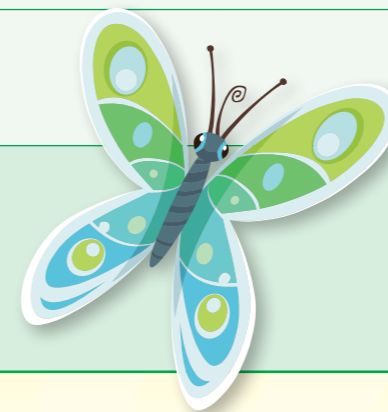




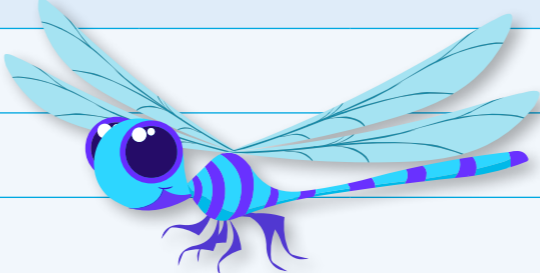
KINDERGARTEN

Strand	General Learning Outcomes	Specific Learning Outcomes	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
NUMBER	Develop number sense.	Say the number sequence by 1s, starting anywhere from 1 to 30 and from 10 to 1.	K.N.1	10, 16, 18, 20, 21, 25, 28, 31			DT Early Number 2, 4, 5, 9	
		Subitize and name familiar arrangements of 1 to 6 dots (or objects).	K.N.2					
		Relate a numeral, 1 to 10, to its respective quantity.	K.N.3				DT Early Number 1, 6, 7	
		Represent and describe numbers 2 to 10 in two parts, concretely and pictorially.	K.N.4	1, 2, 3, 5, 7, 11, 12, 14, 17, 19, 33			DT Early Number 3, 10	
		Demonstrate an understanding of counting to 10 by indicating that the last number said identifies "how many", and showing that any set has only one count.	K.N.5					
		Compare quantities, 1 to 10, using one-to-one correspondence and by ordering numbers representing different quantities.	K.N.6	22			DT Early Number 8	Kindergarten Number Test 3
PATTERNS AND RELATIONS (Patterns)	Use patterns to describe the world and solve problems.	Demonstrate an understanding of repeating patterns (two or three elements) by identifying, reproducing, extending, and creating patterns.	K.PR.1	8, 27, 37			DT Early Patterns 1–9	
SHAPE AND SPACE (Measurement)	Use direct or indirect measurement to solve problems.	Use direct comparison to compare two objects based on a single attribute, such as length (height).	K.SS.1	13, 26			DT Early Measurement 2, 3, 5, 6, 9, 10	Kindergarten Measurement Tests 1, 2, 3
		Use direct comparison to compare two objects based on a single attribute, such as mass (weight).	K.SS.1	29			DT Early Measurement 7, 8, 11, 12	Kindergarten Measurement Test 4
		Use direct comparison to compare two objects based on a single attribute, such as volume (capacity).	K.SS.1	38			DT Early Measurement 15, 16, 20	Kindergarten Measurement Test 5
SHAPE AND SPACE (3-D Objects and 2-D Shapes)	Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.	Sort 3-D objects, using a single attribute.	K.SS.2	35, 44			DT Early Geometry 15–18, 21–23	Kindergarten Geometry Tests 2, 3





