Map: Math Grade K Grade Level: K

District: Island Trees

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	Essential Questions	Content	Skills		Standards/PIs
Unit 1	How can I identify the positions top, middle, bottom, in front, behind, over, under, on, inside, outside, left, and right? - How can I sort objects with one and two attributes?	Sorting and Classifying	*Identifying and using position words: top, middle, bottom, in front, behind, over, under, on, inside, outside, left, right *Sorting by one attribute or two attributes *Analyze and solve problems using skills and strategies (Use the logical reasoning: same, different, what doesn't belong)		MST3-K.RP.3 MST3-K.PS.2 MST3-K.PS.8 MST3-K.PS.9
Unit 2	<u>What is a</u> pattern?	Exploring Patterns	*Identify, extend, and create patterns		MST3-K.PS.8 MST3-K.PS.9
	<u>How do I</u> <u>create a</u>		*Analyze and solve	e and solve	MST3-K.PS.3
	<u>simple</u> pattern?		problems using skills and strategies		MST3-K.R.1
	How can I				MST3-K.R.5
	<u>extend a</u> pattern?		*Create a growing pattern		MST3-K.A.1

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m to state the state term of t	at is a aber? <u>Lidentify</u> <u>terals and</u> <u>punts for 0</u> <u>?</u> <u>y do 1 form</u> <u>number 0 -</u> <u>L count to</u> <u>rwards and</u> <u>cwards?</u> <u>Lidentify</u> <u>nals to</u> <u>?</u>	Exploring Numbers to 5	 *Identify and compare groups of objects: equal, more, fewer, one more, one fewer *Identify and show groups of objects that represent cardinal numbers to five and ordinal numbers to fifth *Write numbers 0 - 5 *Analyze and solve problems using skills and strategies (Make and use a graph) *Order numbers first - fifth *Count forward and backward from 0 - 5 	MST3-K.N.1 MST3-K.N.2 MST3-K.N.3 MST3-K.N.6 MST3-K.N.7 MST3-K.N.8 MST3-K.N.8 MST3-K.N.11

	Essential Questions	Content	Skills	Standards/PIs
Unit 4	What are two and three dimensional figures?	Shapes and Sharing	*Identify two- and three-dimensional figures	MST3-K.G.1 MST3-K.G.2 MST3-K.G.3
	Can you identify the traditional geometric shapes (square, circle, rectangle, triangle, diamond?		*Identify equal and unequal parts including halves, fourths, and thirds *Analyze and solve problems using skills and strategies (Act It Out)	MST3-K.G.4 MST3-K.G.5
	What are the attributes of a plane and space shapes? What are equal parts?		*Identify the attributes of plane and space shapes (i.e. corner, face, sides, curves)	
Unit S	Can I identify numerals and amounts for 6 to 10? Can I count to 10? How do I form numbers 6 - 10?	Exploring Numbers to 10	*Identify and show groups of objects that represent cardinal numbers to ten and ordinal number to tenth *Compare and order groups of objects up to ten	MST3-K.N.5 MST3-K.N.6 MST3-K.N.7 MST3-K.N.8 MST3-K.N.9 MST3-K.N.10 MST3-K.N.11
	Can I count forward and backward to 10? How do I order numbers		*Analyze and solve problems using skills and strategies (Make and use a tally table)	

	first - tenth? What is a tally?		*Order numbers first through tenth *Count forward and backward to 10 *Write numbers 6 - 10	
Unit 6	How do I measure the length or weight of an object? What is the length of an object? What is the weight of an object? What is capacity? How do I read a bar graph?	Measurement	*Explore length (includes sorting, comparing, ordering) *Explore weight (includes comparing and ordering) *Explore capacity (includes comparing and ordering) *Analyze and solve problems using skills and strategies (measuring using nonstandard units) *Create and analyze a bar graph to compare lengths and capacities	MST3-K.M.1 MST3-K.M.2 MST3-K.M.3

	Essential Questions	Content	Skills	Standards/PIs
Unit 7	How do 1 order (first, next, and last) of an event? What is the difference between a digital and analog clock? How do 1 tell time to the hour? What is the penny, nickel and dime? What are their values? How do we add change amounts?	Time and Money	*Order events *Identify, compare, and tell time using both analog and digital clocks *Identify and count using pennies, nickels, and dimes *Analyze and solve problems using skills and strategies	MST3-K.CN.1 MST3-K.CN.2 MST3-K.CN.3 MST3-K.M.3
Unit 8	What are the numbers to 20? How can we write and compare numbers to 20? How do we count and	Exploring Greater Numbers	*Identify, compare, and order numbers to 20 *Explore numbers to 100 *Analyze and solve	MST3-K.N.4 MST3-K.PS.2 MST3-K.PS.3 MST3-K.PS.4 MST3-K.PS.5 MST3-K.PS.6
	explore higher numbers? How do I skip count 2's and 5's and 10's?		*Skip count by 2's, 5's and 10's	MST3-K.PS.8 MST3-K.PS.9 MST3-K.PS.10

