Term 1	Term 2	Term 3	KINDERGARTEN – MATH PLO's
			NUMBER
			• says the number sequence by 1s forward and backward to 10
			• identifies familiar number arrangements of 1 to 5 objects
			• relates a numeral, 1 to 10, to its respective quantity
			• represents and describes numbers from 2 to 10 using pictures or objects
			• compares quantities from 1 to 10
			PATTERNS AND RELATIONS
			Patterns
			• identifies repeating patterns using manipulatives, sounds and actions
			• reproduces repeating patterns using manipulatives, sounds and actions
			• extends a variety of repeating patterns using manipulatives, sounds and actions
			• creates a variety of repeating patterns using manipulatives, sounds and actions
			SHAPE AND SPACE
			Measurement
			• compares and explains the length, mass or volume of two objects
			3-D Objects & 2-D Shapes
			• sorts a given set of familiar 3-D objects using a single attribute, such as size or shape
			• builds and describes 3-D objects

Term 1	Term 2	Term 3	GRADE 1 – MATH PLO's
			NUMBER
			• says the number sequence by 1s forward and backward between any two numbers up to 100
			• skip counts by 2s to 20
			• skip counts by 5s and 10s to 100
			• identifies the number represented by a given arrangement of objects or dots up to 10
			• uses the last number counted in a set to identify how many
			• understands that the count of the number of objects in a given set does not change
			• uses the counting on strategy when counting
			• demonstrates an understanding of counting by using parts or equal groups
			• represents and describes numbers to 20
			• compares sets that contain up to 20 objects to solve problems
			• estimates quantities to 20 by comparing them to known quantities
			• demonstrates how a number can be represented by a variety of equal groups with and without singles
			• identifies the number, up to 20, that is one or two more or one or two less than a given number
			• demonstrates an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts
			• creates and solves addition word problems with answers to 20 and their corresponding subtraction facts
			• describes and uses mental mathematics strategies for the basic addition and subtraction facts to 18
			PATTERNS AND RELATIONS
			Patterns
			• describes repeating patterns using manipulatives, diagrams, sounds and actions
			• reproduces repeating patterns using manipulatives, diagrams, sounds and actions
			• extends repeating patterns using manipulatives, diagrams, sounds and actions
			• creates repeating patterns using manipulatives, diagrams, sounds and actions
			• represents a given repeating pattern in various ways
			Variables and Equations
			• describes and explains if two given concrete sets are equal or unequal
			• records equalities using the equal (=) symbol

Term 1	Term 2	Term 3	**GRADE 1 – MATH PLO's (Cont.)**
			SHAPE AND SPACE
			Measurement
			• identifies length, mass, volume and/or area as attributes that could be used to compare objects
			• demonstrates an understanding of measurement as a process of comparing by ordering objects
			3-D Objects and 2-D Shapes
			• sorts 3-D objects and 2-D shapes using length, mass, volume or area, and explains the sorting rule
			• copies given composite 2-D shapes and 3-D objects
			• compares 2-D shapes to parts of 3-D objects in the environment

Term 1	Term 2	Term 3	**GRADE 2 – MATH PLO's**
			NUMBER
			• says the number sequence by 2s, 5s and 10s forward and backward between any two numbers up to 100
			• skip counts by 10s to 100 using starting points from 1 to 9
			• skip counts by 2s to 100 starting at 1
			• demonstrates if a number to 100 is even or odd
			• describes the order or relative position of objects using ordinal numbers (up to tenth)
			• represents and describes numbers to 100
			• compares and orders numbers up to 100
			• estimates quantities to 100 by comparing them to known quantities
			• illustrates the meaning of place value for numerals to 100 using pictures and objects
			• demonstrates and explains the effect of adding or subtracting zero from any number
			• adds and subtracts 1- and 2-digit numerals to 100
			• creates and solves addition and subtraction word problems to 100
			• applies mental mathematics strategies to determine basic addition and related subtraction facts to 18
			PATTERNS AND RELATIONS
			Patterns
			• describes repeating patterns using manipulatives, diagrams, sounds and actions
			• extends repeating patterns using manipulatives, diagrams, sounds and actions
			• compares repeating patterns using manipulatives, diagrams, sounds and actions
			• creates repeating patterns using manipulatives, diagrams, sounds and actions
			• describes increasing patterns (numbers to 100) using manipulatives, diagrams, sounds and actions
			• reproduces increasing patterns (numbers to 100) using manipulatives, diagrams, sounds and actions
			• extends increasing patterns (numbers to 100) using manipulatives, diagrams, sounds and actions
			• creates increasing patterns (numbers to 100) using manipulatives, diagrams, sounds and actions
			Variables and Equations
			• demonstrates and explains the meaning of equality and inequality
			• records equalities using the equal (=) or not equal (≠) symbol

