



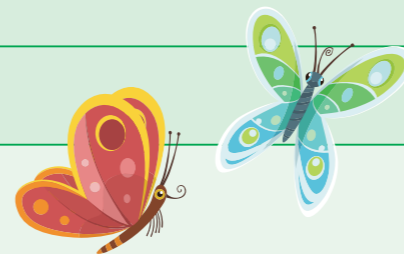
The New Zealand Curriculum: Mathematics and statistics



YEAR 1



			Mathseeds Lesson #			Additional Mathseeds Resources	
Know	Concepts	Outcome	Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number Mātauranga tau	Number structure	subitise the number of objects in a group of up to 10 objects	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 19, 20, 21, 25, 28, 33, 50		12	DT Kindergarten Number 1-10 DT Kindergarten Operations 2, 6	
		count to 20 and beyond to 100, forwards and backwards in 1s, 2s and 10s, from any number; identify, read, and write whole numbers up to at least 20 and represent them using the ten-and-ones structure of teen	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 25, 28, 33, 41, 43, 45, 46, 48, 50		12, 43	DT Kindergarten Number 1-25	Kindergarten Number Tests 1-5
		compare and order whole numbers up to at least 20 and ordinal numbers	16, 18, 22, 50, 63		41, 63	DT Kindergarten Number 8, 20	Kindergarten Number Test 3
		partition and regroup up to 20 objects in different ways	21, 24, 25, 30, 31, 32, 34, 36, 40, 47, 49, 50		19, 30, 31, 34, 36, 40, 46, 47	DT Kindergarten Operations 1-25 MM Addition Sprints MM Subtraction Sprints	Kindergarten Operations Tests 1-4
	Operations	join and separate groups of up to a total of 20 objects, and find the difference between groups by grouping and counting					
		explore addition facts up to 10 and their corresponding subtraction facts	49			DT Kindergarten Operations 20	
		multiply and divide by making equal groups and using grouping or counting				DT Kindergarten Operations 8, 20, 21 MM Multiplication Sprints MM Division Sprints	
Algebra Taurangi	Equations and relationships	copy, continue, create, and describe a repeating pattern with three elements, and identify missing elements in a pattern	27, 37		6, 8, 15, 23, 27, 37	DT Kindergarten Patterns 1-9	Kindergarten Number Test 6
Measurement Ine	Measuring	compare the length of objects directly and indirectly	13, 26			DT Kindergarten Measurement 5, 6, 9, 10	Kindergarten Measurement Tests 1-3
		compare the mass (weight) of objects directly and indirectly	29			DT Kindergarten Measurement 7, 8, 12	Kindergarten Measurement Test 4
		compare the volume and capacity of objects directly and indirectly	38		38	DT Kindergarten Measurement 15, 16, 20	Kindergarten Measurement Test 5
	Time	identify how the passing of time is measured in years, months, weeks, days, hours, minutes, and seconds; name and order the days of the week, and sequence events in a day using everyday language of time.	39, 42		37	DT Kindergarten Measurement 1, 4, 13, 14, 17-19	Kindergarten Measurement Tests 6, 7
		tell the time to the hour using the language of 'o'clock'	39				
Geometry Āhuahanga	Shapes	identify, describe, and classify familiar 2D shapes presented in different orientations.	4, 6, 8, 9, 15, 23		6, 15, 23	DT Kindergarten Geometry 1-8, 19, 20	Kindergarten Geometry Tests 1, 3
		identify, describe, and classify familiar 3D shapes presented in different orientations.	35, 44			DT Kindergarten Geometry 15-23	Kindergarten Geometry Tests 2, 3
	Spatial reasoning	anticipate which smaller shapes might be used to compose a target shape, and then check by making the shape.				DT Kindergarten Geometry 12	Kindergarten Geometry Test 4
	Pathways	follow and give instructions to move to a familiar location or locate an object; use pictures, diagrams, or stories to describe the positions of objects and places				DT Kindergarten Geometry 9-11, 13, 14	Kindergarten Geometry Tests 5, 6
Statistics Tauanga	Problem, Plan, Data, Analysis, Conclusion, Statistical literacy	pose summary investigative questions that classify objects into categories; collect data for one variable; collect categorical data for one variable; create and describe data visualisations for categorical data, giving the frequency for each category; choose statements that best answer the investigative question; agree or disagree with others' statements about simple data visualisations				DT Kindergarten Data 1-10	Kindergarten Data Tests 1, 2