GRADE 1

Strand	General Learning Outcomes	Specific Learning Outcomes	Codes	Mathseeds Lesson #			Additional Mathseeds Resources		
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
				Online Lesson and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment	
NUMBER	Develop number sense.	Say the number sequence by 1s forward and backward (0 to 100); by 2s to 30; by 5s and 10s to 100.	1.N.1	56, 60, 67, 75, 77, 79, 81, 86, 90					
		Subitize and name familiar arrangements of 1 to 10 dots.	1.N.2						
		Demonstrate an understanding of counting.	1.N.3						
		Represent and describe numbers to 20.	1.N.4						
		Compare and order sets up to 20.	1.N.5						
		Estimate quantities to 20 by using referents.	1.N.6						
		Demonstrate how a number up to 30 can be represented by a variety of equal groups with and without singles.	1.N.7						
		Identify the number, up to 20, that is one more, two more, one less, and two less than a given number.	1.N.8						
		Demonstrate an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts.	1.N.9						51, 53, 58, 65
		Demonstrate how a number up to 30 can be represented by a variety of equal groups with and without singles.	1.N.10						68, 72, 85, 91, 93, 100
PATTERNS AND RELATIONS (Patterns)	Use patterns to describe the world and solve problems.	Demonstrate an understanding of repeating patterns (two to four elements). Translate repeating patterns from one representation to another.	1.PR.1, 1.PR.2				DT Grade 1 Patterns and Fractions 1, 2, 4		
PATTERNS AND RELATIONS (Variables and Equations)	Represent algebraic expressions in multiple ways.	Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20). Record equalities using the equal symbol (0 to 20).	1.PR.3, 1.PR.4	76					
SHAPE AND SPACE (Measurement)	Use direct or indirect measurement to solve problems.	Demonstrate an understanding of measurement as a process of comparing by identifying attributes, ordering, making statements of comparison and matching. (length)	1.SS.1	55, 73, 84			DT Grade 1 Measurement 2, 4, 13, 14	Grade 1 Measurement: Length Tests 1–5	
		Demonstrate an understanding of measurement as a process of comparing by identifying attributes, ordering, making statements of comparison, and filling. (capacity)	1.SS.1	89			DT Grade 1 Measurement 11, 17–19		
		Demonstrate an understanding of measurement as a process of comparing by identifying attributes, ordering, making statements of comparison, and covering. (area)	1.SS.1	59					
SHAPE AND SPACE (3-D Objects and 2-D Shapes)	Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.	Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule.	1.SS.2	52, 62			DT Grade 1 Geometry 1–3, 6–8, 10, 17–19	Grade 1 Geometry: Shape Tests 1–6	
		Replicate composite 2-D shapes and 3-D objects.	1.SS.3	99			DT Grade 1 Geometry 9, 13	Grade 1 Geometry: Shape Test 7	
		Compare 2-D shapes to parts of 3-D objects in the environment.	1.SS.4	69					





Mathseeds Lessons and the Manitoba Mathematics Curriculum Framework

GRADE 2

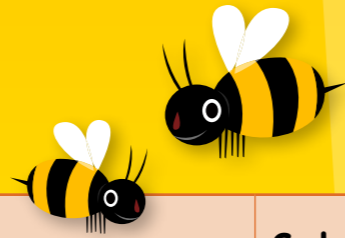
Strand	General Learning Outcomes	Specific Learning Outcomes	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
NUMBER	Develop number sense.	Say the number sequence 0 to 100 by 2s, 5s and 10s, forward and backward.	2.N.1	117			DT Grade 2 Patterns and Fractions 1-3	
		Demonstrate if a number (up to 100) is even or odd.	2.N.2	108			DT Grade 2 Operations 3	
		Describe order or relative position using ordinal numbers.	2.N.3	63			DT Early Number 24, 25	
		Represent and describe numbers to 100.	2.N.4				DT Grade 1 Number 8, 12, 22	
		Compare and order numbers up to 100.	2.N.5	122			DT Grade 1 Number 7, 14, 18, 20, 23	
		Estimate quantities to 100 using referents.	2.N.6	129				
		Illustrate the meaning of place value for numbers to 100.	2.N.7				DT Grade 1 Number 9, 17, 19, 24	Grade 1 Number and Algebra: Place Value Tests 1-6
		Demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction.	2.N.9	103, 110, 118, 120, 124, 128, 131, 139, 150			DT Grade 2 Operations 7, 13-17, 20, 22, 23 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Tests 4-6 Grade 2 Number and Algebra: Addition and Subtraction Tests 2-6
Apply mental mathematics strategies to develop recall of basic addition facts to 18 and related subtraction facts.	2.N.10	142			DT Grade 2 Operations 1, 2, 4, 5	Grade 2 Number and Algebra: Addition and Subtraction Test 1		
PATTERNS AND RELATIONS (Patterns)	Use patterns to describe the world and solve problems.	Demonstrate an understanding of increasing patterns (numbers to 100).	2.PR.2	133			DT Grade 2 Patterns and Fractions 6-9	Grade 2 Number and Algebra: Number Patterns Tests 1-3
SHAPE AND SPACE (Measurement)	Use direct or indirect measurement to solve problems.	Relate the number of days to a week and the number of months to a year in a problem-solving context.	2.SS.1	109			DT Grade 2 Measurement 1-5, 14, 16	
		Relate the size of a unit of measure to the number of non-standard units used to measure length. Compare and order objects by length, height, distance around. Measure length to the nearest non-standard unit.	2.SS.2, 2.SS.3, 2.SS.4	104, 126, 141			DT Grade 2 Measurement 6, 9, 11, 13, 15, 21, 22, 23, 24	Grade 2 Measurement: Length Tests 1, 2
		Relate the size of a unit of measure to the number of non-standard units used to measure mass. Compare and order objects by mass (weight).	2.SS.2, 2.SS.3	135			DT Grade 2 Measurement 17, 18	
		Demonstrate that changing the orientation of an object does not alter the measurements of its attributes.	2.SS.5	102				
SHAPE AND SPACE (3-D Objects and 2-D Shapes)	Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.	Sort 2-D shapes and 3-D objects, using two attributes, and explain the sorting rule.	2.SS.6	145			DT Grade 2 Geometry 3-7, 10	Grade 2 Geometry: Shape Tests 1-5
		Describe, compare and construct 3-D objects, including cubes, spheres, cones, cylinders, prisms, and pyramids.	2.SS.7				DT Grade 2 Geometry 5-7, 10	Grade 2 Geometry: Shape Tests 1, 2
		Describe, compare and construct 2-D shapes, including triangles, squares, rectangles, circles.	2.SS.8	119			DT Grade 2 Geometry 3	Grade 2 Geometry: Shape Tests 3, 4
		Identify 2-D shapes as parts of 3-D objects in the environment.	2.SS.9	121			DT Grade 2 Geometry 4	
STATISTICS AND PROBABILITY (Data Analysis)	Collect, display and analyze data to solve problems.	Gather and record data about self and others to answer questions.	2.SP.1	143				Grade 1 Statistics: Data Test 1
		Construct and interpret concrete graphs and pictographs to solve problems.	2.SP.2				DT Grade 2 Data 4, 5, 7-14	Grade 1 Statistics: Data Tests 2-5





