Mathseeds Lessons and The New Zealand Curriuculum
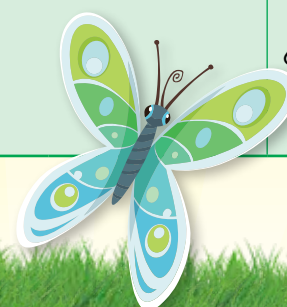
YEAR 1 • LEVEL 1

				Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	**Assessment**	**Higher Order Thinking Skills**	**Fluency**	**Assessment**
Strands	**Topics**	**Achievement objectives**	**Codes**	**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 AND ALGEBRA	**Number strategies**	Use a range of counting, grouping, and equal-sharing strategies with whole numbers.	NA1-1	20, 21, 22, 25, 28, 31, 34, 36, 40, 49, 50		12, 19, 30, 34, 36, 40, 41, 43, 47	**DT** Early Number 6, 8, 18, 19, 20, 22 **DT** Early Operations 1–25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Number** Test 3 **Kindergarten Operations** Tests 1–4
	Number knowledge	Know the forward and backward counting sequences of whole numbers to 100.	NA1-2	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 25, 28, 31, 33, 41, 43, 45, 46, 48, 50		12, 41	**DT** Early Number 2, 4, 5, 9, 10, 13, 16, 17, 21, 23	**Kindergarten Number** Test 1
		Know groupings with five, within ten, and with ten.	NA1-3	24, 30, 31, 32, 34, 36, 40, 47, 49, 50		19, 30, 34, 36, 40, 43, 47	**DT** Early Number 11, 12 **DT** Early Operations 1–7, 9–20, 22–25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Number** Test 4 **Kindergarten Operations** Tests 1–4
	Patterns and relationships	Generalise that the next counting number gives the result of adding one object to a set and that counting the number of objects in a set tells how many.	NA1-5	2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 22, 25, 28, 31, 41, 43, 45, 46, 50		12, 41	**DT** Early Number 1, 3, 7, 14, 15	**Kindergarten Number** Test 2
		Create and continue sequential patterns.	NA1-6	8, 27, 37		6, 15, 23, 27, 31, 37, 38, 40, 46	**DT** Early Patterns 1–9	**Kindergarten Number** Test 5
GEOMETRY AND MEASUREMENT	**Measurement**	Order and compare objects or events by length by direct comparison and/or counting whole numbers of units.	GM1-1	13, 26			**DT** Early Measurement 1, 2, 5, 6, 9, 10	**Kindergarten Measurement** Tests 1–3
		Order and compare objects or events by volume and capacity by direct comparison and/or counting whole numbers of units.	GM1-1	13, 38			**DT** Early Measurement 15, 16, 20	**Kindergarten Measurement** Test 5
		Order and compare objects or events by weight (mass) by direct comparison and/or counting whole numbers of units.	GM1-1	13, 29			**DT** Early Measurement 7, 8, 11, 12	**Kindergarten Measurement** Test 4
		Order and compare objects or events by time by direct comparison and/or counting whole numbers of units.	GM1-1	39, 42			**DT** Early Measurement 1, 4, 13, 14, 17, 18, 19	**Kindergarten Measurement** Tests 6, 7
	Shape	Sort objects by their appearance.	GM1-2	4, 6, 9, 15, 23, 35, 44		6, 8, 15, 23, 27	**DT** Early Geometry 1–8, 15–23	**Kindergarten Geometry** Tests 1–3