The New Zealand Curriculum: Mathematics and statistics



YEAR 2



			Mathseeds Lesson #			Additional Mathseeds Resources	
Know	Concepts	Outcome	Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number Mātauranga tau	Number structure	count to 100, forwards and backwards, from any number, in 1s, 2s, 5s, and 10s	56, 60, 67, 75, 77, 79, 81, 86, 90		56, 67, 75	DT Year 1 Patterns and Fractions 7-10, 12	Year 1 Number and Algebra: Whole Numbers Tests 1-9
		identify, read, and write whole numbers up to at least 100 and represent them using base 10 structure					
		partition and regroup whole numbers up to at least 100	60, 67, 75, 81, 86		60, 75, 81	DT Year 1 Number 1-24	Year 1 Number and Algebra: Place Value Tests 1-6
		compare and order whole numbers up to at least 100	56, 75, 81				
	Operations	add and subtract numbers up to 100 without renaming	51, 53, 58, 65, 68, 85, 88, 95, 96, 98, 100		51, 53, 65, 68, 76, 85, 88, 95, 96, 98, 100	DT Year 1 Operations 1-20 MM Addition Sprints MM Subtraction Sprints	Year 1 Number and Algebra: Operations Tests 1-6
		recall addition facts up to 10, and explore addition facts up to 20 and their corresponding subtraction facts	72, 76, 91, 93		72, 91, 93	DT Year 1 Operations 16 MM Addition Sprints MM Subtraction Sprints	
		identify the relationship between skip counting and multiplication facts for 2s, 5s, and 10s	77, 79, 90		77, 79	DT Year 1 Patterns and Fractions 7-10, 12 MM Multiplication Sprints MM Division Sprints	
		multiply and divide by grouping and skip counting	71, 74		71, 74	MM Multiplication Sprints MM Division Sprints	
	Rational numbers	identify, read, write, and represent halves, thirds and quarters as fractions of sets and regions, using equal parts of the whole; find a half, quarter, or third of a set by identifying groups and patterns and identify the whole set or shape when given a half or quarter	61, 66			DT Year 1 Patterns and Fractions 3, 5, 6, 11, 13, 14	Year 1 Number and Algebra: Fractions and Money Tests 1-3, 7
	Financial maths	recognise and order NZ denominations up to \$20 according to their value, make groups of 'like' denominations, and calculate their value.	64, 83, 92			DT Year 1 Measurement 3, 5-7, 12	
Algebra Taurangi	Equations and relationships	solve true or false number sentences and open number sentences involving addition and subtraction of one- and two-digit numbers	76			DT Year 1 Operations 16 MM Addition Sprints MM Subtraction Sprints	
		recognise and describe the unit of repeat in a repeating pattern, and use it to predict further elements	77, 79, 90			DT Year 1 Patterns and Fractions 2, 12	Year 1 Number and Algebra: Patterns Tests 1-7
Measurement Ine	Measuring	estimate and use an informal unit repeatedly to measure the length of an object; compare and order several objects using informal units of length.	55, 84			DT Year 1 Measurement 2, 4, 13, 14	Year 1 Measurement: Length and Capacity Tests 1-5
		estimate and use an informal unit repeatedly to measure the mass (weight) of an object; compare and order several objects using informal units of mass (weight).	73				
		estimate and use an informal unit repeatedly to measure the volume or capacity of an object; compare and order several objects using informal units of volume or capacity.	89			DT Year 1 Measurement 11, 17-19	Year 1 Measurement: Length and Capacity Tests 6, 7
		turn, and describe how far an object or person has turned, using half and quarter turns as benchmarks.	94				
	Time	name and order the months and seasons, and describe the duration of familiar events using months, weeks, days, and hours	54			DT Kindergarten Measurement 4, 13, 14, 16, 18, 19	Year 1 Measurement: Time Tests 1-6
		tell the time to the hour and half-hour, using the language of 'past' and 'o'clock'.	54, 70, 87			DT Kindergarten Measurement 1, 8-10, 15	
Geometry Āhuahanga	Shapes	visualise, estimate, and measure the perimeter and area of 2D shapes, using informal units	59				
		identify, describe, and classify the properties of 2D shapes, using the properties of shapes.	52, 69			DT Year 1 Geometry 1-3, 6, 10	Year 1 Geometry: Shape Tests 1, 2, 5, 6
	Spatial reasoning	identify, describe, and classify the properties of 3D shapes, using the properties of shapes.	62, 99			DT Year 1 Geometry 7, 8, 17-19	Year 1 Geometry: Shape Tests 3-6
		anticipate which smaller shapes might be used to compose and decompose a target shape, and then check by making the shape.	69			DT Year 1 Geometry 9, 13	Year 1 Geometry: Shape Test 6
	Pathways	recognise lines of symmetry in patterns or pictures, and create or complete symmetrical pictures or patterns				DT Year 1 Patterns and Fractions 1, 4	
		follow and give instructions to move people or objects to a different location, using direction, distances, and half and quarter turns; interpret diagrams to describe the positions of objects and places in relation to other objects and places	57, 78, 94			DT Year 1 Geometry 4, 5, 11, 12, 14-16	Year 1 Geometry: Shape Tests 7, 8
Statistics Tauanga	Problem, Plan, Data, Analysis, Conclusion, Statistical literacy	pose summary investigative questions which the data will have categorical variables; use survey to collect data, identify who and what the data measures; collect categorical data for more than one variable; create and describe data visualisations, comparing the frequencies; choose statements that best answer the investigative question; match statements made by others and agree or disagree with the statements.	80, 97		80	DT Year 1 Data 1-4, 9, 10, 12-16	Year 1 Statistics: Data Tests 1-5





