Identifier	Lander - Grade Pre-Kindergarten - Mathematics	Introduced	Completed
PKM1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
PKM1.1	Use concrete objects to combine and separate groups up to 5		
PKM1.2	Count to 10		
PKM1.3	Recognize and read numerals 0-5		
PKM1.4	Estimate the number of objects in a set to 5 and verify by counting		
PKM1.5	Match the number of objects to the correct numeral 0-5		
PKM2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
PKM2.1	Sort objects by similar attributes (e.g., size, shape, and color)		
PKM2.2	Recognize and replicate simple patterns (e.g. ABAB)		
PKM2.3	Compare sets of objects; determine which set has more or less.		
PKM3	**MEASUREMENT**		
PKM3.1	Compare objects by size to determine smaller and larger		
PKM3.2	Sort pennies and nickels		
PKM3.3	Identify day and night		
PKM4	**SPATIAL SENSE AND GEOMETRY**		
PKM4.1	Identify circles, triangles, and squares		
PKM4.2	Identify positions (e.g., in front, behind, next to, up, down, inside, outside, on top)		
PKM5	**DATA ANALYSIS**		
PKM5.1	Identify and sort data (e.g., interpret quantity in pictures)		
PKM6	**PROBLEM SOLVING**		
PKM6.1	Apply previous experience and knowledge to new problem-solving situations		
PKM6.2	Explain and verify results with respect to the original problem		
PKM6.3	Try more than one strategy when the first strategy proves to be unproductive		
PKM6.4	Apply solutions and strategies from earlier problems to new problem situations		
PKM7	**MATHEMATICAL COMMUNICATION**		
PKM7.1	Discuss and exchange ideas about mathematics as a part of learning		
PKM7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
PKM7.3	Use pictorial representations to identify mathematical operations and concepts		
PKM7.4	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas		
PKM7.5	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
PKM7.6	Explain and justify thinking about mathematical ideas and solutions		
PKM7.7	Use mathematical notation to communicate and explain mathematical situations		
PKM8	**MATHEMATICAL REASONING**		
PKM8.1	Justify and explain the solutions to problems using manipulatives and physical models		
PKM8.2	Ask questions to reflect on, clarify, and extend thinking		
PKM9	**MATHEMATICAL CONNECTIONS**		
PKM9.1	Link new concepts to prior knowledge		

Identifier	Nevada - Kindergarten - Mathematics	Introduced	Completed
K M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
K M 1.K.1	Use concrete objects to model simple sums and differences.		
K M 1.K.5	Count to 20.		
K M 1.K.6	Recognize, read, and write numbers from 0-10.		
K M 1.K.7	Estimate the number of objects in a set to 10 and verify by counting; use ordinal positions first to third.		
K M 1.K.8	Match the number of objects to the correct numeral, 0-10.		
K M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
K M 2.K.1	Sort and describe objects by similar attributes; recognize and replicate a pattern.		
K M 2.K.4	Identify and create sets of objects with unequal amounts, describing them as more or less.		
K M 3	**MEASUREMENT**		
K M 3.K.1	Compare and order objects by size communicating their similarities and differences.		
K M 3.K.4	Identify and sort pennies, nickels, and dimes.		
K M 3.K.6	Recite, in order, the days of the week.		
K M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
K M 4.K.1	Identify two-dimensional shapes (circles, triangles, rectangles including squares) regardless of position.		
K M 4.K.2	Use position words (e.g., middle, before, down) to place objects.		
K M 4.K.3	Identify two-dimensional figures (e.g., windows are shaped like rectangles) as they appear in the environment.		
K M 5	**DATA ANALYSIS**		
K M 5.K.1	Collect and describe data.		
K M 6	**PROBLEM SOLVING**		
K M 6.K.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
K M 6.K.2	Apply previous experience and knowledge to new problem-solving situations.		
K M 6.K.3	Formulate (own) problems; use various approaches to investigate and solve problems.		
K M 6.K.4	Explain and verify results with respect to the original problem.		
K M 6.K.6	Try more than one strategy when the first strategy proves to be unproductive.		
K M 6.K.8	Apply solutions and strategies from earlier problems to new problem situations.		
K M 6.K.12	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration).		
K M 7	**MATHEMATICAL COMMUNICATION**		
K M 7.K.1	Discuss and exchange ideas about mathematics as a part of learning.		
K M 7.K.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
K M 7.K.4	Use pictorial representations to identify mathematical operations and concepts.		
K M 7.K.7	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas.		
K M 7.K.12	Explain and justify thinking about mathematical ideas and solutions.		
K M 7.K.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
K M 7.K.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
K M 7.K.17	Use mathematical notation to communicate and explain mathematical situations.		
K M 8	**MATHEMATICAL REASONING**		
K M 8.K.1	Justify and explain the solutions to problems using manipulative and physical models.		
K M 8.K.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
K M 8.K.8	Ask questions to reflect on, clarify, and extend thinking.		
K M 8.K.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
K M 8.K.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
K M 9	**MATHEMATICAL CONNECTIONS**		
K M 9.K.1	Link new concepts to prior knowledge.		
K M 9.K.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
K M 9.K.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
K M 9.K.8	Identify, explain, and use mathematics in everyday life.		