Term 1	Term 2	Term 3	GRADE 2 – MATH PLO's (Cont.)
			SHAPE AND SPACE
			Measurement
			• solves problems that relate the number of days to a week and the number of months to a year
			• measures length and mass (weight) using non-standard units
			• compares and orders objects by length, height, distance around and mass (weight)
			• uses multiple copies of a unit to measure length to the nearest non-standard unit
			• uses a repetitive copies of a unit to measure length to the nearest non-standard unit
			• demonstrates that changing the orientation of an object does not alter its measurements
			3-D Objects and 2-D Shapes
			• sorts 3-D objects and 2-D shapes using two of: length, mass, volume or area, and explains the sorting rule
			• describes, compares and constructs 3-D objects
			• describes, compares and constructs 2-D shapes
			• identifies 2-D shapes as parts of 3-D objects in the environment
			STATISTICS AND PROBABILITY
			Data Analysis
			• gathers and records data about self and others to answer questions
			• constructs and interprets concrete graphs and pictographs to solve problems

Term 1	Term 2	Term 3	**GRADE 3 – MATH PLO's**
			NUMBER
			• says the number sequence by 5s, 10s and 100s forward and backward using any starting point up to 1000
			• skip counts by 3s to 1000 using starting points that are multiples of 3
			• skip counts by 4s to 1000 using starting points that are multiples of 4
			• skip counts by 25s to 1000 using starting points that are multiples of 25
			• represents and describes numbers to 1000
			• compares and orders numbers to 1000
			• estimates quantities less than 1000 by comparing them to known quantities
			• illustrates the meaning of place value for numerals to 1000 using pictures and objects
			• describes and applies mental mathematics strategies for adding two 2-digit numerals
			• describes and applies mental mathematics strategies for subtracting two 2-digit numerals
			• applies estimation strategies to predict answers to 2-digit addition and subtraction problems
			• adds and subtracts 1-, 2- and 3-digit numerals with answers to 1000
			• creates and solves 1-, 2- and 3-digit numeral addition problems with answers to 1000
			• applies mental mathematics strategies to determine basic addition and related subtraction facts to 18
			• demonstrates an understanding of and solves multiplication problems to 5 x 5 using various strategies
			• demonstrates an understanding of and solves division (limited to related multiplication facts up to 5 x 5) problems using a variety of strategies
			• understands that a fraction represents a part of a whole
			• describes situations in which fractions are used
			• compares fractions with like denominators
			PATTERNS AND RELATIONS
			Patterns
			• describes increasing patterns using manipulatives, diagrams, sounds and actions
			• extends increasing patterns using manipulatives, diagrams, sounds and actions
			• compares increasing patterns using manipulatives, diagrams, sounds and actions
			• creates increasing patterns using manipulatives, diagrams, sounds and actions
			• describes decreasing patterns (numbers to 1000) using manipulatives, diagrams, sounds and actions
			• extends decreasing patterns (numbers to 1000) using manipulatives, diagrams, sounds and actions
			• compares decreasing patterns (numbers to 1000) using manipulatives, diagrams, sounds and actions
			• creates decreasing patterns (numbers to 1000) using manipulatives, diagrams, sounds and actions