Unit 9	How do I explore addition?	Exploring Addition	*Find sums using addition sentences and vertical form		MST3-K.N.12 MST3-K.N.13
	<u>What is a</u> "sum"? <u>How do I find</u> the sum of two		*Add money using pennies	с 1 1	MST3-K.PS.10 MST3-K.RP.3 MST3-K.R.1
	<u>numbers?</u> <u>What is a plus</u> sign? <u>What is an</u>		*Analyze and solve problems using skills and strategies (Draw a Picture)		MST3-K.R.5
	<u>equal sign?</u>		*Read and write appropriate addition examples (horizontal and vertical sentences)		
			*Identify plus sign and equal sign		
			*Identify the sum of an addition problem		

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	Essential Questions	Content	Skills		Standards/PIs			
Unit 10	What does it mean to take away?	Explore Subtraction	*Find differences using subtraction sentences and vertical form		MST3-K.N.12			
					MST3-K.N.13			
	How do I subtract?				MST3-K.PS.8			
	What are the subtraction		*Subtract money using		MST3-K.PS.9			
	<u>symbols:</u>		pennies		MST3-K.PS.3			
			*Analyze and solve problems using skills and strategies (act it out)		MST3-K.PS.6			
Key t	o Standards used in this Ma	p						
MST3	-K.PS.2 [2 occurences] - MST	Standard 3 - Problem Solving	Strand - Students will build ne	w mathematical knowledge thr	ough problem solv	ring Performance Indicator		
MST3	-K.PS.3 [3 occurences] - MST	Standard 3 - Problem Solving	Strand - Students will solve pr	oblems that arise in mathemat	tics and in other co	ntexts Performance		
Indica	tor K.PS.3 - act out or model v	vith manipulatives activities inv	olving mathematical content f	rom literature and/or storytelli	ng [Kindergarten]			
Indica	tor K.PS.4 - formulate problem	is and solutions from everyday	situations [Kindergarten]	plems that arise in mathemati	cs and in other cor	itexts Performance		
мятз	-K.PS.5 [1 occurence] - MST S	Standard 3 - Problem Solving S	trand - Students will apply and	d adapt a variety of appropriate	e strategies to solv	e problems Performance		
Indica MST3	-K.PS.5 - use informal count -K.PS.6 [2 occurrences] - MST	Standard 3 - Problem Solutions	[Kindergarten] Strand - Students will apply ar	nd adapt a variety of appropria	te strategies to sol	ve problems, - Performance		
Indica	tor K.PS.6 - experience teache	r-directed questioning process	to understand problems [Kind	ergarten]	·· ·· ·· ·· ·· ·· ·· ·· ·· ··			
MST3	MST3-K.PS.8 [4 occurences] - MST Standard 3 - Problem Solving Strand - Students will apply and adapt a variety of appropriate strategies to solve problems Performance							
MST3-K.PS.9 [4 occurences] - MST Standard 3 - Problem Solving Strand - Students will apply and adapt a variety of appropriate strategies to solve problems Performance								
Indicator K.PS.9 - use drawings/pictures to model the action in problems [Kindergarten]								
MST3 Indica	MST3-K.PS.10 [2 occurences] - MST Standard 3 - Problem Solving Strand - Students will monitor and reflect on the process of mathematical problem solving Performance							
MST3-K.RP.3 [2 occurences] - MST Standard 3 - Reasoning and Proof Strand - Students will make and investigate mathematical conjectures Performance Indicator K.RP.3								
- explore guesses, using a variety of objects and manipulatives [Kindergarten]								
Indicator K.CN.1 - recognize the presence of mathematics in their daily lives [Kindergarten]								
WST3-K.CN.2 [1 occurence] - MST Standard 3 - Connections Strand - Students will recognize and apply mathematics in contexts outside of mathematics Performance								

Indicator K.CN.2 - use counting strategies to solve problems in their daily lives [Kindergarten]

MST3-K.CN.3 [1 occurence] - MST Standard 3 - Connections Strand - Students will recognize and apply mathematics in contexts outside of mathematics. - Performance Indicator K.CN.3 - recognize and apply mathematics to objects and pictures [Kindergarten]

MST3-K.R.1 [2 occurences] - MST Standard 3 - Representation Strand - Students will create and use representations to organize, record, and communicate mathematical ideas. - Performance Indicator K.R.1 - use multiple representations, including verbal language, acting out or modeling a situation, and drawing pictures as representations [Kindergarten]

MST3-K.R.5 [2 occurences] - MST Standard 3 - Representation Strand - Students will use representations to model and interpret physical, social, and mathematical phenomena. - Performance Indicator K.R.5 - use objects to show and understand mathematical phenomena [Kindergarten]

