



	KINDE	RGARTEN ( A CONTROLL )	Ma	athseeds Lesson #		Additional Mathse	eds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
Organizing Idea	Learning Outcome	Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment	
		Recognize a number of familiar objects as a quantity. Represent a quantity in different ways. Relate a numeral to a specific quantity.						
	Children investigate	Count within 10, forward and backward, starting at any number, according to the counting principles.	1, 2, 3, 4, 5, 10, 11, 12, 14, 16, 17, 33	19, 20, 21, 25, 31,	12, 19	<b>DT</b> Kindergarten Number 1, 3-7, 10	Kindergarten Number Test 1, 2, 4	
Number: Quantity is measured with numbers	Children investigate quantity to 10.	Subitize quantities to 5.						
that enable counting, labelling, comparing, and operating.		Compare the size of two sets using one-to-one correspondence. Describe quantities relative to each other using comparative language. Describe a quantitiy in relation to a purpose or need using comparative language. Solve problems in familiar situations by counting.	22, 28			<b>DT</b> Kindergarten Number 8, 9	Kindergarten Number Test 3	
Geometry: Shapes are	Children interpret compositions of quantities within 10.	Identify a quantity in various groups or arrangements. Compose quantities within 10. Recognize various ways to make 5 and 10.	24, 30, 32, 34, 36, 40, 47, 49		30, 31, 34, 36, 40, 47	<b>DT</b> Kindergarten Operations 1-14, 16-20, 22-25 <b>MM</b> Addition Sprints <b>MM</b> Subtraction Sprints	Kindergarten Operations Test 1-4	
Geometry: Shapes are	Children investigate	Relate shapes in nature to various two-dimensional and three-dimensional shapes. Identify familiar two- and three-dimensional shapes.					W	
defined and related by geometric attributes.	Children investigate shape.	Investigate three-dimensional shapes by rolling, stacking, or sliding.	4, 6, 9, 15, 23, 35, 44			<b>DT</b> Kindergarten Geometry 1-8, 15-23	Kindergarten Geometry Test 1-3	
		Describe a shape using words such as flat, curved, straight, or round.						
		Identify measureable attributes of familiar objects to which size may refer. Compare the length of two objects directly. Describe the size of an object in relation to another object, using comparative language.  Describe the size of an object in relation to a purpose or need, using comparative language.	26			<b>DT</b> Kindergarten Measurement 5, 6, 9, 10	Kindergarten Measurement Test 1-2	
Measurement: Attributes such as length, area, volume, and angle are quantified by measurement.	Children explore	Identify measureable attributes of familiar objects to which size may refer. Compare the area of two objects directly. Describe the size of an object in relation to another object, using comparative language. Describe the size of an object in relation to a purpose or need, using comparative language.	13			<b>DT</b> Kindergarten Measurement 2,3	Kindergarten Measurement Test 3	
	size through direct comparison.	Identify measureable attributes of familiar objects to which size may refer. Compare the weight of two objects directly. Describe the size of an object in relation to another object, using comparative language.  Describe the size of an object in relation to a purpose or need, using comparative language.	29			<b>DT</b> Kindergarten Measurement 7, 8, 11, 12 <b>DT</b> Grade 2 Measurement 18, 19	Kindergarten Measurement Test 4 Grade 2 Measurement: Informal Units Test 6, 7	
		Identify measureable attributes of familiar objects to which size may refer. Compare the capacity of two objects directly. Describe the size of an object in relation to another object, using comparative language. Describe the size of an object in relation to a purpose or need, using comparative language.	38		38	<b>DT</b> Kindergarten Measurement 15, 16, 20	Kindergarten Measurement Test 5	
Patterns: Awareness of patterns supports problem solving in various situations.	Children identify and create repeating patterns.	Recognize repeating patterns encountered in daily routines and plays, including songs or dances. Recognize change or constancy between elements in a repeating pattern. Predict the next elements in a repeating pattern. Create a repeating pattern with up to three repeating elements.	8, 27, 37		6, 8, 15, 23, 27, 37	<b>DT</b> Kindergarten Patterns 1-9	<b>Kindergarten Number</b> Test 6	
Time: Duration is described and quantified by time.	Children interpret time as a sequence of events.	Sequence events, limited to two events, according to time using words or ordinal numbers. Describe daily events as occuring yesterday, today, or today.	39, 42			<b>DT</b> Kindergarten Measurement 1		