Term 1	Term 2	Term 3	**GRADE 3 – MATH PLO's (Cont.)**
			PATTERNS AND RELATIONS (Cont.)
			Variables and Equations
			• solves one-step addition and subtraction equations involving a symbol to represent an unknown number
			SHAPE AND SPACE
			Measurement
			• relates the passage of time to common activities using non-standard and standard units
			• solves problems that relate the passage of time to common activities
			• selects and justifies choosing cm or m to measure length
			• models and describes the relationship between the units cm and m
			• estimates length using cm^2 and/or m^2
			• measures and records length, width and height using cm and/or m
			• selects and justifies choosing g or kg to measure mass
			• models and describes the relationship between the units g and kg
			• estimates mass using g and/or kg
			• measures and records mass using g and/or kg
			• demonstrates an understanding of perimeter by estimating
			• demonstrates an understanding of perimeter by measuring and recording perimeter using cm and/or m
			• demonstrates an understanding of perimeter by constructing different shapes for a given perimeter using cm and/or m
			3-D Objects and 2-D Shapes
			• describes 3-D objects according to the shape of the faces, and the number of edges and vertices
			• sorts regular and irregular polygons according to the number of sides
			STATISTICS AND PROBABILITY
			Data Analysis
			• collects and organizes first-hand data to answer questions
			• constructs, labels and interprets bar graphs to solve problems

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Term 1	Term 2	Term 3	GRADE 4 – MATH PLO's
			NUMBER
			• represents and describes whole numbers to 10 000
			• compares and orders numbers to 10 000
			• uses personal strategies to add numbers with answers 10 000 and their corresponding (up to 4 digits) subtractions
			• estimates answers sums and differences to add numbers with answers to 10 000 and their corresponding (up to 4 digits) subtractions
			• solves problems that involve addition of numbers with answers to 10 000 and their corresponding (up to 4 digits) subtractions
			• explains how to determine the answer when multiplying numbers by one or zero
			• explains how to determine the answer when dividing numbers by one
			• describes and applies mental mathematics strategies to determine basic multiplication facts to 9 x 9 and related division facts
			• demonstrates an understanding of and solves 2- or 3-digit by 1-digit multiplication problems using various strategies
			• demonstrates an understanding of and solves 2-digit by 1-digit division problems using various strategies
			• demonstrates an understanding of fractions less than or equal to one whole or a set
			• compares and orders fractions less than or equal to one
			• provides examples of when two identical fractions less than or equal to one may not represent the same quantity
			• provides examples of a fractions less than or equal to one from everyday contexts
			• describes and represents decimals (tenths and hundredths)
			• relates decimals to fractions (to hundredths)
			• solves addition and subtraction of decimals to hundredths using various strategies
			PATTERNS AND RELATIONS
			Patterns
			• identifies and describes patterns found in tables and charts
			• reproduces a pattern shown in a table or chart using concrete materials
			• represents and describes patterns and relationships using charts and tables
			• identifies and explains mathematical relationships using charts and diagrams to solve problems
			Variables and Equations
			• expresses a given problem as an equation in which a symbol is used to represent an unknown number
			• solves one-step equations involving a symbol to represent an unknown number

Term 1	Term 2	Term 3	GRADE 4 – MATH PLO's (Cont.)
			SHAPE AND SPACE
			Measurement
			• reads and records time using digital and analog clocks, including 24-hour clocks
			• reads and records calendar dates in a variety of formats
			• recognizes that area of 2-D shapes is measured in square units
			• selects and justifies choosing cm^2 or m^2 to measure the area of 2-D shapes
			• estimates the area of 2-D shapes using cm^2 and/or m^2
			• determines and records the area of regular and irregular 2-D shapes using cm^2 and/or m^2
			• demonstrates that many different rectangles are possible for a given area
			3-D Objects and 2-D Shapes
			• describes and constructs rectangular and triangular prisms
			Transformations
			• identifies symmetrical 2-D shapes
			• creates symmetrical 2-D shapes
			• draws one or more lines of symmetry in a 2-D shape
			STATISTICS AND PROBABILITY
			Data Analysis
			• uses bar graphs and/or pictographs to demonstrate an understanding of many-to-one correspondence
			• constructs and interprets pictographs and bar graphs involving many-to-one correspondence