MST3-K.N.1 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.1 - count the items in a collection and know the last counting word tells how many items are in the collection (1 to 10) [Kindergarten]

MST3-K.N.2 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.2 - count out (produce) a collection of a specified size 1 to 10 [Kindergarten]

MST3-K.N.3 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.3 - numerically label a data set of 1 to 5 [Kindergarten]

MST3-K.N.4 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.4 - verbally count by 1's to 20 [Kindergarten]

MST3-K.N.5 [2 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.5 - verbally count backwards from 10 [Kindergarten]

MST3-K.N.6 [2 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.6 - represent collections with a finger pattern up to 10 [Kindergarten]

MST3-K.N.7 [3 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.7 - draw pictures or other informal symbols to represent a spoken number up to 10 [Kindergarten]

MST3-K.N.8 [3 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.8 - draw pictures or other informal symbols to represent how many in a collection up to 10 [Kindergarten]

MST3-K.N.9 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.9 - write numbers 1-10 to represent a collection [Kindergarten]

MST3-K.N.10 [1 occurence] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.10 - visually determine how many more or less, and then using the verbal counting sequence, match and count 1-10 [Kindergarten]

MST3-K.N.11 [2 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems. [Number Systems] - Performance Indicator K.N.11 - use and understand verbal ordinal terms, first to tenth [Kindergarten]

MST3-K.N.12 [2 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand meanings of operations and procedures, and how they relate to one another. [Operations] - Performance Indicator K.N.12 - solve and create addition and subtraction verbal word problems [Kindergarten]

MST3-K.N.13 [2 occurences] - MST Standard 3 - Number Sense and Operations Strand - Students will understand meanings of operations and procedures, and how they relate to one another. [Operations] - Performance Indicator K.N.13 - determine sums and differences by various means [Kindergarten]

MST3-K.A.1 [1 occurence] - MST Standard 3 - Algebra Strand - Students will recognize, use, and represent algebraically patterns, relations, and functions. [Patterns, Relations and Functions] - Performance Indicator K.A.1 - use a variety of manipulatives to create patterns using attributes of color, size, or shape [Kindergarten]

MST3-K.A.2 [1 occurence] - MST Standard 3 - Algebra Strand - Students will recognize, use, and represent algebraically patterns, relations, and functions. [Patterns, Relations and Functions] - Performance Indicator K.A.2 - recognize, describe, extend, and create patterns that repeat (e.g., ababab or abaabaaab) [Kindergarten]

MST3-K.G.1 [1 occurence] - MST Standard 3 - Geometry Strand - Students will use visualization and spatial reasoning to analyze characteristics and properties of geometric shapes. [Shapes] - Performance Indicator K.G.1 - describe characteristics and relationships of geometric objects [Kindergarten]

MST3-K.G.2 [1 occurence] - MST Standard 3 - Geometry Strand - Students will identify and justify geometric relationships, formally and informally. [Geometric Relationships] - Performance Indicator K.G.2 - sort groups of objects by size and size order (increasing and decreasing) [Kindergarten]

MST3-K.G.3 [1 occurence] - MST Standard 3 - Geometry Strand - Students will apply transformations and symmetry to analyze problem solving situations. [Transformational

Geometry] - Performance Indicator K.G.3 - explore vertical and horizontal orientation of objects [Kindergarten]

MST3-K.G.4 [1 occurence] - MST Standard 3 - Geometry Strand - Students will apply transformations and symmetry to analyze problem solving situations. [Transformational Geometry] - Performance Indicator K.G.4 - manipulate two- and three-dimensional shapes to explore symmetry [Kindergarten]

MST3-K.G.5 [1 occurence] - MST Standard 3 - Geometry Strand - Students will apply coordinate geometry to analyze problem solving situations. [Coordinate Geometry] - Performance Indicator K.G.5 - understand and use ideas such as over, under, above, below, on, beside, next to, and between [Kindergarten]

MST3-K.M.1 [1 occurence] - MST Standard 3 - Measurement Strand - Students will determine what can be measured and how, using appropriate methods and formulas. [Units of Measurement] - Performance Indicator K.M.1 - name, discuss, and compare attributes of length (longer than, shorter than) [Kindergarten]

MST3-K.M.2 [1 occurence] - MST Standard 3 - Measurement Strand - Students will determine what can be measured and how, using appropriate methods and formulas. [Units of Measurement] - Performance Indicator K.M.2 - compare the length of two objects by representing each length with string or a paper strip [Kindergarten]

MST3-K.M.3 [2 occurences] - MST Standard 3 - Measurement Strand - Students will determine what can be measured and how, using appropriate methods and formulas. [Units of Measurement] - Performance Indicator K.M.3 - relate specific times such as morning, noon, afternoon, and evening to activities and absence or presence of daylight [Kindergarten]