Identifier	**Lander - Kindergarten - Mathematics**	Introduced	Completed
OKM1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
OKM1.1	Count up to 20 objects to determine quantity		
OKM1.2	Count to 20		
OKM1.3	Compare sets of objects and describe more/less/equal		
OKM1.4	Match the number of objects to the correct numeral, 0 – 10		
OKM1.5	Recognize, read, and write numbers, 0 — 10		
OKM1.6	Recognize number words, 0 — 10		
OKM1.7	Use ordinal positions, first to third		
OKM1.8	Estimate the number of objects in a set to 10 and verify by counting		
OKM1.9	Use concrete objects to model simple sums and differences		
OKM1.10	Add and subtract whole numbers to 10, using objects		
OKM1.11	Use number sense, computation, and estimation to solve mathematical and real-world problems		
OKM2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
OKM2.1	Sort and describe objects by similar characteristics (attributes)		
OKM2.2	Create and describe patterns using objects, words, and numbers		
OKM2.3	Recognize, and replicate patterns		
OKM2.4	Identify and create sets of objects with unequal amounts, describing them as more or less		
OKM3	**MEASUREMENT**		
OKM3.1	Compare and order objects by length and weight, communicating their similarities and differences		
OKM3.2	Compare and order objects by size and weight, communicating their similarities and differences		
OKM3.3	Identify and sort pennies, nickels, and dimes		
OKM3.4	Recite, in order, the days of the week		
OKM4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
OKM4.1	Identify and describe geometric figures (sphere, cylinder, rectangular prism, cube, cone)		
OKM4.2	Identify two-dimensional shapes (circles, triangles, rectangles, including squares) regardless of position		
OKM4.3	Use position words (e.g., middle, before, down) to place and describe location of objects		
OKM4.4	Identify two-dimensional figures as they appear in the environment (e.g., windows are shaped like rectangles)		
OKM5	**DATA ANALYSIS**		
OKM5.1	Collect and describe data		
OKM5.2	Describe and compare information (data) on graphs made with objects, pictures, or numbers		
OKM6	**PROBLEM SOLVING**		
OKM6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
OKM6.2	Formulate own problems; use various approaches to investigate and solve problems		
OKM6.3	Explain and verify results with respect to the original problem		
OKM6.4	Apply solutions and strategies from earlier problems to new problem situations		
OKM7	**MATHEMATICAL COMMUNICATION**		
OKM7.1	Discuss and exchange ideas about mathematics as a part of learning		
OKM7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
OKM7.3	Use pictorial representations to identify mathematical operations and concepts		
OKM7.4	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas		
OKM7.5	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
OKM7.6	Explain and justify thinking about mathematical ideas and solutions		
OKM7.7	Use mathematical notation to communicate and explain mathematical situations		
OKM8	**MATHEMATICAL REASONING**		
OKM8.1	Justify and explain the solutions to problems using manipulatives and physical models		
OKM8.2	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
OKM8.3	Ask questions to reflect on, clarify, and extend thinking		
OKM9	**MATHEMATICAL CONNECTIONS**		
OKM9.1	Link new concepts to prior knowledge		
OKM9.2	Identify practical applications of mathematical principles that can be applied to other disciplines		
OKM9.3	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 1 - Mathematics	Introduced	Completed
M 1.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 1.1.1A	Compare and order whole numbers up to 99 using sets of concrete objects and pictorial models.		
M 1.1.1B	Use words and numbers to describe the values of individual coins such as penny, nickel, dime, and quarter and their relationships.		
M 1.1.1C	Read and write numbers to 99 to describe sets of concrete objects.		
M 1.1.2A	Share a whole by separating it into equal parts and use appropriate language to describe the parts; use appropriate language to describe part of a set.		
M 1.1.3A	Model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.		
M 1.1.4A	Model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined.		
M 1.1.4B	Model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.		
M 1.1.5A	Round two-digit numbers to the nearest ten.		
M 1.2	**PATTERNS, RELATIONSHIPS AND ALGEBRAIC THINKING**		
M 1.2.1A	Identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems.		
M 1.2.1B	Use patterns to skip count by twos, fives, and tens.		
M 1.2.1C	Generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels.		
M 1.2.1D	Identify patterns in a list of related number pairs based on a real-life situation and extend the list.		
M 1.2.2A	Find patterns in numbers, including odd and even.		
M 1.2.2B	Identify patterns in related addition and subtraction sentences.		
M 1.3	**GEOMETRY AND SPATIAL REASONING**		
M 1.3.1A	Describe and identify objects in order to sort them according to a given attribute using informal language; identify circles, triangles, and rectangles, including squares, and describe the shape of balls, boxes, cans, and cones.		
M 1.3.1B	Combine geometric shapes to make new geometric shapes using concrete models.		
M 1.3.2A	Identify congruent shapes.		
M 1.3.2B	Identify lines of symmetry.		
M 1.3.3A	Locate and name points on a line using whole numbers.		
M 1.4	**MEASUREMENT**		
M 1.4.1A	Estimate and measure length, capacity, and weight using nonstandard units; describe the relationship between the size of the unit and the number of units needed in a measurement.		
M 1.4.2A	Use linear measure to find the perimeter of a shape.		
M 1.4.2B	Use models of square units to determine the area of shapes.		
M 1.4.3A	Use a thermometer to measure temperature and recognize temperatures such as a hot day or a cold day.		
M 1.4.3B	Describe time on a clock using hours and half hours.		
M 1.4.3C	Order three or more events by how much time they take.		
M 1.5	**PROBABILITY AND STATISTICS**		
M 1.5.1A	Collect and sort data; use organized data to construct real-object graphs, picture graphs, and bar-type graphs.		
M 1.5.2A	Draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs.		
M 1.5.2B	Identify events as certain or impossible.		
M 1.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 1.6.1A	Identify mathematics in everyday situations.		
M 1.6.1B	Use a problem-solving model, with guidance as needed, that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 1.6.1C	Select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem.		
M 1.6.2A	Explain and record observations using objects, words, pictures, numbers, and technology.		
M 1.6.2B	Relate informal language to mathematical language and symbols.		
M 1.6.3A	Make generalizations from patterns or sets of examples and nonexamples.		

Identifier	Nevada - Grade 1 - Mathematics	Introduced	Completed
1 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
1 M 1.1.1	Identify and model basic addition facts (sums through 10) and the corresponding subtraction facts.		
1 M 1.1.3	Write, model, and describe one-step addition and subtraction problems.		
1 M 1.1.5	Use the inherent patterns in numbers to skip count by 1's, 2's, 5's, and 10's to 100.		
1 M 1.1.6	Read, write, order, and compare numbers from 0-100.		
1 M 1.1.7	Estimate the number of objects in a set to 10; read and write number words to 10 and use ordinal positions first to tenth.		
1 M 1.1.8	Use, model, and identify place-value positions of 1's and 10's.		
1 M 1.1.9	Identify and model a whole; identify and model 1/2.		
1M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
1 M 2.1.1	Recognize, describe, extend, and create simple repeating patterns using symbols, objects, and manipulatives.		
1 M 2.1.4	Create, compare, and describe sets of objects as more, less, or equal (amounts).		
1M 3	**MEASUREMENT**		
1 M 3.1.1	Compare and order objects by length and weight, communicating their similarities and differences.		
1 M 3.1.2	Compare and measure length and weight, using nonstandard measurement.		
1 M 3.1.4	Determine the value of any set of pennies, nickels, and dimes.		
1 M 3.1.6	Recite the months of the year in order; use a calendar to identify days, weeks, months, and year; read time to the nearest hour; distinguish between day and night.		
1M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
1 M 4.1.1	Name, sort, and sketch two-dimensional shapes (circles, triangles, rectangles including squares) regardless of position.		
1 M 4.1.2	Use position words (e.g., between, left, near) to describe location of objects.		
1 M 4.1.3	Identify and replicate two-dimensional designs that contain a line of symmetry.		
1M 5	**DATA ANALYSIS**		
1 M 5.1.1	Collect, organize, and describe data.		
1M 6	**PROBLEM SOLVING**		
1 M 6.1.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
1 M 6.1.2	Apply previous experience and knowledge to new problem-solving situations.		
1 M 6.1.3	Formulate (own) problems; use various approaches to investigate and solve problems.		
1 M 6.1.4	Explain and verify results with respect to the original problem.		
1 M 6.1.6	Try more than one strategy when the first strategy proves to be unproductive.		
1 M 6.1.8	Apply solutions and strategies from earlier problems to new problem situations.		
1 M 6.1.12	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration).		
1M 7	**MATHEMATICAL COMMUNICATION**		
1 M 7.1.1	Discuss and exchange ideas about mathematics as a part of learning.		
1 M 7.1.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
1 M 7.1.4	Use pictorial representations to identify mathematical operations and concepts.		
1 M 7.1.7	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas.		
1 M 7.1.12	Explain and justify thinking about mathematical ideas and solutions.		
1 M 7.1.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
1 M 7.1.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
1 M 7.1.17	Use mathematical notation to communicate and explain mathematical situations.		
1M 8	**MATHEMATICAL REASONING**		
1 M 8.1.1	Justify and explain the solutions to problems using manipulative and physical models.		
1 M 8.1.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
1 M 8.1.8	Ask questions to reflect on, clarify, and extend thinking.		
1 M 8.1.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
1 M 8.1.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
1M 9	**MATHEMATICAL CONNECTIONS**		
1 M 9.1.1	Link new concepts to prior knowledge.		
1 M 9.1.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
1 M 9.1.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
1 M 9.1.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
1 M 9.1.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 1 - Mathematics	Introduced	Completed
1M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
1M1.1	Use the inherent patterns in numbers to count by 1's, 2's, 5's, and 10's to 100		
1M1.2	Read, write, order, and compare numbers from 0 —100		
1M1.3	Read and write number words, 0 —10		
1M1.4	Use ordinal positions first through tenth		
1M1.5	Use, model, and identify place value positions of 1's and 10's		
1M1.6	Explain and model the meaning of addition and subtraction		
1M1.7	Identify and model a whole		
1M1.8	Identify and model 1/2		
1M1.9	Identify and model basic addition facts (sums to 10) and the corresponding subtraction facts		
1M1.10	Write number sentences for the basic addition and subtraction facts (sums to 10 or less) and corresponding subtraction facts		
1M1.11	Add and subtract one– and two-digit numbers, with no regrouping, with and without objects		
1M1.12	Estimate the number of objects in a set to 10		
1M1.13	Use mental computation in appropriate situations to solve problems		
1M1.14	Use number sense, computation, and estimation to solve mathematical and real-world problems		
1M1.15	Write, model, and describe one-step addition and subtraction problems		
1M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
1M2.1	Sort and categorize objects, shapes, and numbers in a variety of ways		
1M2.2	Recognize, describe, extend, and create repeating and increasing patterns using symbols, objects, and manipulatives		
1M2.3	Determine possible combinations for a given number (0 —10)		
1M2.4	Create, compare, and describe sets of objects as having more, less, or equal amounts		
1M3	**MEASUREMENT**		
1M3.1	Compare and order objects by length and weight, communicating their similarities and differences		
1M3.2	Compare and measure length and weight using non-standard units of measure		
1M3.3	Distinguish between day and night (i.e., between A.M. and P.M.)		
1M3.4	Read time to the nearest hour and half-hour		
1M3.5	Use a calendar to identify months, weeks, days, and years		
1M3.6	Identify and sort coins and bills		
1M3.7	Identify values of pennies, nickels, dimes, and quarters		
1M3.8	Determine the value of any set of pennies, nickels, and dimes		
1M3.9	Recite the months of the year in order		
1M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
1M4.1	Use position words (e.g., middle, before, down) to place objects		
1M4.2	Identify and describe geometric figures (sphere, cylinder, cube, cone)		
1M4.3	Name, sort, and sketch two-dimensional geometric shapes (circles, triangles, rectangles, including squares) regardless of position		
1M4.4	Identify and replicate two-dimensional designs that contain a line of symmetry		
1M4.5	Recognize and describe different shapes in the environment		
1M5	**DATA ANALYSIS**		
1M5.1	Collect, organize and describe data		
1M5.2	Read and interpret information (data) on graphs made with objects, pictures, or numbers		
1M5.3	Use data to make decisions and solve problems		
1M6	**PROBLEM SOLVING**		
1M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
1M6.2	Apply previous experience and knowledge to new problem-solving situations		
1M6.3	Formulate own problems; use various approaches to investigate and solve problems		
1M6.4	Explain and verify results with respect to the original problem		
1M6.5	Try more than one strategy when the first strategy proves to be unproductive		
1M6.6	Apply solutions and strategies from earlier problems to new problem situations		
1M6.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
1M7	**MATHEMATICAL COMMUNICATION**		
1M7.1	Discuss and exchange ideas about mathematics as a part of learning		
1M7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
1M7.3	Use pictorial representations to identify mathematical operations and concepts		
1M7.4	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas		
1M7.5	Explain and justify thinking about mathematical ideas and solutions		
1M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
1M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
1M7.8	Use mathematical notation to communicate and explain mathematical situations		