Term 1	Term 2	Term 3	GRADE 5 – MATH PLO's
			NUMBER
			• represents and describes whole numbers to 1 000 000
			• solves problems using estimation strategies
			• applies mental mathematics strategies to determine answers to basic multiplication facts to 81 and related division facts
			• applies mental mathematics strategies for multiplication
			• solves 2- digit by 2-digit multiplication problems
			• solves 3-digit by 1-digit division problems
			• demonstrates an understanding of equivalent fractions
			• compares fractions with like and unlike denominators
			• describes and represents decimals (tenths, hundredths, thousandths)
			• relates decimals to fractions (to thousandths)
			• compares and orders decimals (to thousandths) using various strategies
			• adds and subtracts decimals to thousandths
			PATTERNS AND RELATIONS
			Patterns
			• determines the pattern rule to make predictions about subsequent elements
			Variables and Equations
			• solves problems involving single-variable, one-step whole number equations
			SHAPE AND SPACE
			Measurement
			• designs and constructs different rectangles given either perimeter and/or area and draw conclusions
			• selects and justifies choosing mm to measure length
			• models and describes the relationship between mm and cm, and mm and m
			• selects and justifies choosing cm^3 or m^3 to measure volume
			• estimates volume using cm^3 and/or m^3
			• measures and records volume using cm^3 and/or m^3
			• constructs rectangular prisms for a given volume
			• describes describing the relationship between ml and L
			• selects and justifies choosing ml and/ or L to measure capacity
			• estimates capacity using ml or L
			• measures and records capacity using ml and/or L
			3-D Objects and 2-D Shapes
			• describes and provides examples of edges and faces of 3-D objects that are parallel, intersecting, perpendicular vertical and horizontal
			• describes and provides examples of sides of 2-D shapes that are parallel, intersecting, perpendicular vertical and horizontal
			• identifies and sorts quadrilaterals according to their attributes
			Transformations
			• slides. turns or flips a 2-D shape and draws and describes the image
			• identifies a single transformation, including a slide, turn or flip of 2-D shapes

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Term 1	Term 2	Term 3	GRADE 5 – MATH PLO's (Cont.)
			STATISTICS AND PROBABILITY
			Data Analysis
			• differentiates between first-hand and second-hand data
			• constructs and interprets double bar graphs to draw conclusions
			Chance and Uncertainty
			• uses words to describe the likelihood of a single outcome occurring
			• uses words to compare the likelihood of two possible outcomes occurring

Term 1	Term 2	Term 3	GRADE 6 – MATH PLO's
			NUMBER
			• understands place value for numbers greater than one million
			• understands place value for numbers less than one thousandth
			• uses technology to solve problems involving large numbers
			• determines multiples and factors of numbers less than 100
			• identifies prime and composite numbers
			• solves problems involving multiples
			• relates improper fractions to mixed numbers
			• demonstrates an understanding of ratio
			• demonstrates an understanding of percent (limited to whole numbers)
			• demonstrates an understanding of integers
			• multiplies decimals using 1-digit whole numbers
			• divides decimals using 1-digit whole numbers
			• explains and applies the standardized order of operations
			PATTERNS AND RELATIONS
			Patterns
			• understands the relationships within tables of values to solve problems
			• uses graphs and tables to represent and describe patterns and relationships
			• represents generalizations using equations with letter variables
			• solves equations by applying the preservation of equality
			• identifies examples of angles in the environment
			• classifies angles according to their measure
			• estimates the measure of angles using 45°, 90° and 180° as reference angles
			• determines angle measures in degrees
			• draws and labels specified angles
			• demonstrates that the sum of interior angles in a triangle is 180°
			• demonstrates that the sum of interior angles in a quadrilateral is 360°
			• develops and applies a formula for determining the perimeter of polygons
			• develops and applies a formula for determining the area of rectangles
			• develops and applies a formula for determining the volume of right rectangular prisms
			3-D Objects and 2-D Shapes
			• constructs and compares triangles in different orientations
			• describes and compares the sides and angles of regular and irregular polygons
			Transformations
			• performs a combination of slide(s), turn(s) or flip(s) on a single 2-D shape
			• creates, identifies and describes a combination of successive transformations of 2-D shapes
			• identifies and plots points using whole number ordered pairs
			• performs and describes single transformations of a 2-D shape

