill Quests**	
Spatial reasoning: Line symmetry	Identifying line symmetry

Pathways

Following and creating a sequence of step-by-step instructions for moving people or objects to a different location, including half and quarter turns and the distance to be travelled	
📋 **Activities**	
Geometry: Shape, space & pathways	Following Directions
👑 **Skill Quests**	
Pathways: Create & follow instructions	Creating & following instructions
Pathways: Create & use simple maps	Creating & using simple maps

Using simple maps to locate objects and places relative to other objects and places	
📋 **Activities**	
Geometry: Shape, space & pathways	Map Coordinates
👑 **Skill Quests**	
Pathways: Create & use simple maps	Creating & using simple maps

Statistics

Developing knowledge from data

Collecting categorical data and sorting the responses	
📋 **Activities**	
Statistics	Tallies
👑 **Skill Quests**	
Statistics: Collect & sort data	Collecting & sorting data

Collecting numerical data by asking an investigative question with a response that is a count or a discrete measurement (i.e. a whole number) (e.g. How many teeth have been lost by the students in our class? What are the shoe sizes in the class?)

📄 **Activities**
Teacher directed
👑 **Skill Quests**
Teacher directed

Visualisation of data

Creating data visualisations for categorical and numerical data	
📄 **Activities**	
Statistics	Making Picture Graphs: With Scale
👑 **Skill Quests**	
Statistics: Data visualisation	Data in tables or lists
	Data in pictographs
	Data in bar graphs
	Data in basic dot plots

Interpretation of data

Describing data visualisations using the variable name and the context and giving the frequency for each category or number	
📄 **Activities**	
Statistics	Picture Graphs: Single-Unit Scale
👑 **Skill Quests**	
Teacher directed	

Answering questions about data visualisations, including which category has the most or least items and questions involving operations (e.g. How many teeth did our class lose in total?)	
📄 **Activities**	
Statistics	Reading from a Bar Chart
👑 **Skill Quests**	
Statistics: Interpret data	Interpreting simple data displays

Mathletics

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