Mathseeds Lessons and The New Zealand Curriuculum

YEAR 2 • LEVEL 1

Strands	Topics	Achievement objectives	Codes	Mathseeds Lesson # — Knowledge and Skills: Online Lesson, Printable Resources, & Problem Solving Tasks	Mathseeds Lesson # — Assessment: End-of-lesson Quiz	Mathseeds Lesson # — Higher Order Thinking Skills: Critical Thinking and Problem Solving Interactives	Additional Mathseeds Resources — Fluency: Driving Tests (DT) Mental Minute (MM)	Additional Mathseeds Resources — Assessment: Printable Achievement Standards Assessment
NUMBER AND ALGEBRA	**Number strategies**	Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.	NA1-1	51, 53, 56, 58, 61, 63, 65, 66, 68, 71, 72, 74, 76, 77, 79, 85, 88, 90, 91, 93, 95, 96, 98, 100		51, 53, 56, 60, 65, 67, 68, 71, 74, 75, 76, 77, 79, 81, 82, 85, 88, 91, 93, 95, 96, 98, 100	**DT** Year 1 Number 5, 9, 10, 17–20, 24 **DT** Year 1 Operations 6–20 **MM** Addition Sprints **MM** Subtraction Sprints	**Year 1 Number and Algebra: Place Value** Tests 1–6 **Year 1 Number and Algebra: Operations** Tests 1–6 **Year 1 Number and Algebra: Fractions and Money** Tests 2, 3
	Equations and expressions	Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers, and pictures.	NA1-4					
	Number knowledge	Know the forward and backward counting sequences of whole numbers to 100.	NA1-2	56, 60, 67, 75, 81, 86		60, 67	**DT** Year 1 Number 1–4, 6–8, 11–16, 21–23	**Year 1 Number and Algebra: Whole Numbers** Tests 1, 3–5, 7–9
		Know groupings with five, within ten, and with ten.	NA1-3	51, 53, 65		51, 53, 56	**DT** Year 1 Operations 1, 2, 3 **MM** Addition Sprints **MM** Subtraction Sprints	**Year 1 Number and Algebra: Operations** Tests 1–3
	Patterns and relationships	Generalise that the next counting number gives the result of adding one object to a set and that counting the number of objects in a set tells how many.	NA1-5	56, 60		67	**DT** Year 1 Operations 4, 5	**Year 1 Number and Algebra: Whole Numbers** Tests 2, 6
		Create and continue sequential patterns.	NA1-6	77, 79, 90		57, 62, 63, 72, 78, 82, 87, 93, 94	**DT** Year 1 Patterns and Fractions 1, 2, 4, 7–10, 12	**Year 1 Number and Algebra: Patterns** Tests 1–7
GEOMETRY AND MEASUREMENT	**Measurement**	Order and compare objects or events by length by direct comparison and/or counting whole numbers of units.	GM1-1	84			**DT** Year 1 Measurement 2, 4, 13, 14	**Year 1 Measurement: Length and Capacity** Tests 1–5
		Order and compare objects or events by area by direct comparison and/or counting whole numbers of units.	GM1-1	59		59		
		Order and compare objects or events by volume and capacity by direct comparison and/or counting whole numbers of units.	GM1-1	89			**DT** Year 1 Measurement 11, 17, 18, 19	**Year 1 Measurement: Length and Capacity** Tests 6, 7
		Order and compare objects or events by weight (mass) by direct comparison and/or counting whole numbers of units.	GM1-1	73				
		Order and compare objects or events by time by direct comparison and/or counting whole numbers of units.	GM1-1	54, 70, 87		87	**DT** Year 1 Measurement 1, 8–10, 15, 16	**Year 1 Measurement: Time** Tests 1–6
	Shape	Sort objects by their appearance.	GM1-2	52, 62, 99			**DT** Year 1 Geometry 1–3, 6–8, 10, 17–19	**Year 1 Geometry: Shape** Tests 1–6
	Position and orientation	Give and follow instructions for movement that involve distances, directions, and half or quarter turns.	GM1-3	55, 57, 78, 94			**DT** Year 1 Geometry 4, 5, 11, 12, 14–16	**Year 1 Geometry: Shape** Tests 7, 8
		Describe their position relative to a person or object.	GM1-4					
	Transformation	Communicate and record the results of translations, reflections, and rotations on plane shapes.	GM1-5	69		69	**DT** Year 1 Geometry 9, 13	
STATISTICS	**Statistical investigation**	Conduct investigations using the statistical enquiry cycle: - posing and answering questions - gathering, sorting and counting, and displaying category data - discussing the results.	S1-1	80, 97		80	**DT** Year 1 Data 1–4, 6, 9, 10, 12–15	**Year 1 Statistics: Data** Tests 1–5
	Statistical literacy	Interpret statements made by others from statistical investigations and probability activities.	S1-2					
	Probability	Investigate situations that involve elements of chance, acknowledging and anticipating possible outcomes.	S1-3	82			**DT** Year 1 Data 5, 7, 8, 11	**Year 1 Statistics: Data** Test 6