Identifier	**Lander - Grade 1 - Mathematics**	Introduced	Completed
1M7.9	Use patterns and relationships to analyze mathematical situations		
1M8	**MATHEMATICAL REASONING**		
1M8.1	Justify and explain the solutions to problems using manipulatives and physical models		
1M8.2	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
1M8.3	Ask questions to reflect on, clarify, and extend thinking		
1M8.4	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments		
1M9	**MATHEMATICAL CONNECTIONS**		
1M9.1	Link new concepts to prior knowledge		
1M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
1M9.3	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 2 - Mathematics	Introduced	Completed
M 2.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 2.1.1A	Use concrete models to represent whole numbers, and use place value to read and write whole numbers.		
M 2.1.1B	Use place value to compare and order whole numbers.		
M 2.1.1C	Use place value to describe the value of whole numbers.		
M 2.1.2A	Name fractional parts of a whole object when given a concrete representation.		
M 2.1.2B	Name fractional parts of a set of objects when given a concrete representation.		
M 2.1.3A	Recall and apply basic addition facts.		
M 2.1.3B	Select addition or subtraction and solve problems using two-digit numbers, whether or not regrouping is necessary.		
M 2.1.3C	Determine the value of a collection of coins.		
M 2.1.4A	Model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined.		
M 2.1.4B	Model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.		
M 2.1.5A	Round two-digit numbers to the nearest ten and three-digit numbers to the nearest hundred.		
M 2.1.5B	Estimate sums and differences.		
M 2.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 2.2.1A	Solve subtraction problems related to addition facts (fact families).		
M 2.2.2A	Generate a list of paired numbers based on a real-life situation.		
M 2.2.2B	Identify patterns in a list of related number pairs based on a real-life situation and extend the list.		
M 2.2.2C	Identify, describe, and extend patterns to make predictions and solve problems.		
M 2.3	**GEOMETRY AND SPATIAL REASONING**		
M 2.3.1A	Identify attributes of any shape or solid.		
M 2.3.1B	Use attributes to describe how two shapes or two solids are alike or different, and cut geometric shapes apart and identify the new shapes made.		
M 2.3.2A	Identify congruent shapes.		
M 2.3.2B	Identify lines of symmetry in shapes.		
M 2.3.3A	Use whole numbers to locate and name points on a line.		
M 2.4	**MEASUREMENT**		
M 2.4.1A	Identify concrete models that approximate standard units of length, capacity, and weight; measure length, capacity, and weight using concrete models that approximate standard units.		
M 2.4.1B	Describe activities that take approximately one second, one minute, and one hour.		
M 2.4.2A	Use linear measure to find the perimeter of a shape.		
M 2.4.2B	Use models of square units to determine the area of shapes.		
M 2.4.3A	Read a thermometer to gather data.		
M 2.4.3B	Describe time on a clock using hours and minutes.		
M 2.5	**PROBABILITY AND STATISTICS**		
M 2.5.1A	Construct picture graphs and bar-type graphs.		
M 2.5.1B	Draw conclusions and answer questions based on picture graphs and bar-type graphs.		
M 2.5.1C	Use data to describe events as more likely or less likely.		
M 2.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 2.6.1A	Identify the mathematics in everyday situations.		
M 2.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 2.6.1C	Select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 2.6.2A	Explain and record observations using objects, words, pictures, numbers, and technology.		
M 2.6.2B	Relate informal language to mathematical language and symbols.		
M 2.6.3A	Reason and support his or her thinking using objects, words, pictures, numbers, and technology.		
M 2.6.4A	Make generalizations from patterns or sets of examples and nonexamples.		

Identifier	Nevada - Grade 2 - Mathematics	Introduced	Completed
2 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
2 M 1.2.1	Identify and model basic addition facts (sums to 18) and the corresponding subtraction facts; immediately recall basic addition facts (sums through 10) and the corresponding subtraction facts.		
2 M 1.2.2	Add and subtract multidigit numbers without regrouping.		
2 M 1.2.3	Generate and solve one-step addition and subtraction problems based on practical situations.		
2 M 1.2.4	Use decimals to show money amounts.		
2 M 1.2.5	Use the patterns in numbers to skip count.		
2 M 1.2.7	Estimate the number of objects in a set to 20; read and write number words to 20 and use ordinal positions first to twentieth.		
2 M 1.2.8	Use, model, and identify place-value positions of 1's, 10's, and 100's.		
2 M 1.2.9	Identify, model, and label 1/2 and 1/4 as parts of a whole.		
2 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
2 M 2.2.1	Recognize, describe, extend, and create repeating and increasing patterns using symbols, objects, and manipulatives; use patterns and their extensions to solve problems.		
2 M 2.2.2	Generate and solve problems based on various numerical sentences; represent mathematical situations using numbers, symbols, and words.		
2 M 2.2.3	Use variables and open sentences to express relationships.		
2 M 2.2.4	Generate and solve problems based on various numerical sentences; represent mathematical situations using numbers, symbols, and words.		
2 M 2.2.7	Model, explain, and solve a number sentence involving addition and subtraction.		
2 M 3	**MEASUREMENT**		
2 M 3.2.1	Compare and order objects by various measurable attributes (e.g., time, temperature, length, weight, capacity, and area) communicating their similarities and differences.		
2 M 3.2.2	Measurement: Compare objects to standard whole units to find objects that are greater than, less than, and/or equal to a given unit (e.g., inch, yard, centimeter, meter).		
2 M 3.2.4	Determine the value of any given set of coins.		
2 M 3.2.6	Read time to the nearest quarter hour; distinguish between A.M. and P.M.		
2 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
2 M 4.2.1	Describe and compare two-dimensional shapes (circles, triangles, rectangles including squares) regardless of position.		
2 M 4.2.2	Compare the size (larger and smaller) of similar two-dimensional figures (e.g., circles, triangles); identify congruent shapes.		
2 M 4.2.3	Identify figures with symmetry as they appear in the environment; create two-dimensional designs that contain a line of symmetry.		
2 M 4.2.4	Identify, name, sort, describe, two- and three-dimensional geometric figures and objects (e.g., circle/sphere, square/cube).		
2 M 5	**DATA ANALYSIS**		
2 M 5.2.1	Collect, organize, record, and explain classification of data using concrete materials.		
2 M 6	**PROBLEM SOLVING**		
2 M 6.2.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
2 M 6.2.2	Apply previous experience and knowledge to new problem-solving situations.		
2 M 6.2.3	Formulate (own) problems; use various approaches to investigate and solve problems.		
2 M 6.2.4	Explain and verify results with respect to the original problem.		
2 M 6.2.6	Try more than one strategy when the first strategy proves to be unproductive.		
2 M 6.2.8	Apply solutions and strategies from earlier problems to new problem situations.		
2 M 6.2.12	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration).		
2 M 7	**MATHEMATICAL COMMUNICATION**		
2 M 7.2.1	Discuss and exchange ideas about mathematics as a part of learning.		
2 M 7.2.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
2 M 7.2.4	Use pictorial representations to identify mathematical operations and concepts.		
2 M 7.2.7	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas.		
2 M 7.2.12	Explain and justify thinking about mathematical ideas and solutions.		
2 M 7.2.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
2 M 7.2.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
2 M 7.2.17	Use mathematical notation to communicate and explain mathematical situations.		
2 M 8	**MATHEMATICAL REASONING**		
2 M 8.2.1	Justify and explain the solutions to problems using manipulative and physical models.		
2 M 8.2.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
2 M 8.2.8	Ask questions to reflect on, clarify, and extend thinking.		
2 M 8.2.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
2 M 8.2.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
2 M 9	**MATHEMATICAL CONNECTIONS**		
2 M 9.2.1	Link new concepts to prior knowledge.		
2 M 9.2.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
2 M 9.2.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		