The New Zealand Curriculum: Mathematics and statistics



YEAR 3



			Mathseeds Lesson #			Additional Mathseeds Resources	
Know	Concepts	Outcome	Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number Mātauranga tau	Number structure	count to 1,000, forwards and backwards in 2s, 3s, 5s, 10s, and 100s; identify, read, and write whole numbers up to at least 1,000; compare and order whole numbers up to at least 1,000; partition and regroup whole numbers up to at least 1,000	101, 105, 106, 108, 122, 140		105, 106, 108	DT Year 2 Numbers 1-24 DT Year 2 Operations 3	Year 2 Number and Algebra: Numbers to 1000 Tests 1-7
	Operations	use estimation to predict and to check the reasonableness of calculations; round whole numbers up to 1,000 to the nearest hundreds and tens.	129				
		add and subtract numbers up to at least 100	103, 110, 118, 120, 124, 128, 131, 134, 137, 139, 140, 144, 146, 148, 150		110, 118, 120, 124, 128, 134, 137, 139, 144, 146, 148, 150	DT Year 2 Operations 1, 2, 4, 5, 7, 13-18, 20-28 MM Addition Sprints MM Subtraction Sprints	Year 2 Number and Algebra: Addition and Subtraction Tests 1-8
		recall addition facts up to 20 and their corresponding subtraction facts	140, 142		142	DT Year 2 Operations 2, 5, 22 MM Addition Sprints MM Subtraction Sprints	Year 2 Number and Algebra: Addition and Subtraction Tests 1, 2, 4
		multiply a 1- or 2-digit number by a 1-digit number, without renaming	113, 115, 130		113, 115, 130	DT Year 2 Operations 8-12, 19 MM Multiplication Sprints	Year 2 Number and Algebra: Equal Groups Tests 3-5
		divide whole numbers by a 1-digit divisor with no remainders, by grouping and using the inverse relationship with multiplication	111, 136		136	DT Year 2 Operations 6 MM Division Sprints	Year 2 Number and Algebra: Equal Groups Tests 1, 2, 5
	Rational numbers	identify, read, write, and represent halves, thirds, quarters, fifths, sixths, and eighths as fractions of sets and regions, using equal parts of the whole; compare and order fractions involving halves, quarters, and eighths and identify when two fractions are equivalent	132, 138		132	DT Year 2 Patterns and Fractions 5, 11, 12, 14-17	Year 2 Number and Algebra: Fractions and Money Tests 1-4
	Financial maths	make amounts of money using one- and two-dollar coins and 5-, 10-, 20-, 50-, and 100-dollar notes	125, 147		125, 131, 147	DT Year 2 Measurement 12	Year 2 Number and Algebra: Fractions and Money Tests 5-8
Algebra Taurangi	Equations and relationships	recognise, continue, and create growing patterns, and describe a rule to explain a pattern	117, 133		101, 117, 133, 137	DT Year 2 Patterns and Fractions 1-4, 6-10, 13	Year 2 Number and Algebra: Number Patterns Tests 1-8
Measurement Ine	Measuring	estimate and then reliably measure length, using metric units; compare and order objects using metric units of length	104, 126, 140, 141, 143		104, 141	DT Year 2 Measurement 6, 9, 11, 13, 15, 19, 21-24	Year 2 Measurement: Informal Units Tests 1, 2, 8
		estimate and then reliably measure mass (weight), using metric units; compare and order objects using metric units of mass (weight)	135		135	DT Year 2 Measurement 17, 18	Year 2 Measurement: Informal Units Tests 6-8