Mathseeds Lessons and the Manitoba Mathematics Curriculum Framework

GRADE 3



Strand	General Learning Outcomes	Specific Learning Outcomes	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
NUMBER	Develop number sense.	Say the number sequence forward and backward from 0 to 1000 by 10s, 100s, 5s or 25s, and from 0 to 100 by 3s and 4s.	3.N.1					Grade 2 Number and Algebra: Numbers to 1000 Test 4
		Represent and describe numbers to 1000.	3.N.2					Grade 2 Number and Algebra: Numbers to 1000 Tests 1–3, 8
		Compare and order numbers to 1000.	3.N.3					Grade 2 Number and Algebra: Numbers to 1000 Test 7
		Estimate quantities less than 1000, using referents.	3.N.4	194				
		Illustrate the meaning of place value for numerals to 1000.	3.N.5					Grade 2 Number and Algebra: Numbers to 1000 Test 5
		Describe and apply mental mathematics strategies for adding and subtracting two 2-digit numerals.	3.N.6, 3.N.7	173				MM Addition Sprints MM Subtraction Sprints
		Demonstrate an understanding of addition and subtraction with answers to 1000 (limited to 1-, 2- and 3-digit numerals).	3.N.9	170, 178, 183				Grade 2 Number and Algebra: Addition and Subtraction Tests 7–9
		Demonstrate an understanding of multiplication to 5×5 .	3.N.11	155, 158, 168, 176				MM Multiplication Sprints Grade 2 Number and Algebra: Equal Groups Tests 1, 3, 5
		Demonstrate an understanding of division (limited to division related to multiplication facts up to 5×5).	3.N.12	165, 190, 196				MM Division Sprints Grade 2 Number and Algebra: Equal Groups Tests 2, 4
Demonstrate an understanding of fractions.	3.N.13	160, 175, 180, 191, 197						
PATTERNS AND RELATIONS (Patterns)	Use patterns to describe the world and solve problems.	Demonstrate an understanding of increasing patterns (to 1000). Demonstrate an understanding of decreasing patterns (from 1000).	3.PR.1, 3.PR.2	153, 166, 195				Grade 2 Number and Algebra: Number Patterns Tests 4–7
PATTERNS AND RELATIONS (Variables and Equations)	Represent algebraic expressions in multiple ways.	Solve one-step addition and subtraction equations involving symbols representing an unknown number.	3.PR.3	163				
SHAPE AND SPACE (Measurement)	Use direct or indirect measurement to solve problems.	Relate the passage of time to common activities, using non-standard and standard units.	3.SS.1	179				
		Relate the number of seconds to a minute, the number of minutes to an hour and the number of days to a month.	3.SS.2	162, 185, 189				Grade 2 Measurement: Time Tests 1–7
		Demonstrate an understanding of measuring length (cm, m).	3.SS.3	182				Grade 2 Measurement: Length Tests 4, 6
		Demonstrate an understanding of measuring mass (g, kg).	3.SS.4	172				
		Demonstrate an understanding of perimeter of regular and irregular shapes.	3.SS.5	192				
SHAPE AND SPACE (3-D Objects and 2-D Shapes)	Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.	Describe 3-D objects according to the shape of the faces and the number of edges and vertices.	3.SS.6	169				
		Sort regular and irregular polygons according to the number of sides.	3.SS.7	184				
STATISTICS AND PROBABILITY (Data Analysis)	Collect, display and analyze data to solve problems.	Collect first-hand data and organize it using tally marks, line plots, charts, lists, to answer questions.	3.SP.1	174, 198				Grade 2 Statistics: Data Tests 1–3, 5
		Construct, label and interpret bar graphs to solve problems.	3.SP.2	187				Grade 2 Statistics: Data Test 4