	GRADE 1		Mathseeds Lesson #			Additional Mathseeds Resources			
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment		
Organizing Idea	Learning Outcome	Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of- lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment		
		Represent quantities using words, numerals, objects, or pictures. Identify a quantity of 0 in familiar situations.  Count within 100, forward by 1s, starting at any number, according to the counting principles. Count backwards from 20 to 0 by 1s. Recognize quantities to 10.	41 43 45 46 48 50 56 60 67 75 81		56, 60, 67, 75, 81, 88	<b>DT</b> Kindergarten Number 2, 11- 19, 21-23 <b>DT</b> Grade 1 Number 1-6, 8-12, 14	Grade 1 Number and Algebra: Whole Numbers Test 1-9		
Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.	Students interpret and explain quantity	Skip count to 100, forwards by 5s and 10s, starting at 0. Skip count to 20, forwards by 2s, starting at 0.	77, 79, 90		77, 79, 90 77, 79		Grade 1 Number and Algebra: Patterns Test 1-7		
	to 100.	Partition a set of objects by sharing and grouping. Demonstrate conservation of number when sharing or grouping.	71,74 71,7		71, 74	<b>DT</b> Kindergarten Operations 21			
		Investigate equal and unequal quantities, including using a balance model. Identify numbers that are one more, two more, one less, and two less than a given number. Represent a quantity relative to another, including symbolically.	76			<b>DT</b> Kindergarten Number 20 <b>DT</b> Grade 1 Number 7, 15, 18			
	Students examine addition and subtraction within 20.	Visualize quantities between 10 and 20 as compositions of 10 and another quantity.  Model addition and subtraction within 20 in various ways, including with a balance.  Relate addition and subtraction to various contexts involving composition or  decomposition of quantity.	51, 53, 58, 65, 68, 72, 85, 88, 91, 92, 93, 100		41, 43, 46, 51, 53, 65, 68, 72, 76, 91, 93	<b>DT</b> Kindergarten Operations 15 <b>DT</b> Grade 1 Operations 1-15, 17-20	Grade 1 Number and Algebra: Operations		
		Investigate addition and subtraction strategies. Add and subtract within 20. Check differences and sums using inverse operations. Determine a missing quantity in a sum or difference, within 20, in a variety of ways. Express addition and subtraction symbolically. Solve problems using addition and subtraction.					Test 1-4		
		Identify patterns in addition and subtraction, including patterns in addition tables. Recognize families of related addition and subtraction number facts. Recall addition number facts, with addends to 10, and related subtraction number facts.				<b>DT</b> Grade 1 Operations 16 <b>MM</b> Addition Sprints <b>MM</b> Subtraction Sprints			
	Students examine one-half as a part-whole relationship.	Identify one-half in familiar situations. Partition an even set of objects into two equal groups, limited to sets of 10 or less. Partition a shape or object into two equal pieces. Describe one of two equal groups or pieces as one half.	61, 66		61, 66		61, 66	<b>DT</b> Grade 1 Patterns and Fractions 5, 6, 11, 13, 14	Grade 1 Number and Algebra: Fractions and Money Test 1-3
		Identify familiar shapes in various sizes and orientations. Model two-dimensional shapes. Sort shapes according to one attribute and describe the sorting rule.	52, 62, 99		52, 62, 99		52, 62	<b>DT</b> Grade 1 Geometry 1-3, 6-8, 10, 17-19	<b>Grade 1 Geometry: Shape</b> Test 1-6
eometry: Shapes are efined and related by eometric attributes.	Students interpret shape in two and three dimensions.	Compose and decompose two- or three- dimensional composite shapes. Identify familiar shapes within two- or three-dimensional composite shapes.	69		69	<b>DT</b> Kindergarten Geometry 12 <b>DT</b> Grade 1 Geometry 9, 13	Kindergarten Geometry Test 4		
		Investigate symmetry of two-dimensional shapes by folding and matching.	152						





**Organizing Idea** 

Measurement: Attributes

such as length, area,

Patterns: Awareness

of patterns supports

Time: Duration is

situations.

by time.

problem solving in various

described and quantified

Statistics: The science

of collecting, analyzing,

data can inform

making.

visualizing, and interpreting

understanding and decision

volume, and angle

are quantified by

measurement.