Identifier	**Nevada - Grade 2 - Mathematics**	Introduced	Completed
2 M 9.2.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
2 M 9.2.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 2 - Mathematics	Introduced	Completed
2M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
2M1.1	Compare and order groups of objects and numerals less than 1,000		
2M1.2	Use ordinal positions first through twentieth		
2M1.3	Use the inherent patterns in numbers to skip count by 2's, 3's, 5's, and 10's to 100 and beyond		
2M1.4	Use, model, and identify place value positions (ones, tens, and hundreds)		
2M1.5	Read, write, and use number words (0—20)		
2M1.6	Demonstrate understanding of the processes of addition and subtraction		
2M1.7	Use decimals to show money amounts		
2M1.8	Identify and model basic addition facts (sums to 18) and the corresponding subtraction facts		
2M1.9	Immediately recall basic addition facts (sums to 18) and the corresponding subtraction facts		
2M1.10	Add and subtract multi-digit numbers without regrouping		
2M1.11	Add and subtract two-digit numbers with regrouping		
2M1.12	Add and subtract money amounts		
2M1.13	Describe and explain sequence of steps in addition and subtraction algorithms		
2M1.14	Use a variety of appropriate strategies to compute and solve problems with whole numbers		
2M1.15	Estimate the number of objects in a set to 20; verify by counting, and revise estimate, as needed, based on results		
2M1.16	Generate and solve one-step addition and subtraction problems based on practical situations		
2M1.17	Use estimation and mental computation in appropriate situations to solve problems		
2M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
2M2.1	Compare and contrast attributes of objects, shapes, and numbers		
2M2.2	Recognize and describe repeating and increasing patterns using symbols, objects, manipulatives, and calculators		
2M2.3	Use patterns and their extensions to solve problems		
2M2.4	Use variables and open sentences to express relationships		
2M2.5	Generate and solve problems based on various numerical sentences		
2M2.6	Model, explain, and solve a number sentence involving addition and subtraction		
2M2.7	Represent mathematical situations using numbers, symbols, and words		
2M3	**MEASUREMENT**		
2M3.1	Compare and order objects by various measurable attributes including time, temperature, length, weight, capacity, and area, and communicate their similarities and differences		
2M3.2	Compare objects to standard whole units such as inches, yards, centimeters, and meters to identify the objects as greater than, less than, or equal to the given unites		
2M3.3	Estimate and measure length, weight, and capacity of objects, using a standard or non standard unit of measure		
2M3.4	Read time to nearest quarter hour; distinguish between day and night (i.e., A.M. and P.M.)		
2M3.5	Determine the value of any given set of coins and bills		
2M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
2M4.1	Describe and compare and contrast two-dimensional shapes (circles, triangles, rectangles [squares]) regardless of position		
2M4.2	Use position words such as before, far, below, left to describe location of objects and to place objects		
2M4.3	Identify congruent shapes		
2M4.4	Compare the size (larger and smaller) or similar two-dimensional figures such as circles, triangles		
2M4.5	Recognize and describe position of shapes after transformation (flip, turn, slide), using models		
2M4.6	Identify figures with symmetry as they appear in the environment		
2M4.7	Create two-dimensional designs that contain a line of symmetry		
2M4.8	Identify, name, sort, describe, compare, and contrast two– and three-dimensional geometric figures and objects such as circle/sphere, square/cube, triangle/pyramid		
2M5	**DATA ANALYSIS**		
2M5.1	Collect, organize, record and explain classification of data using concrete materials		
2M5.2	Collect, organize, tally, display, and interpret data in charts, tables, and graphs		
2M5.3	Read and interpret simple picture and bar graphs to solve problems		
2M6	**PROBLEM SOLVING**		
2M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
2M6.2	Apply previous experience and knowledge to new problem-solving situations		
2M6.3	Formulate own problems; use various approaches to investigate and solve problems		
2M6.4	Explain and verify results with respect to the original problem		
2M6.5	Try more than one strategy when the first strategy proves to be unproductive		
2M6.6	Apply solutions and strategies from earlier problems to new problem situations		
2M6.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
2M7	**MATHEMATICAL COMMUNICATION**		
2M7.1	Discuss and exchange ideas about mathematics as a part of learning		
2M7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
2M7.3	Use pictorial representations to identify mathematical operations and concepts		

Identifier	**Lander - Grade 2 - Mathematics**	Introduced	Completed
2M7.4	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas		
2M7.5	Explain and justify thinking about mathematical ideas and solutions		
2M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
2M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
2M7.8	Use mathematical notation to communicate and explain mathematical situations		
2M8	**MATHEMATICAL REASONING**		
2M8.1	Justify and explain the solutions to problems using manipulatives and physical models		
2M8.2	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
2M8.3	Ask questions to reflect on, clarify, and extend thinking		
2M8.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
2M9	**MATHEMATICAL CONNECTIONS**		
2M9.1	Link new concepts to prior knowledge		
2M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
2M9.3	Identify practical applications of mathematical principles that can be applied to other disciplines		
2M9.4	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 3 - Mathematics	Introduced	Completed
M 3.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 3.1.1A	Use place value to read, write (in symbols and words), and describe the value of whole numbers through 999,999.		
M 3.1.1B	Use place value to compare and order whole numbers through 9,999.		
M 3.1.1C	Determine the value of a collection of coins and bills.		
M 3.1.2A	Compare fractional parts of whole objects or sets of objects in a problem situation using models.		
M 3.1.2B	Use fraction names and symbols to describe fractional parts of whole objects or sets of objects with denominators of 12 or less.		
M 3.1.3A	Model addition and subtraction using pictures, words, and numbers.		
M 3.1.3B	Select addition or subtraction and use the operation to solve problems involving whole numbers through 999.		
M 3.1.4A	Solve and record multiplication problems (one-digit multiplier).		
M 3.1.4B	Use models to solve division problems and use number sentences to record the solutions.		
M 3.1.5A	Round two-digit numbers to the nearest ten and three-digit numbers to the nearest hundred.		
M 3.1.5B	Estimate sums and differences beyond basic facts.		
M 3.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 3.2.1A	Identify and extend whole-number and geometric patterns to make predictions and solve problems.		
M 3.2.1B	Identify patterns in multiplication facts using pictorial models.		
M 3.2.1C	Identify patterns in related multiplication and division sentences (fact families), such as $2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$.		
M 3.2.2A	Generate a table of paired numbers based on a real-life situation, such as insects and legs.		
M 3.2.2B	Identify patterns in a table of related number pairs based on a real-life situation and extend the table.		
M 3.3	**GEOMETRY AND SPATIAL REASONING**		
M 3.3.1A	Name, describe, and compare shapes and solids using formal geometric vocabulary.		
M 3.3.2A	Identify congruent shapes.		
M 3.3.2B	Identify lines of symmetry in shapes.		
M 3.3.3A	Locate and name points on a line using whole numbers.		
M 3.4	**MEASUREMENT**		
M 3.4.1A	Estimate and measure lengths using standard units such as inch, foot, yard, centimeter, and meter.		
M 3.4.1B	Use linear measure to find the perimeter of a shape.		
M 3.4.1C	Use models of square units to determine the area of shapes.		
M 3.4.2A	Tell and write time shown on traditional and digital clocks.		
M 3.4.2B	Use a thermometer to measure temperature.		
M 3.4.3A	Measure to solve problems involving length, temperature, and time.		
M 3.5	**PROBABILITY AND STATISTICS**		
M 3.5.1A	Organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data.		
M 3.5.1B	Interpret information from pictographs and bar graphs.		
M 3.5.1C	Use data to describe events as more likely, less likely, or equally likely.		
M 3.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 3.6.1A	Identify the mathematics in everyday situations.		
M 3.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 3.6.1C	Select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 3.6.2A	Relate informal language to mathematical language and symbols.		
M 3.6.3A	Make generalizations from patterns or sets of examples and nonexamples.		