		estimate and then reliably measure capacity, using metric units; compare and order objects using metric units of capacity	116, 140			DT Year 2 Measurement 8	Year 2 Measurement: Informal Units Tests 4, 5, 8
		turn, and describe how far an object or person has turned, using half, quarter, and three-quarter turns as benchmarks	102		102	DT Year 2 Geometry 1	Year 2 Geometry: Shape and Movement Tests 6, 7
	Time	identify the duration of events using years, months, weeks, days, hours, minutes, and seconds	109		109	DT Year 2 Measurement 1-5, 14, 16	Year 2 Measurement: Time Tests 4, 5
		tell the time to the hour, half hour, and quarter past and quarter to the hour	114, 123, 127			DT Year 2 Measurement 7, 10, 20	Year 2 Measurement: Time Tests 1-3
	Perimeter, area, and volume	visualise, estimate, and measure the area of 2D shapes covered with squares of identical size	112, 140, 149		149	DT Year 2 Measurement 6	Year 2 Measurement: Informal Units Tests 3, 8
Geometry Āhuahanga	Shapes	visualise, identify, compare, and classify 2D shapes using the properties of shapes	102, 119, 140, 145, 184		119, 145	DT Year 2 Geometry 4-6, 10	Year 2 Geometry: Shape and Movement Tests 1, 2, 5
		visualise, identify, compare, and classify 3D shapes using the properties of shapes	121		121, 140	DT Year 2 Geometry 3, 5-7	Year 2 Geometry: Shape and Movement Tests 3-5
	Spatial reasoning	compose and decompose 2D shapes using the properties of shapes, other shapes, side lengths, and angles	119, 145		119		
		predict the results of a one-step transformation on 2D shapes	102		102	DT Year 2 Geometry 1	Year 2 Geometry: Shape and Movement Tests 6, 7
	Pathways	follow and create a sequence of step-by-step instructions for moving people or objects to a different location; interpret, draw, and use simple maps to locate objects and places relative to other objects and places				DT Year 2 Geometry 2, 8, 9, 11-13	Year 2 Geometry: Shape and Movement Test 8
Statistics Tauanga	Problem, Plan, Data, Analysis, Conclusion, Statistical literacy	pose summary investigative questions about everyday situations; use survey to collect data; collect, record, and sort data; use secondary data sources; create and describe data visualisations for categorical and discrete numerical data; choose statements that best answer the investigative question; identify relevant features in others' data visualisation; agree or disagree with the statements, and suggest improvements	140, 143		143	DT Year 2 Data and Chance 1, 4, 5, 7-14	Year 2 Statistics: Data Tests 1-6
Probability Tūponotanga	Probability investigations, Critical thinking in probability	engage in chance-based investigations about games and everyday situations to: anticipate what might happen; identify possible outcomes; collect and record data; create data visualisations; describe what these visualisations show; answer investigative questions; reflect on anticipated outcomes; notice variations in outcomes; explain and question statements about chance-based situations	107			DT Year 2 Data and Chance 2, 3, 6	Year 2 Statistics: Data Test 7