#### Mathseeds Alberta Curriculum Chart

80, 97



#### GRADE 1 continued

Learning

Outcome

Students relate

length to the

understanding

of size.

Students

examine

cycles.

to cycles.

Students

investigate and

represent data.

patterns in

Students explain

time in relation



Collaborate to construct a concrete graph using data collected in the learning

environment. Create a pictograph from a concrete graph.

continued	Math	seeds Lesson	#	Additional Math	seeds Resources
Commoed	Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of- lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Recognize the height, width or depth of an object as lengths in various orientations. Compare and order objects according to length. Describe distance in familiar contexts.	55				
Compare the length of two objects directly or indirectly using a third object. Order objects according to length.	84			<b>DT</b> Grade 1 Measurement 2, 4, 13, 14	Grade 1 Measurement: Length and Capacity Test 1-5
Compare the area of two objects directly or indirectly using a third object. Order objects according to area.	59, 112		59		Grade 2 Measurement: Informal Units Test 3
Compare the capacity of two objects directly or indirectly using a third object. Order objects according to capacity.	89, 116			<b>DT</b> Grade 1 Measurement 11, 17-19 <b>DT</b> Grade 2 Measurement 8	Grade 1 Measurement: Length and Capacity Test 6, 7 Grade 2 Measurement: Informal Units Test 4, 5
Identify the pattern core, up to four elements, in a cycle. Identify a missing element in a repeating pattern or cycle. Describe change and constancy in repeating patterns and cycles. Create different representations of the same repeating pattern or cycle, limited to a pattern core of up to four elements. Extend a sequence of elements in various ways to create repeating patterns.				<b>DT</b> Grade 1 Patterns and Fractions 1, 2, 4, 12	
Describe cycles of time encountered in daily routines and nature. Describe observable changes that indicate a cycle of time. Identify cycles from a calendar.				<b>DT</b> Kindergarten Measurement 4, 14	
Share wonderings about people, things, events, or experiences. Gather data by sharing answers to questions.				<b>DT</b> Grade 1 Data 1-4, 9,	Grade 1 Statistics: Data
	80. 97		80	Di Giaue i Data 1-4, 3,	Grade I Statistics. Data