Identifier	Nevada - Grade 3 - Mathematics	Introduced	Completed
3 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
3 M 1.3.1	Immediately recall and use addition, subtraction, and multiplication facts to 81.		
3 M 1.3.2	Add and subtract multidigit numbers with regrouping.		
3 M 1.3.3	Generate and solve two-step addition and subtraction and one-step multiplication problems based on practical situations using pencil and paper, mental computation, and estimation.		
3 M 1.3.4	Add and subtract decimals using money as a model.		
3 M 1.3.5	Model and explain multiplication, including as repeated addition.		
3 M 1.3.6	Read, write, order, and compare numbers from 0-999; read and write number words.		
3 M 1.3.7	Round to nearest tens and hundreds to determine reasonableness of the answer; read and write number words.		
3 M 1.3.8	Use, model, and identify place-value positions up to 10,000.		
3 M 1.3.9	Model, sketch, and label fractions with denominators to 10; write fractions with numbers and words.		
3 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
3 M 2.3.1	Recognize, describe, and create patterns using numbers; use number patterns and their extensions to solve problems.		
3 M 2.3.3	Identify missing terms and missing numbers in open number sentences involving number facts in addition and subtraction.		
3 M 2.3.4	Complete number sentences with the appropriate words and symbols for addition, subtraction, less than, greater than, and equal to (+, -, <, >, =).		
3 M 3	**MEASUREMENT**		
3 M 3.3.2	Select and use appropriate units of measurement; measure to a required degree of accuracy and record results.		
3 M 3.3.3	Estimate and use measuring devices with standard and nonstandard units to measure length, surface area, liquid volume, capacity, temperature, and weight, communicating the concepts of more, less, and equivalent.		
3 M 3.3.4	Read, write, and use money notation determining possible combinations of coins and bills to equal given amounts.		
3 M 3.3.6	Tell time to the nearest minute, using analog and digital clocks, and identify elapsed time.		
3 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
3 M 4.3.1	Describe, sketch, compare, and contrast plane geometric figures.		
3 M 4.3.2	Demonstrate and describe the motion (transformation) of geometric figures as a slide, rotation, or a flip.		
3 M 4.3.4	Compare, contrast, sketch, model, and build two- and three-dimensional geometric figures and objects.		
3 M 5	**DATA ANALYSIS**		
3 M 5.3.1	Collect, organize, display, and describe simple data using number lines, pictographs, bar graphs, and frequency tables.		
3 M 5.3.2	Use concepts of probability (e.g., impossible, likely, certain) to make predictions about future events.		
3 M 6	**PROBLEM SOLVING**		
3 M 6.3.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
3 M 6.3.2	Apply previous experience and knowledge to new problem-solving situations.		
3 M 6.3.4	Explain and verify results with respect to the original problem.		
3 M 6.3.6	Try more than one strategy when the first strategy proves to be unproductive.		
3 M 6.3.8	Apply solutions and strategies from earlier problems to new problem situations.		
3 M 6.3.12	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration).		
3 M 7	**MATHEMATICAL COMMUNICATION**		
3 M 7.3.1	Discuss and exchange ideas about mathematics as a part of learning.		
3 M 7.3.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
3 M 7.3.5	Identify and translate key words and phrases that imply mathematical operations.		
3 M 7.3.7	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas.		
3 M 7.3.12	Explain and justify thinking about mathematical ideas and solutions.		
3 M 7.3.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
3 M 7.3.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
3 M 7.3.17	Use mathematical notation to communicate and explain mathematical situations.		
3 M 8	**MATHEMATICAL REASONING**		
3 M 8.3.1	Justify and explain the solutions to problems using manipulative and physical models.		
3 M 8.3.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
3 M 8.3.8	Ask questions to reflect on, clarify, and extend thinking.		

Identifier	Nevada - Grade 3 - Mathematics	Introduced	Completed
3 M 8.3.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
3 M 8.3.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
3 M 9	**MATHEMATICAL CONNECTIONS**		
3 M 9.3.1	Link new concepts to prior knowledge.		
3 M 9.3.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
3 M 9.3.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
3 M 9.3.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
3 M 9.3.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 3 - Mathematics	Introduced	Completed
3M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
3M1.1	Read, write, order and compare whole numbers (0-999)		
3M1.2	Read and write number words		
3M1.3	Use ordinal positions first through hundredth		
3M1.4	Identify odd and even numbers		
3M1.5	Use, model, and identify place value positions up to 10,000		
3M1.6	Round numbers to nearest tens and hundreds to determine reasonableness of answers		
3M1.7	Explain and use the processes and properties of addition, subtraction, multiplication, and division, including correct notations and representations		
3M1.8	Model concepts of multiplication and division, including groupings and arrays model and explain multiplication as repeated addition		
3M1.9	Use subtraction to model and explain division		
3M1.10	Model, sketch, and label fractions with denominators to 10		
3M1.11	Write fractions with numbers and words		
3M1.12	Name and write fractions represented by drawings or models		
3M1.13	Identify the part of a set and/or region that represents a given fraction and write the corresponding fraction		
3M1.14	Identify and compare fractions with like denominators, using numbers, models, and drawings		
3M1.15	Identify the number of equal parts needed to make a whole or a fractional part of a whole, with and without models		
3M1.16	Read and write decimals (tenths and hundredths place)		
3M1.17	Immediately recall and use addition and subtraction facts		
3M1.18	Immediately recall and use multiplication facts, products to 81		
3M1.19	Recall division facts through the 10's		
3M1.20	Add an subtract multi-digit numbers, with regrouping		
3M1.21	Multiply a two– or three-digit number by a one-digit number, with and without regrouping		
3M1.22	Multiply three one-digit numbers		
3M1.23	Multiply a two– or three-digit number by a multiple of ten		
3M1.24	Divide a two-digit number by a one-digit number, without remainder		
3M1.25	Divide a three-digit multiple of ten by a two-digit multiple of ten		
3M1.26	Use estimation and mental computation in appropriate situations to solve problems		
3M1.27	Add and subtract proper fractions and mixed numbers with like denominators (without regrouping or simplifying), with and without models		
3M1.28	Add and subtract decimals, using money as a model		
3M1.29	Add and subtract decimals, tenths and hundredths		
3M1.30	Generate and solve two-step addition and subtraction and one-step multiplication problems based on practical situations using pencil and paper, mental computation, and estimation		
3M1.31	Use a variety of appropriate strategies to estimate, compute, and solve mathematical and real-world problems		
3M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
3M2.1	Compare and categorize shapes and numbers		
3M2.2	Recognize, describe, and create repeating and increasing patterns using numbers		
3M2.3	Describe and label with letters, words, and numbers the patterns observed in models of repeating and increasing patterns		
3M2.4	Use number patterns and their extensions to solve problems		
3M2.5	Identify missing terms and missing numbers in open number sentences involving addition and subtraction number facts		
3M2.6	Compare number sentences with the appropriate words and symbols for addition, subtraction, less than, greater than, and equal to (+, -, <, >, =)		
3M3	**MEASUREMENT**		
3M3.1	Measure to a required degree of accuracy, and record results		
3M3.2	Select and use appropriate units of measure		
3M3.3	Estimate and use measuring devices with standard and non-standard units to measure length, surface area, liquid volume (capacity), temperature, and weight		
3M3.4	Communicate the relationships of more, less, and equivalent when measuring		
3M3.5	Identify perimeter and area of regular and irregular figures by counting units		
3M3.6	Identify dimensions and volume of rectangular prisms by counting cubes		
3M3.7	Use the calendar to identify year/month/week/day(date)		
3M3.8	Tell time to nearest minute using digital and analog clocks		