Mathseeds Lessons and The New Zealand Curriuculum

YEAR 3 • LEVEL 2

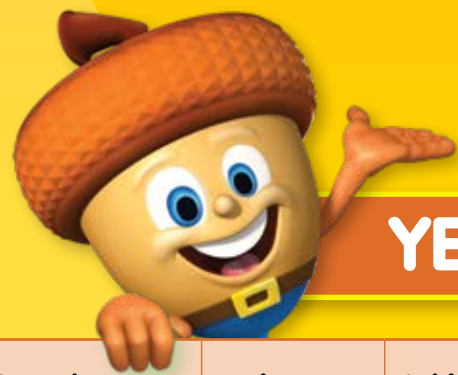| Strands	Topics	Achievement objectives	Codes	Mathseeds Lesson # — Knowledge and Skills (Online Lesson, Printable Resources, & Problem Solving Tasks)	Mathseeds Lesson # — Assessment (End-of-lesson Quiz)	Mathseeds Lesson # — Higher Order Thinking Skills (Critical Thinking and Problem Solving Interactives)	Additional Mathseeds Resources — Fluency (Driving Tests (DT) Mental Minute (MM))	Additional Mathseeds Resources — Assessment (Printable Achievement Standards Assessment)
NUMBER AND ALGEBRA	Number strategies	Use simple additive strategies with whole numbers and fractions.	NA2-1	103, 110, 111, 113, 115, 118, 120, 124, 128, 130, 131, 134, 136, 137, 138, 139, 144, 146, 148, 150		105, 110, 113, 118, 120, 124, 125, 128, 130, 131, 132, 133, 134, 135, 136, 137, 139, 140, 141, 142, 143, 144, 146, 147, 148, 149, 150	**DT** Year 2 Operations 6–28 **MM** Addition Sprints **MM** Subtraction Sprints **MM** Multiplication Sprints **MM** Division Sprints	**Year 2 Number and Algebra: Equal Groups** Tests 1–5 **Year 2 Number and Algebra: Addition and Subtraction** Tests 3, 5–8
	Equations and expressions	Communicate and interpret simple additive strategies, using words, diagrams (pictures), and symbols.	NA2-6					
	Number knowledge	Know forward and backward counting sequences with whole numbers to at least 1000.	NA2-2	101, 106		105, 117, 120, 133	**DT** Year 2 Number 2, 3, 6, 9, 10, 12–15, 17	**Year 2 Number and Algebra: Numbers to 1000** Tests 1, 4
		Know the basic addition and subtraction facts.	NA2-3	108, 142		142	**DT** Year 2 Operations 1–5 **MM** Addition Sprints **MM** Subtraction Sprints	**Year 2 Number and Algebra: Addition and Subtraction** Tests 1, 2, 4
		Know how many ones, tens, and hundreds are in whole numbers to at least 1000.	NA2-4	105, 122		101, 105, 106	**DT** Year 2 Number 1, 4, 5, 7, 8, 11, 16, 18–24	**Year 2 Number and Algebra: Numbers to 1000** Tests 2, 3, 5–7
		Know simple fractions in everyday use.	NA2-5	132			**DT** Year 2 Patterns and Fractions 5, 11, 12, 14–17	**Year 2 Number and Algebra: Fractions and Money** Tests 1–4
	Patterns and relationships	Generalise that whole numbers can be partitioned in many ways.	NA2-7	105, 129				
		Find rules for the next member in a sequential pattern.	NA2-8	117, 133		102, 117, 120, 132, 133	**DT** Year 2 Patterns and Fractions 1–4, 6–10, 13	**Year 2 Number and Algebra: Number Patterns** Tests 1–8
GEOMETRY AND MEASUREMENT	Measurement	Create and use appropriate units and devices to measure length. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	104, 126, 141, 143			**DT** Year 2 Measurement 6, 13–15, 21, 22	**Year 2 Measurement: Informal Units** Tests 1, 2
		Create and use appropriate units and devices to measure area. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	112, 149			**DT** Year 2 Measurement 6	**Year 2 Measurement: Informal Units** Test 3
		Create and use appropriate units and devices to measure volume and capacity. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	116			**DT** Year 2 Measurement 8	**Year 2 Measurement: Informal Units** Tests 4, 5
		Create and use appropriate units and devices to measure weight (mass). Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	135			**DT** Year 2 Measurement 18, 19	**Year 2 Measurement: Informal Units** Tests 6, 7
		Create and use appropriate units and devices to measure time. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	109, 114, 123, 127		109	**DT** Year 2 Measurement 1–5, 7, 10, 16, 17, 20	**Year 2 Measurement: Time** Tests 1–5
	Shape	Sort objects by their spatial features, with justification.	GM2-3	119, 145			**DT** Year 2 Geometry 3–7, 10	**Year 2 Geometry: Shape and Movement** Tests 1–5
		Identify and describe the plane shapes found in objects.	GM2-4	121		121, 140		**Year 2 Geometry: Shape and Movement** Test 4
	Transformation	Predict and communicate the results of translations, reflections, and rotations on plane shapes.	GM2-7	102		102, 104, 106, 108, 115, 119, 133, 145	**DT** Year 2 Geometry 1, 9, 11, 12	**Year 2 Geometry: Shape and Movement** Tests 6, 7
STATISTICS	Statistical investigation	Conduct investigations using the statistical enquiry cycle: - posing and answering questions - gathering, sorting and displaying category and whole number data - communicating findings based on the data.	S2-1	143			**DT** Year 2 Data 1, 4, 5, 7–14	**Year 2 Statistics: Data** Tests 1–6
	Statistical literacy	Compare statements with the features of simple data displays from statistical investigations or probability activities undertaken by others.	S2-2					
	Probability	Investigate simple situations that involve elements of chance, recognising equal and different likelihoods and acknowledging uncertainty.	S2-3	107			**DT** Year 2 Data 2, 3, 6	**Year 2 Statistics: Data** Test 7