10, 12-16

Test 1-5









	GRAD	E 2	Mathseeds Lesson #			Additional Mathseeds Resources		
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
Organizing Idea	Learning Outcome	Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment	
Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.		Represent quantities using words and natural numbers. Identify the digits representing thousands, hundreds, tens, and ones based on place in a natural number. Relate a number, including zero, to its position on the number line. Count within 1000, forwards and backwards by 1s, starting at any number.	101, 106		105, 106, 132	<b>DT</b> Grade 1 Number 13, 16, 17, 19, 21-24 <b>DT</b> Grade 2 Number 1-3, 5-13, 17, 18, 21-24	Grade 1 Number and Algebra: Place Value Test 1-6 Grade 2 Number and Algebra: Numbers to 1000 Test 1-5, 7	
		Decompose quantities into groups of 100s, 10s and 1s.	105		128	<b>DT</b> Grade 2 Number 4, 16, 19, 20		
	Students analyze quantity to 1000.	Skip count by 20s, 25s, or 50s starting at 0. Skip count by 2s and 10s, starting at any number. Determine the value of a collection of coins or bills of the same denomination by skip counting.	11, 125			<b>DT</b> Grade 2 Patterns and Fractions 1-4, 6-10, 13	Grade 2 Number and Algebra: Number Patterns Test 1-8	
		Model even and odd quantities by sharing and grouping. Describe a quantity as even or odd. Partition a set of objects by sharing or grouping, with or without remainders.	108, 111, 113		108	<b>DT</b> Grade 2 Operations 3, 6, 11, 12	Grade 2 Number and Algebra: Equal Groups Test 1, 2, 5	
		Model equality and inequality between two quantities, including with a balance. Compare and order natural numbers. Describe a quantity as less than, greater than, or equal to another quantity.	122			<b>DT</b> Grade 1 Number 20 <b>DT</b> Grade 2 Number 14, 15	Grade 2 Number and Algebra: Numbers to 1000 Test 6	
		Visualize 100 as a composition of multiples of 10 in various ways. Compose a sum in multiple ways including with more than two addends.	95, 96, 98, 103, 110, 118, 120, 124, 131, 139, 141,			<b>DT</b> Grade 1 Operations 1, 2, 4, 5, 7, 13-18, 20-28		
	Students investigate addition and subtraction within 100.	Recall and apply addition number facts, with addends to 10, and related subtraction number facts.			83, 95, 96, 98, 100, 104,		Grade 1 Number and Algebra: Operations Test 5, 6	
		Investigate strategies for addition and subtraction of two-digit numbers. Add and subtract numbers within 100. Verify a sum or difference using inverse operations. Determine a missing quantity in a sum or difference, within 100, in a variety of ways. Solve problems using addition and subtract of countable quantities or measurable lengths.	142, 147, 150		110, 118, 120, 124, 131, 139, 142, 147, 150	MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Test 1-8	
	Students interpret part-whole relationships using unit fractions.	Model a unit fraction by partitioning a whole object or whole set into equal parts, limited to 10 or fewer equal parts. Compare different unit fractions of the same whole, limited to denominators of 10 or less. Compare the same unit fractions of different wholes, limited to denominators of 10 or less. Model one whole, using a given unit fraction, limited to denominators of 10 or less.	132, 138		132	<b>DT</b> Grade 2 Patterns and Fractions 5, 11, 12, 14-17	Grade 2 Number and Algebra: Fractions and Money Test 1-4	







	GRADE 2 continued		Mathseeds Lesson #			Additional Mathseeds Resources		
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
Organizing Idea	Learning Outcome	Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment	
Geometry: Shapes are defined and related by geometric attributes.	Students analyze and explain geometric attributes of shape.	Sort shapes according to two geometric attributes and describe the sorting rule. Relate the faces of three-dimensional shapes to two-dimensional shapes.  Create a picture or design with shapes from verbal instructions, visualization, or memory.	119, 121, 145, 169		119, 121, 140, 145	<b>DT</b> Grade 2 Geometry 3-7, 10	Grade 2 Geometry: Shape and Movement Test 1-5	
Measurement: Attributes such as length, area, volume, and angle are quantified by measurement.	Students communicate length using units.	Measure length with non-standard units by tiling, iterating, or using a self-created measuring tool. Compare and order measurements of different lengths measured with the same non-standard units, and explain the choice of unit. Compare measurements of the same length measured with different non-standard units. Measure length with standard units by tiling or iterating with a centimetre. Compare and order measurements of different lengths measured with centimetres.	104, 126		141	<b>DT</b> Grade 2 Measurement 6, 13-15, 21, 22	Grade 2 Measurement: Informal Units Test 1, 2	
Patterns: Awareness of patterns supports problem solving in various situations.	Students explain and analyze patterns in a variety of contexts.	Describe non-repeating patterns encountered in surroundings, including in art, architecture, cultural designs, and nature. Investigate patterns in a hundreds chart. Create and express growing patterns using sounds, objects, pictures, or actions.  Create and express a repeating patterns with a pattern core of up to four elements that change by more than one attribute.	133, 137		101, 133, 137	<b>DT</b> Grade 2 Geometry 12	Grade 2 Geometry: Shape and Movement Test 7	
Time: Duration is described and quantified by time.	Students relate duration to time.	Express significant events using calendar dates. Describe the duration between or until significant events using comparative language. Describe the duration of events using non-standard units. Describe the relationship between days, weeks, months, and years. Describe the duration between or until significant events using standard units of time.	109		109	<b>DT</b> Kindergarten Measurement 13, 17-19 <b>DT</b> Grade 2 Measurement 1-5, 16, 17	Kindergarten Measurement Test 7 Grade 2 Measurement: Time Test 4, 5	
Statistics: The science of collecting, analyzing, visualizing, and interpreting	Students relate data to a variety of	Generate questions for a specific investigation within the learning environment. Collect first-hand data by questioning people within the learning environment.			143	<b>DT</b> Grade 2 Data and	Grade 2 Statistics: Data	
data can inform understanding and decision making.	data to a variety of representations.	Record data in a table. Construct graphs to represent data. Interpret graphs to answer questions. Compare the features of pictographs, dot plots, and bar graphs.	143	h	1.0	Chance 1, 4, 5, 7-14	Test 1-6	