Identifier	Lander - Grade 3 - Mathematics	Introduced	Completed
3M3.9	Identify elapsed time using a clock		
3M3.10	Read thermometers and compare results		
3M3.11	Read, write and use money notation determining possible combinations of coins and bills to equal given monetary amounts		
3M3.12	Determine totals for monetary amounts in problem solving and real-world situations		
3M3.13	Solve problems involving measurements		
3M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
3M4.1	Describe, sketch, compare, and contrast plane geometric figures		
3M4.2	Compare, contrast, sketch, model, and build two– and three-dimensional geometric figures and objects		
3M4.3	Identify and draw open and closed curves		
3M4.4	Describe and sketch intersecting and parallel lines		
3M4.5	Identify lines of symmetry		
3M4.6	Demonstrate and describe the transformation (motion) of geometric figures as a slide, turn (rotation), or a flip		
3M4.7	Identify a figure after transformation (flips, turns, slides)		
3M4.8	Describe results of combining and subdividing shapes		
3M4.9	Recognize and describe similar and congruent figures		
3M5	**DATA ANALYSIS**		
3M5.1	Collect, organize, display, and describe simple data using number lines, pictographs, bar graphs, and frequency tables		
3M5.2	Read and interpret displays of data; draw conclusions from charts, tables, and graphs to solve problems		
3M5.3	Use concepts of probability (e.g., impossible, likely, and certain) to make predictions about future events		
3M5.4	Conduct simple probability experiments using spinners, number cubes, and random drawings		
3M6	**PROBLEM SOLVING**		
3M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
3M6.2	Apply previous experience and knowledge to new problem-solving situations		
3M6.3	Formulate own problems; use various approaches to investigate and solve problems		
3M6.4	Explain and verify results with respect to the original problem		
3M6.5	Try more than one strategy when the first strategy proves to be unproductive		
3M6.6	Apply solutions and strategies from earlier problems to new problem situations		
3M6.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
3M7	**MATHEMATICAL COMMUNICATION**		
3M7.1	Discuss and exchange ideas about mathematics as a part of learning		
3M7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
3M7.3	Identify and translate key words and phrases that imply mathematical operations		
3M7.4	Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas		
3M7.5	Explain and justify thinking about mathematical ideas and solutions		
3M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
3M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
3M7.8	Use mathematical notation to communicate and explain mathematical situations		
3M8	**MATHEMATICAL REASONING**		
3M8.1	Justify and explain the solutions to problems using manipulative and physical models		
3M8.2	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
3M8.3	Ask questions to reflect on, clarify, and extend thinking		
3M8.4	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments		
3M8.5	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
3M9	**MATHEMATICAL CONNECTIONS**		
3M9.1	Link new concepts to prior knowledge		
3M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		

Identifier	**Lander - Grade 3 - Mathematics**	Introduced	Completed
3M9.3	Identify practical applications of mathematical principles that can be applied to other disciplines		
3M9.4	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
3M9.5	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 4 - Mathematics	Introduced	Completed
M 4.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 4.1.1A	Use place value to read, write, compare, and order whole numbers through the millions place.		
M 4.1.2A	Generate equivalent fractions using pictorial models.		
M 4.1.2B	Model fraction quantities greater than one using pictures.		
M 4.1.2C	Compare and order fractions using pictorial models.		
M 4.1.2D	Relate decimals to fractions that name tenths and hundredths using models.		
M 4.1.3A	Use addition and subtraction to solve problems involving whole numbers.		
M 4.1.3B	Add and subtract decimals to the hundredths place using pictorial models.		
M 4.1.4A	Model factors and products using arrays and area models.		
M 4.1.4B	Represent multiplication and division situations in picture, word, and number form.		
M 4.1.4C	Recall and apply multiplication facts through 12 x 12.		
M 4.1.4D	Use multiplication to solve problems involving two-digit numbers.		
M 4.1.4E	Use division to solve problems involving one-digit divisors.		
M 4.1.5A	Round whole numbers to the nearest ten, hundred, or thousand to approximate reasonable results in problem situations.		
M 4.1.5B	Estimate a product or quotient beyond basic facts.		
M 4.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 4.2.1A	Solve division problems related to multiplication facts (fact families) such as 9 x 9 = 81 and 81 ÷ 9 = 9.		
M 4.2.1B	Use patterns to multiply by 10 and 100.		
M 4.2.2A	Describe the relationship between two sets of related data such as ordered pairs in a table.		
M 4.3	**GEOMETRY AND SPATIAL REASONING**		
M 4.3.1A	Identify right, acute, and obtuse angles.		
M 4.3.1B	Identify models of parallel and perpendicular lines.		
M 4.3.1C	Describe shapes and solids in terms of vertices, edges, and faces.		
M 4.3.2A	Use translations, reflections, and rotations to verify that two shapes are congruent.		
M 4.3.2B	Use reflections to verify that a shape has symmetry.		
M 4.3.3A	Locate and name points on a number line using whole numbers, fractions such as halves and fourths, and decimals such as tenths.		
M 4.4	**MEASUREMENT**		
M 4.4.1A	Estimate and measure weight using standard units including ounces, pounds, grams, and kilograms.		
M 4.4.1B	Estimate and measure capacity using standard units including milliliters, liters, cups, pints, quarts, and gallons.		
M 4.4.2A	Measure to solve problems involving length (including perimeter), time, temperature, and area.		
M 4.5	**PROBABILITY AND STATISTICS**		
M 4.5.1A	List all possible outcomes of a probability experiment such as tossing a coin.		
M 4.5.1B	Use a pair of numbers to compare favorable outcomes to all possible outcomes such as four heads out of six tosses of a coin.		
M 4.5.1C	Interpret bar graphs.		
M 4.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 4.6.1A	Identify the mathematics in everyday situations.		
M 4.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 4.6.1C	Select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 4.6.2A	Relate informal language to mathematical language and symbols.		
M 4.6.3A	Make generalizations from patterns or sets of examples and nonexamples.		