The New Zealand Curriculum: Mathematics and statistics



YEAR 4



			Mathseeds Lesson #			Additional Mathseeds Resources	
Know	Concepts	Outcome	Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number Mātauranga tau	Number structure	skip count from any multiple of 100, forwards or backwards in 25s and 50s; identify, read, write, compare, and order whole numbers up to 10,000, and represent them using base 10 structure	151, 156, 161, 166		151, 156, 161		
	Operations	use rounding, estimation, and inverse operations to predict results and to check the reasonableness of calculations; round whole numbers to the nearest thousand, hundred, or ten	194		194		
		add and subtract two- and three-digit numbers	170, 173, 178, 183, 188, 195		170, 173, 178, 183		
		recall multiplication and corresponding division facts for 4s and 6s	158, 171, 176, 199				
		multiply a two-digit by one-digit number and two one-digit whole numbers	155, 158, 168, 171, 176, 181, 186, 188, 190, 193, 199		168, 176, 181, 186, 188, 193, 196, 199		
		divide up to three-digit whole number by a one-digit divisor, with no remainder	165, 181, 188, 190, 196, 199		181, 188, 196, 199		
	Rational numbers	identify, read, write, and represent tenths as fractions; compare and order tenths as fractions	175, 180		191		
		for fractions with related denominators of 2, 4, and 8, 3 and 6, or 5 and 10: compare and order the fractions, identify when two fractions are equivalent	160, 175, 180, 191		175, 180		
		convert between mixed numbers and improper fractions with denominators of 2, 3, 4, 5, 6, 8, and 10; add and subtract fractions with the same denominators to make up to one whole	191, 197		197		
	Financial maths	make amounts of money using dollars and cents; estimate and calculate the total cost and change for items costing whole dollar amounts	159		159, 188		
Algebra Taurangi	Equations and relationships	form and solve true or false number sentences and open number sentences involving multiplication and division	163, 173, 181, 190		163		
		recognise and describe the rule for a growing pattern using words, tables, and diagrams, and predict further elements in the pattern	153, 195		153, 195		
Measurement Ine	Measuring	develop personal benchmarks for estimations and measure length, using appropriate metric units; use appropriate units to describe length; use the metric measurement system to explore relationships between units	182, 198		182		
		develop personal benchmarks for estimations and measure mass (weight), using appropriate metric units; use appropriate units to describe mass (weight); use the metric measurement system to explore relationships between units	172		172		
		develop personal benchmarks for estimations and measure capacity, using appropriate metric units; use appropriate units to describe capacity; use the metric measurement system to explore relationships between units	154		154		
		recognise that angles can be measured in degrees, using 90, 180, and 360 degrees as benchmarks	177				
	Time	tell the time to the nearest 5 minutes, using the language of minutes past the hour and to the hour	162, 179, 185, 189		179, 185, 189		
	Perimeter, area, and volume	visualise, estimate, and calculate: the perimeter of polygons using metric units	192				
		visualise, estimate, and calculate: the area of shapes covered with squares or half squares	157, 200		200		
Geometry Āhuahanga	Shapes	identify, classify, and describe the properties of polygons using properties of shapes, including line and rotational symmetry	152				
		compare and classify angles in 2D shapes equal to, smaller than, or larger than a right angle	177				
	Spatial reasoning	identify the 2D shapes that compose 3D shapes	169				
	Pathways	use grid references to identify regions and to plot positions on a grid map; interpret and describe pathways, including half and quarter turns and the distance travelled	164				
Statistics Tauanga	Problem, Plan, Data, Analysis, Conclusion, Statistical literacy	investigate summary and comparison situations using multivariate data; plan how to collect primary data to support answering a question; use a variety of tools to collect data, and check for errors; create and describe data visualisations; choose the best descriptive statements to answer questions, reflecting on findings and how they compare with initial predictions; check the statements that others make about data to see if they make sense	174, 187, 198		187		
Probability Tūponotanga	Probability investigations, Critical thinking in probability	engage in chance-based investigations with equally likely outcomes by: posing investigative questions; anticipating what might happen; identifying possible outcomes for questions; generating all possible ways to get each outcome; undertake a probability experiment and record the occurrences; creating data visualisations; describing what these visualisations show; answering investigative questions; reflecting on anticipated outcomes; agree or disagree with others' conclusions	167				