Organizing Idea    Companizing Idea   Companizing I		Mathseeds Lesson # A	Additional Mathseeds Resources		
Number: Cuantity: Students apply strategies for the addition and subtraction of interedity in the desire duplication and subtraction of natural numbers. Add and subtraction to repeated addition, and subtraction to repeated addition. Recognizer multiplication and division synthical generals contenting and operating.  Number: Cuantity: Students apply strategies for the addition and subtraction of natural numbers. Express the relationship between two numbers to strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of natural numbers. Express the relationship between two numbers to strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of natural numbers. Add and subtraction of two-digit numbers to strategies for the addition and subtraction of natural numbers. Add and subtraction.  Number: Cuantity is made as a proper strategies for the addition and subtraction of natural numbers. Add and subtraction of natural numbers. Add and subtraction to repeated addition. And subtraction of natural numbers. Add and subtraction to repeated addition. Relate multiplication by 0.  Manual Minute (MM)  **To find 1 (194, 1154) (194, 1		Knowledge and Skills Assessment Higher Order E	ncy Assessment		
the value of acid digit in a natural number. Lipress natural numbers using words and numerals. Express value within 100 000 compare and order natural numbers. Express the relationship between two numbers using <,>, or = interpret place value within 100 000 compare and order natural numbers. Express the relationship between two numbers using <,>, or = interpret place value within 100 000 count and represent the value of a collection of a nickels, dimes, and quarters as cents. Count and represent the value of a collection of loonies, tonies, and bills as dollars. Recognize French and English 200 000 counts and representations of monetary values.  Students apply strategies for addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of three-digit numbers.  Maddition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of strategies for the addition and subtraction of three-digit numbers.  Students apply strategies for the addition and subtraction of three-digit numbers to strategies for the addition and subtraction of three-digit numbers to strategies for the addition and subtraction of three-digit numbers to strategies for the addition and subtraction of three-digit numbers to strategi	Irganizing idea 🚦	Skills & Procedures Resources, and Problem lesson Quiz Problem Solving Mental	the state of the s		
Students apply strategies for addition and subtraction of three-digit numbers. Express the relationship between two numbers using <, >, or =.    Students apply strategies for addition and subtraction of three-digit numbers. Express the relationship between two numbers using <, >, or =.    Students apply strategies for addition and subtraction of three-digit numbers. Express the addition and subtraction of three-digit numbers. Add and subtract thoral within 1000.    Number: Quantity is measured with numbers. Students apply strategies for addition and subtraction of numbers. Express the addition and subtraction of natural numbers. Add and subtract not not problems using addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms for addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms strategies for the addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms strategies for the addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms strategies for the addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms strategies for the addition and subtraction of natural numbers. Add and subtract natural numbers using standard algorithms strategies. Multiplication to repeated addition. Relate multiplication to skip counting. Investigate multiplication by 0.    Students apply   Strategies for the addition and division in various contexts.   Students are product using equal groups of objects. Relate multiplication to repeated addition. Relate multiplication to skip counting.   Students are problems using addition and division in various contexts.   Students are product using equal groups of properties using addition. Addition and products are problems.   Students are product using equal groups of products and quotients are problems.   Students are problems.   Students are problems.   Studen		th digit in a natural number. Express natural numbers using words and numerals. Express sitions of a natural number using place value.			