Identifier	Nevada - Grade 4 - Mathematics	Introduced	Completed
4 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
4 M 1.4.1	Immediately recall and use multiplication and corresponding division facts through 12s.		
4 M 1.4.3	Generate and solve two-step multiplication and division problems based on practical situations using pencil and paper, mental computation, and estimation.		
4 M 1.4.4	Multiply and divide money amounts by a one-digit whole number producing a solution with no remainder.		
4 M 1.4.5	Multiply and divide multidigit numbers by a one-digit number with regrouping; model and explain division including as repeated subtraction.		
4 M 1.4.6	Read, write, order, and compare whole numbers.		
4 M 1.4.7	Use estimation to determine the reasonableness of an answer.		
4 M 1.4.8	Use and identify place-value positions of whole numbers.		
4 M 1.4.9	Identify and compare fractions with like denominators using numbers, models, and drawings.		
4 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
4 M 2.4.1	Identify, describe, and represent numeric and geometric patterns and relationships.		
4 M 2.4.3	Find solutions to given equalities from a given replacement set (e.g., find the solution to 3 X 7 =_____, given the replacement set {19, 20, 21}).		
4 M 3	**MEASUREMENT**		
4 M 3.4.2	Measure and compare length in inches, feet, yards, and miles to the nearest 1/2, 1/4; measure and compare lengths in metric units (millimeter, centimeter, meter, kilometer); convert within each system.		
4 M 3.4.3	Communicate the difference between perimeter and area; describe and determine the perimeter of polygons and the area of rectangles (including squares).		
4 M 3.4.4	Determine totals for monetary amounts in problem-solving situations.		
4 M 3.4.5	Describe and determine the perimeter of polygons and the area of rectangles (including squares).		
4 M 4	**SPATIAL SENSE AND GEOMETRY**		
4 M 4.4.1	Identify, draw, and classify angles according to their measurement, including right, obtuse, and acute.		
4 M 4.4.2	Represent concepts of similarity, congruence, and symmetry using transformational motion.		
4 M 4.4.4	Identify, describe, and classify two- and three-dimensional figures by relevant properties, including the number of vertices (corners), edges, and shapes of faces, using models.		
4 M 4.4.6	Identify, describe, and draw geometric figures including points, intersecting lines, parallel lines, line segments, rays, and angles.		
4 M 5	**DATA ANALYSIS**		
4 M 5.4.1	Collect, organize, display, describe, and interpret simple data using number lines, pictographs, bar graphs, and frequency tables.		
4 M 5.4.2	Conduct simple probability experiments using concrete materials, and represent the results using fractions.		
4 M 6	**PROBLEM SOLVING**		
4 M 6.4.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
4 M 6.4.2	Apply previous experience and knowledge to new problem-solving situations.		
4 M 6.4.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
4 M 6.4.6	Try more than one strategy when the first strategy proves to be unproductive.		
4 M 6.4.9	Generalize solutions and strategies from earlier problems to new problem situations.		
4 M 6.4.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
4 M 6.4.12	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration).		
4 M 7	**MATHEMATICAL COMMUNICATION**		
4 M 7.4.1	Discuss and exchange ideas about mathematics as a part of learning.		
4 M 7.4.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
4 M 7.4.5	Identify and translate key words and phrases that imply mathematical operations.		
4 M 7.4.8	Use physical material, diagrams, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats.		
4 M 7.4.11	Make conjectures and present arguments in discussions of mathematical ideas.		
4 M 7.4.12	Explain and justify thinking about mathematical ideas and solutions.		
4 M 7.4.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
4 M 7.4.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
4 M 7.4.17	Use mathematical notation to communicate and explain mathematical situations.		
4 M 8	**MATHEMATICAL REASONING**		

Identifier	Nevada - Grade 4 - Mathematics	Introduced	Completed
4 M 8.4.1	Justify and explain the solutions to problems using manipulative and physical models.		
4 M 8.4.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
4 M 8.4.5	Follow a logical argument and judge its validity.		
4 M 8.4.6	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning.		
4 M 8.4.8	Ask questions to reflect on, clarify, and extend thinking.		
4 M 8.4.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
4 M 8.4.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
4 M 9	**MATHEMATICAL CONNECTIONS**		
4 M 9.4.1	Link new concepts to prior knowledge.		
4 M 9.4.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
4 M 9.4.3	Use models to explain the relationship of concepts to procedures.		
4 M 9.4.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
4 M 9.4.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
4 M 9.4.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 4 - Mathematics	Introduced	Completed
4M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
4M1.1	Read, write, order, and compare whole numbers		
4M1.2	Explain relative size (magnitude) of numbers using powers of ten (hundreds and thousands) as benchmarks		
4M1.3	Use estimation to determine the reasonableness of answers		
4M1.4	Use and identify place value positions of whole numbers		
4M1.5	Use subtraction to model and explain division		
4M1.6	Describe the relationships of operations (addition, subtraction, multiplication, and division)		
4M1.7	Describe and use the processes and properties of addition, subtraction, multiplication, and division, including correct notations and related words		
4M1.8	Identify and compare fractions with like denominators, using numbers, models, and drawings		
4M1.9	Compare fractions with like denominators, without models		
4M1.10	Immediately recall and use multiplication and corresponding division facts through the 12's		
4M1.11	Describe and use algorithms for addition, subtraction, multiplication, and division		
4M1.12	Add and subtract multi-digit numbers, with and without regrouping		
4M1.13	Multiply by multiples of ten or a hundred		
4M1.14	Multiply multi-digit numbers by one-digit number, with and without regrouping		
4M1.15	Divide multiples of ten or one hundred by multiples of ten		
4M1.16	Divide a two– or three-digit number by a one-digit number, with or without a remainder		
4M1.17	Add and subtract decimals		
4M1.18	Multiply and divide money amounts by a one-digit whole number producing a solution with no remainder		
4M1.19	Generate and solve two-step addition and subtraction and one-step multiplication problems, using pencil and paper, mental computation, and estimation		
4M1.20	Use estimation and mental computation in appropriate situations to solve problems		
4M1.21	Use a variety of appropriate strategies to estimate, compute, and solve mathematical and real-world problems		
4M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
4M2.1	Use and interpret operational and relational symbols		
4M2.2	Analyze, describe, create and extend patterns using numbers, appropriate tables, and calculators		
4M2.3	Identify, describe, and represent numeric and geometric patterns and relationships		
4M2.4	Find solutions to given equations from a given replacement set (e.g., find the solution to 3 x 7 = ____ , given the replacement set (19, 20, 21)		
4M2.5	Use variable expressions (open sentences) to model situations		
4M3	**MEASUREMENT**		
4M3.1	Measure distance, time, temperature, capacity, weight/mass, volume, and area using standard measuring devices (English and metric)		
4M3.2	Measure and compare length in inches, feet, yards, and miles to the nearest fractional part (1/4, 1/2); convert within this system of measurement		
4M3.3	Measure and compare lengths in metric units (e.g., millimeter, centimeter, meter, kilometer); convert within metric system of measure		
4M3.4	Determine totals for monetary amounts in problem-solving situations		
4M3.5	Describe and determine the perimeter and area of polygons		
4M3.6	Describe and determine the perimeter and area of rectangles (including squares)		
4M3.7	Communicate the difference between area and perimeter		
4M3.8	Estimate measurements with appropriate precision		
4M4	**SPATIAL SENSE AND GEOMETRY**		
4M4.1	Describe geometric properties, patterns, and relationships		
4M4.2	Identify parts of a solid figure (base, face, edge, vertex)		
4M4.3	Identify, describe, and classify two– and three-dimensional figures by relevant properties including the number of vertices (corners), edges, and the shapes of faces using models		
4M4.4	Identify, describe, and draw basic geometric figures including points, line segments, rays, angles, intersecting lines, and parallel lines using models		
4M4.5	Identify, draw, and classify angles including acute, right, obtuse, according to their measurements		
4M4.6	Predict verify, and describe results of combining, subdividing, and changing shapes		
4M4.7	Represent concepts of similarity, congruence, and symmetry using motion geometry		
4M5	**DATA ANALYSIS**		
4M5.1	Collect, organize, display, describe, and interpret simple data using number lines, pictographs, bar graphs, and frequency tables		
4M5.2	Read, interpret, and discuss charts, tables, and graphs from books, newspapers, and magazines		