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Term 1	Term 2	Term 3	GRADE 6 – MATH PLO's (Cont.)
			STATISTICS AND PROBABILITY
			Data Analysis
			• creates, labels and interprets line graphs
			• selects, justifies and uses questionnaires, experiments, databases, electronic media to collect data
			• graphs collected data and analyzes the graph to solve problems
			Chance and Uncertainty
			• identifies all possible outcomes of a probability experiment
			• differentiates between experimental and theoretical probability
			• determines the theoretical probability of outcomes in a probability experiment
			• determines the experimental probability of outcomes in a probability experiment
			• compares experimental results with the theoretical probability for an experiment

Term 1	Term 2	Term 3	**GRADE 7 – MATH PLO's**
			NUMBER
			• determines and explains why a number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10 and cannot be divided by 0
			• solves problems involving addition, subtraction, multiplication, and division of decimals
			• solves problems involving percents from 1% to 100%
			• understands the relationship between positive terminating decimals and positive fractions
			• adds and subtracts positive fractions and mixed numbers, with like denominators
			• adds and subtracts positive fractions and mixed numbers, with unlike denominators
			• adds and subtracts integers
			• compares and orders positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks
			• compares and orders positive fractions, positive decimals (to thousandths) and whole numbers by using place value
			• compares and orders positive fractions, positive decimals (to thousandths) and whole numbers by using equivalent fractions and/or decimals
			PATTERNS AND RELATIONS
			Patterns
			• understands oral and written patterns and their equivalent linear relations
			• creates, graphs and analyzes a table of values from a linear relation to draw conclusions and solve problems
			Variables and Equations
			• solves equations by modelling and applying the preservation of equality
			• explains the difference between an expression and an equation
			• evaluates an expression given the value of the variable(s)
			• models and solves one-step linear equations problems
			• models and solves linear equation problems

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Term 1	Term 2	Term 3	GRADE 7 – MATH PLO's (Cont.)
			SHAPE AND SPACE
			Measurement
			• describes the relationships among radius, diameter, and circumference of circles
			• relates the circumference of a circle to pi
			• determines the sum of the central angles of circles
			• constructs circles with a given radius or diameter
			• solves problems involving the radii, diameters and circumferences of circles
			• develops and applies a formula for determining the area of triangles, parallelograms and circles
			3-D Objects and 2-D Shapes
			• performs geometric constructions
			• identifies and plots points in the four quadrants of a Cartesian plane
			Transformations
			• performs and describes slides, turns or flips of a 2-D shape in all four quadrants of a Cartesian plane
			STATISTICS AND PROBABILITY
			Data Analysis
			• determines the measures of central tendency (mean, median, mode) and range
			• determines the most appropriate measures of central tendency to report findings
			• determines the effect of an extreme value on the mean, median, and mode
			• constructs, labels and interprets circle graphs to solve problems
			Chance and Uncertainty
			• expresses probabilities as ratios, fractions and percents
			• identifies all possible outcomes for a probability experiment involving two independent events
			• conducts a probability experiment to compare the theoretical and experimental probability of two independent events

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