Interret place value within 100 000  Count and represent the value of a collection of noines, stoolies, and plus as dollars. Recognize French and English symbolic representations of monetary values.  Students apply strategies for addition and subtraction of three-digit numbers. Add and subtraction of intered addition and subtraction of three-digit numbers. Add and subtraction of intered numbers using standard algorithms for addition and subtraction of instural numbers. Add and subtraction of instruct numbers. Add and subtraction of instruct numbers using standard algorithms for addition and subtraction of instruct numbers. Add and subtraction.  Number: Quantity is measured with numbers and addition and subtraction of instruct numbers using standard algorithms for addition and subtraction of instruct numbers using standard algorithms for multiplication to skip counting. Investigate multiplication by 0.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without mumbers that enable counting. Investigate multiplication by 0.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without emailabelling, comparing, and operating.  Students apply strategies for addition and subtraction of instruct numbers that enable counting, labelling, comparing, and apply strategies for the addition and subtraction or repeated addition. Relate multiplication to skip counting.  Investigate multiplication and quotients as arrays. Recognize interpretations of multiplication and division in various contexts.  Investigate multiplicatio	0 0 0				
Value within 100 000   Count and represent the value of a collection of a nickels, dimes, and quarters as cents. Count and represent the value of a collection of loonies, toonies, and bills as dollars. Recognize French and English symbolic representations of monetary values.    Students apply strategies for addition and subtraction of three-digit numbers: a value of addition and subtraction of three-digit numbers: a value of a didition and subtraction of three-digit numbers. Subtraction of three-digit numbers: a value of a didition and subtraction of three-digit numbers: a value of a didition and subtraction of three-digit numbers. Subtraction of three-digit numbers: a value of a didition and subtraction of three-digit numbers: a value of a didition and subtraction. Explain the standard algorithms subtraction of three-digit numbers: a value of a didition and subtraction of three-digit numbers. Add and subtraction. Explain the standard algorithms of addition and subtraction of natural numbers using standard algorithms. Estimate sums and differences. Solve problems using addition and subtraction.    Compose a product using equal groups of objects. Relate multiplication and subtraction. Investigate multiplication by 0.    Visualize and model products and quantity into equal groups or groups of a certain size, with or without remainders. Visualize and model products and quotients as arrays. Recognize interpretations of multiplication and division in various contexts. Visualize and model products and quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainders. Visualize and model products and quotients as arrays. Recognize interpretations of multiplication and division in various contexts. Visualize and model products and quotients are a missing quantity in a product or quotient in a variety of ways. Express multiplication and division and division model within 100. Verify a product or quotient or partition and division in sharing or grouping situations. Solve prob		rder natural numbers. Express the relationship between two numbers using <, >, or =.			
States   Sta	valu	esent the value of a collection of a nickels, dimes, and quarters as cents. Count and ralue of a collection of loonies, toonies, and bills as dollars. Recognize French and English sentations of monetary values.  Measurer	Money Test 4-8		
Number: Quantity is measured with numbers that emable counting, labelling, comparing, and operating.  Students analyze and apply strategies for multiplication and division within 100.  Wi	strategies for addition and subtraction	three-digit numbers.  128, 134, 144, 146, 148, 159, 163, 166, 163, 170, 172, 173, 178, 183, 188, 195  128, 134, 144, 146, 148, 159, 163, 166, 163, 170, 172, 173, 178, 183, 188, 195  129, 134, 144, 146, 148, 159, 163, 166, 163, 170, 172, 173, 178, 183, 188, 195  120, 173, 178, 183, 188, 195	· · · · · · · · · · · · · · · · · · ·		
Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.  Within 100.  Within 100.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainder in various situations. Solve problems using multiplication and division symbolically. Explain the meaning of the remainder in various situations.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainders.  Visualize and model products and quotients as arrays. Recognize interpretations of multiplication and division in various contexts.  Investigate multiplication and division strategies. Multiply and divide within 100. Verify a product or quotient using inverse operations.  Determine a missing quantity in a product or quotient in a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations. Solve problems using multiplication and division in sharing or grouping situations.  MMM Multiplication Sprints  MMM Multiplication Sprints		a subtraction of natural numbers. And and subtract natural numbers using standard			