Mathseeds Lessons and The New Zealand Curriuculum

YEAR 4 • LEVEL 2

				Mathseeds Lesson #			Additional Mathseeds Resources
				Knowledge and Skills	**Assessment**	**Higher Order Thinking Skills**	**Fluency**
Strands	**Topics**	**Achievement objectives**	**Codes**	**Online Lesson, Printable Resources, & Problem Solving Tasks**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Interactives**	**Mental Minute (MM)**
NUMBER AND ALGEBRA	**Number strategies**	Use simple additive strategies with whole numbers and fractions.	NA2-1	155, 158, 163, 165, 168, 170, 171, 173, 175, 176, 178, 181, 183, 186, 188, 190, 191, 193, 196, 199		153, 154, 159, 163, 168, 170, 172, 176, 178, 181, 182, 183, 186, 188, 193, 194, 195, 196, 199	**MM** Addition Sprints
MM Subtraction Sprints
MM Multiplication Sprints
MM Division Sprints
	Equations and expressions	Communicate and interpret simple additive strategies, using words, diagrams (pictures), and symbols.	NA2-6				
	Number knowledge	Know forward and backward counting sequences with whole numbers to at least 1000.	NA2-2	151, 156		153, 161, 194, 199	
		Know the basic addition and subtraction facts.	NA2-3	173			**MM** Addition Sprints
MM Subtraction Sprints
		Know how many ones, tens, and hundreds are in whole numbers to at least 1000.	NA2-4	151, 156, 161		153, 161, 170, 173, 194, 195, 199	
		Know simple fractions in everyday use.	NA2-5	160, 175, 180, 191, 197		175, 180, 191, 197	
	Patterns and relationships	Generalise that whole numbers can be partitioned in many ways.	NA2-7	161, 194		151, 156, 194	
		Find rules for the next member in a sequential pattern.	NA2-8	153, 166, 171, 195		153, 168, 187, 195	
GEOMETRY AND MEASUREMENT	**Measurement**	Create and use appropriate units and devices to measure length. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	182, 192, 198			
		Create and use appropriate units and devices to measure area. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	157, 200			
		Create and use appropriate units and devices to measure volume and capacity. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	154			
		Create and use appropriate units and devices to measure weight (mass). Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	172			
		Create and use appropriate units and devices to measure turn (angle). Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	177			
		Create and use appropriate units and devices to measure time. Partition and/or combine like measures and communicate them, using numbers and units.	GM2-1, GM2-2	162, 179, 185, 189		179, 181, 185, 189, 200	
	Shape	Sort objects by their spatial features, with justification.	GM2-3	169, 184			
		Identify and describe the plane shapes found in objects.	GM2-4	169			
	Position and orientation	Create and use simple maps to show position and direction.	GM2-5	164			
		Describe different views and pathways from locations on a map.	GM2-6				
	Transformation	Predict and communicate the results of translations, reflections, and rotations on plane shapes.	GM2-7	152			
STATISTICS	**Statistical investigation**	Conduct investigations using the statistical enquiry cycle:
- posing and answering questions
- gathering, sorting and displaying category and whole number data
- communicating findings based on the data.	S2-1	174, 187, 198			
	Statistical literacy	Compare statements with the features of simple data displays from statistical investigations or probability activities undertaken by others.	S2-2				
	Probability	Investigate simple situations that involve elements of chance, recognising equal and different likelihoods and acknowledging uncertainty.	S2-3	167			