numbers that enable counting, labelling, comparing, and operating.  Students analyze and apply strategies for multiplication and division within 100.  Netermine a missing quantity in a product or quotient in a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainders.  Visualize and model products and quotients as arrays. Recognize interpretations of multiplication and division and division in various contexts.  Investigate multiplication and division and division symbolically. Explain the meaning of the remainder in various situations. Solve problems using multiplication and division in sharing or grouping situations.  Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainders.  115, 130, 136, 155, 165, 186  186  8-10, 19  181  181  186  8-10, 19  181  186  8-10, 19  181  186  8-10, 19  181  186  8-10, 19	•	o skip counting.	Grada 2 November and		
labelling, comparing, and operating.  Students analyze and apply strategies for multiplication and division within 100.  Petermine a missing quantity in a product or quotient in a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations.  Students analyze and model products and quotients as arrays. Recognize interpretations of multiplication and division and division and division within 100. Verify a product or quotient or a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations. Solve problems using multiplication and division in sharing or grouping situations.  158, 168, 171, 176, 188, 193, 196, 199  MM Multiplication Sprints	umbers that	INT DV DARTITIONING A GUANTITY INTO EGUAL GROUNS OF GROUNS OF A CERTAIN SIZE WITH OF WITHOUT 1 LIS LIST LIST LIST LIST	Operations Grade 2 Number and Algebra: Equal Groups Test 3, 4		
Investigate multiplication and division and division strategies. Multiply and divide within 100. Verify a product or quotient using inverse operations.  Determine a missing quantity in a product or quotient in a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations. Solve problems using multiplication and division in sharing or grouping situations.  181, 190  181  181  188, 176, 188, 193, 196, 199	enable counting, labelling, comparing, and	· · · · · · · · · · · · · · · · · · ·			
within 100. Determine a missing quantity in a product or quotient in a variety of ways. Express multiplication and division symbolically. Explain the meaning of the remainder in various situations. Solve problems using multiplication and division in sharing or grouping situations.  158, 168, 171, 176, 188, 193, 196, 199  158, 168, 171, 176, 188, 193, 196, 199  158, 168, 171, 176, 188, 193, 196, 199  158, 168, 171, 176, 188, 193, 196, 199  158, 168, 171, 176, 188, 193, 196, 199	- strat mult	· IXI IVII			
130, 100, 171, 170, 100, 133, 130, 133	•	lically. Explain the meaning of the remainder in various situations. Solve problems using and division in sharing or grouping situations.  168, 176, 188, 193  MM Mult	cation		
Examine patterns in multiplication and division, including patterns in multiplication tables and skip counting. Recognize families of related multiplication and division number facts. Recall multiplication number facts, with factors to 10, and related division facts.		ns in multiplication and division, including patterns in multiplication tables and skip gnize families of related multiplication and division number facts. Recall multiplication	Sprints		
Model fractions of a whole quantity, length, shape, or object, in various ways, limited to denominators of 12 or less. Visualize fractions as compositions of a unit fraction. Identify the numerator and denominator of a fraction in various representations. Name a given fraction. Express fractions, including one whole, symbolically, limited to denominators of 12 or less. Relate various representations of the same fraction, limited to denominators of 12 or less.		alize fractions as compositions of a unit fraction. Identify the numerator and denominator various representations. Name a given fraction. Express fractions, including one whole, nited to denominators of 12 or less. Relate various representations of the same fraction,			
interpret fractions in relation to one whole.  Compare the same fraction of different-sized wholes Compare different fractions of the same whole that have the same numerator and different denominators. Express the relationship between two fractions of the same whole, using <, >, or =.  Compare the same fraction of different-sized wholes Compare different fractions of the same whole that the same numerator and different denominators. Express the relationship between two fractions of the same whole, using <, >, or =.	fract relat	minator. Compare different fractions of the same whole that have the same numerator  175, 180			
Relate a fraction less than one to its position on the number line, limited to denominators of 12 or less. Compare fractions to benchmarks of 0, $\frac{1}{2}$ , and 1.		· 1			





	continued
<b>41</b> 1	continued

	GRADE 3 continued		Maths	eeds Lesson	Additional Math		seeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
Organizing Idea	Learning Outcome	Skills & Procedures	Online Lesson, Printable Resources, and Problem Solving Tasks	End-of- lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment	
		Investigate the relationships between the sides of a polygon, including perpendicular, parallel, and equal, using referents for 90° or by measuring. Investigate the relationships between vertices of a polygon, including equal or right angles, using direct comparison or referents for 90°.	119, 145					
and related	Students relate geometric properties to shape.	Describe geometric properties of regular and irregular polygons. Sort polygons according to geometric properties and describe the sorting rule. Classify polygons as regular or irregular using geometric properties.	184					
attributes.		Examine geometric properties of polygons by translating, rotating, or reflecting using hands-on materials or digital applications.	102		102	<b>DT</b> Grade 1 Geometry 12, 14, 16 <b>DT</b> Grade 2 Geometry 1, 9, 11	Grade 2 Geometry: Shape and Movement Test 6	
Measurement: Attributes such	Students determine length using standard units.	Relate millimetres, centimetres, and metres. Relate inches to feet and yards. Justify the choice of millimetres, centimetres, or metres to measure various lengths. Identify referents for a centimetre and a metre. Estimate length by comparing to a benchmark. Estimate length by visualizing the iteration of a referent for a centimetre or metre. Measure lengths of straight lines and curves, with millimetres, centimetres, or metres. Recognize length expressed in metric or imperial units. Approximate a measurement in inches, feet or yards using centimetres or metres.	182		182			
as length, area, volume, and angle are quantified by measurement.		Determine the perimeter of polygons. Determine the length of an unknown side given the perimeter of a polygon.	192					
	Students interpret angles.	: as motion i omnare two angles directly by superimposing i omnare two angles indirectly by						
Patterns: Awareness		Recognize familiar numerical sequences, including the sequence of even or odd numbers. Describe position in a sequence using ordinal numbers.	63		63	<b>DT</b> Kindergarden Number 24, 25		
of patterns supports analyze problem solving in in num	analyze patterns in numerical sequences.	Recognize skip-counting sequences in various representations, including rows or columns of a multiplication table. Determine any missing term in a skip-counting sequence using multiplication. Describe the change from term to term in a numerical sequence using mathematical operations.	117, 153		117, 153			
Time: Duration is described and quantified by time.	Students tell time using clocks.	Investigate relationships between seconds, minutes, and hours using an analog clock. Relate minutes past the hour to minutes until the next hour. Describe time of day as a.m. or p.m. relative to 12-hour cycles of day and night. Tell time using analog and digital clocks. Express time of day in relation to one 24-hour cycle.	54, 70, 87, 114, 123, 127, 162,	185, 189	70, 87, 179, 185, 189	DT Grade 1 Measurement 1, 8-10, 15, 16 DT Grade 2 Measurement 7, 10, 20	Kindergarten Measurement Test 6 Grade 1 Measurement: Time Test 1-6 Grade 2 Measurement: Time Test 1-3	
Statistics: The science of collecting,	Student	Formulate statistical questions for investigation. Predict the answer to a statistical question.						
analyzing, visualizing, and interpreting data can inform understanding and decision making.	interpret and explain representations of data.	Collect data using digital or non-digital tools and resources. Represent first-hand and second-hand data in a dot plot or bar graph with one-to-one correspondence. Describe the story that a representation tells about a collection of data in relation to a statistical question. Consider possible answers to a statistical question based on the data collected.	174, 179, 187, 198		187			