Identifier	Lander - Grade 4 - Mathematics	Introduced	Completed
4M5.3	Conduct simple probability experiments using concrete materials and represent the results using fractions		
4M5.4	Apply probability concepts and counting rules		
4M5.5	Solve problems and make predictions based on collected data		
4M5.6	Understand and apply measures of central tendency and variability		
4M6	**PROBLEM SOLVING**		
4M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
4M6.2	Apply previous experience and knowledge to new problem-solving situations		
4M6.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
4M6.4	Try more than one strategy when the first strategy proves to be unproductive		
4M6.5	Generalize solutions and strategies from earlier problems to new problem situations		
4M6.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
4M6.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
4M6.8	Use technology, including calculators, to investigate, define, and describe qualitative relationships such as patterns and functions		
4M7	**MATHEMATICAL COMMUNICATION**		
4M7.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
4M7.2	Identify and translate key words and phrases that imply mathematical operations		
4M7.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
4M7.4	Explain and justify thinking about mathematical ideas and solutions		
4M7.5	Make conjectures and present arguments in discussions of mathematical ideas		
4M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
4M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
4M7.8	Use mathematical notation to communicate and explain mathematical situations		
4M8	**MATHEMATICAL REASONING**		
4M8.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
4M8.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
4M8.3	Ask questions to reflect on, clarify, and extend thinking		
4M8.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
4M9	**MATHEMATICAL CONNECTIONS**		
4M9.1	Link new concepts to prior knowledge		
4M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
4M9.3	Use models to explain the relationship of concepts to procedures		
4M9.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
4M9.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
4M9.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 5 - Mathematics	Introduced	Completed
M 5.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 5.1.1A	Use place value to read, write, compare, and order whole numbers through the billions place.		
M 5.1.1B	Use place value to read, write, compare, and order decimals through the thousandths place.		
M 5.1.2A	Generate equivalent fractions.		
M 5.1.2B	Compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators.		
M 5.1.2C	Use models to relate decimals to fractions that name tenths, hundredths, and thousandths.		
M 5.1.3A	Use addition and subtraction to solve problems involving whole numbers and decimals.		
M 5.1.3B	Use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology).		
M 5.1.3C	Use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology).		
M 5.1.3D	Identify prime factors of a whole number and common factors of a set of whole numbers.		
M 5.1.3E	Model and record addition and subtraction of fractions with like denominators in problem-solving situations.		
M 5.1.4A	Round whole numbers and decimals through tenths to approximate reasonable results in problem situations.		
M 5.1.4B	Estimate to solve problems where exact answers are not required.		
M 5.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 5.2.1A	Use pictures to make generalizations about determining all possible combinations.		
M 5.2.1B	Use lists, tables, charts, and diagrams to find patterns and make generalizations, such as a procedure for determining equivalent fractions.		
M 5.2.1C	Identify prime and composite numbers using models and patterns in factor pairs.		
M 5.2.2A	Select from and use diagrams and number sentences to represent real-life situations.		
M 5.3	**GEOMETRY AND SPATIAL REASONING**		
M 5.3.1A	Identify critical attributes, including parallel, perpendicular, and congruent parts of geometric shapes and solids.		
M 5.3.1B	Use critical attributes to define geometric shapes or solids.		
M 5.3.2A	Sketch the results of translations, rotations, and reflections.		
M 5.3.2B	Describe the transformation that generates one figure from the other when given two congruent figures.		
M 5.3.3A	Locate and name points on a coordinate grid using ordered pairs of whole numbers.		
M 5.4	**MEASUREMENT**		
M 5.4.1A	Measure volume using models of cubic units.		
M 5.4.2A	Measure to solve problems involving length (including perimeter), weight, capacity, time, temperature, and area.		
M 5.4.2B	Describe numerical relationships between units of measure within the same measurement system, such as an inch is one-twelfth of a foot.		
M 5.5	**PROBABILITY AND STATISTICS**		
M 5.5.1A	Use fractions to describe the results of an experiment.		
M 5.5.1B	Use experimental results to make predictions.		
M 5.5.2A	Use tables of related number pairs to make line graphs.		
M 5.5.2B	Describe characteristics of data presented in tables and graphs, including the shape and spread of the data and the middle number.		
M 5.5.2C	Graph a given set of data using an appropriate graphical representation, such as a picture or line.		
M 5.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 5.6.1A	Identify the mathematics in everyday situations.		
M 5.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 5.6.1C	Select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 5.6.2A	Relate informal language to mathematical language and symbols.		
M 5.6.3A	Make generalizations from patterns or sets of examples and nonexamples.		

Identifier	Nevada - Grade 5 - Mathematics	Introduced	Completed
5 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
5 M 1.5.1	Use and apply multiplication and corresponding division facts through 12's.		
5 M 1.5.2	Generate and solve addition, subtraction, multiplication, and division problems using whole numbers in practical situations.		
5 M 1.5.3	Use order of operations to solve problems.		
5 M 1.5.4	Add and subtract decimals; multiply and divide decimals by whole numbers in problems representing practical situations.		
5 M 1.5.5	Multiply and divide multidigit numbers by two-digit numbers, including strategies for powers of 10.		
5 M 1.5.6	Compare and order negative numbers within the context of everyday happenings (e.g., temperature) and plot those numbers on a number line.		
5 M 1.5.7	When rounding, identify which place value will be most helpful in estimating an answer and determine the reasonableness of the answer.		
5 M 1.5.8	Use and identify place value.		
5 M 1.5.9	Use models and drawings to identify, compare, add, and subtract fractions with like denominators and to add and subtract decimals; use both to solve problems.		
5 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
5 M 2.5.1	Identify, describe, and explain patterns and relationships in the number system (e.g., formed by triangular numbers, perfect squares, arithmetic and geometric sequences) using concrete materials, paper and pencil, and calculators.		
5 M 2.5.3	Using whole numbers as a replacement set, find possible solutions to such inequalities as $8 + 4 > n$.		
5 M 2.5.4	Use variables in open sentences and to describe simple functions and relationships.		
5 M 2.5.5	Generate number sequences given the first term and any basic computation rule.		
5 M 2.5.7	Solve simple equations using a variety of methods (e.g., inverse operations, mental math, and estimate and verify).		
5 M 3	**MEASUREMENT**		
5 M 3.5.3	Estimate measures of length, volume, capacity, quantity, and weight, communicating degree of accuracy needed and when a more precise measure is required.		
5 M 3.5.4	Determine totals and change due for monetary amounts in problem-solving situations.		
5 M 3.5.5	Communicate the difference between perimeter and area.		
5 M 3.5.6	Identify equivalent periods of time, including relationships between and among seconds, minutes, hours, days, months, and years (e.g., 60 sec = 1 min).		
5 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
5 M 4.5.1	Draw and classify triangles according to their properties (e.g., right, scalene, obtuse, equilateral); identify and draw circles and parts of circles, describing the relationships between the various parts (e.g., central angle, arc, diameter).		
5 M 4.5.2	Identify shapes that have congruence, similarity, and/or symmetry of figures using a variety of methods including transformational motions (e.g., translation/slide, rotation/turn, reflection/flip, enlargement/reduction) and models, drawings, and measurement tools.		
5 M 4.5.3	Using a grid, identify coordinates for a given point or locate points of given coordinates in the first quadrant.		
5 M 4.5.4	Identify, describe, compare, and classify two- and three-dimensional figures by relevant properties including number of vertices (corners), edges, and shapes of faces; identify and predict the effects of combining, dividing, and changing shapes into other shapes.		
5 M 4.5.6	Identify, describe, define, and draw geometric figures including points, intersecting, perpendicular, and parallel lines, line segments, rays, angles, and planes.		
5 M 5	**DATA ANALYSIS**		
5 M 5.5.1	Collect, organize, read, and interpret data using a variety of graphic representations including tables, line plots, stem-and-leaf plots, scatterplots, histograms; use data to draw and explain conclusions and predictions.		
5 M 5.5.4	Model and then compute measures of central tendency including mean, median, and mode.		
5 M 5.5.6	Describe the limitations of various graph formats; select an appropriate type of graph to accurately represent the data and justify the selection.		
5 M 6	**PROBLEM SOLVING**		
5 M 6.5.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
5 M 6.5.2	Apply previous experience and knowledge to new problem-solving situations.		
5 M 6.5.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
5 M 6.5.6	Try more than one strategy when the first strategy proves to be unproductive.		
5 M 6.5.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
5 M 6.5.9	Generalize solutions and strategies from earlier problems to new problem situations.		
5 M 6.5.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
5 M 6.5.13	Use technology, including calculators, to solve problems and verify solutions.		
5 M 6.5.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
5 M 7	**MATHEMATICAL COMMUNICATION**		
5 M 7.5.1	Discuss and exchange ideas about mathematics as a part of learning.		
5 M 7.5.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
5 M 7.5.5	Identify and translate key words and phrases that imply mathematical operations.		
5 M 7.5.8	Use physical material, diagrams, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats.		
5 M 7.5.11	Make conjectures and present arguments in discussions of mathematical ideas.		

Identifier	**Nevada - Grade 5 - Mathematics**	Introduced	Completed
5 M 7.5.12	Explain and justify thinking about mathematical ideas and solutions.		
5 M 7.5.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
5 M 7.5.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
5 M 7.5.17	Use mathematical notation to communicate and explain mathematical situations.		
5 M 8	**MATHEMATICAL REASONING**		
5 M 8.5.2	Justify answers and the steps taken to solve problems, with and without manipulatives and physical models.		
5 M 8.5.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
5 M 8.5.5	Follow a logical argument and judge its validity.		
5 M 8.5.6	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning.		
5 M 8.5.8	Ask questions to reflect on, clarify, and extend thinking.		
5 M 8.5.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
5 M 8.5.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
5 M 9	**MATHEMATICAL CONNECTIONS**		
5 M 9.5.1	Link new concepts to prior knowledge.		
5 M 9.5.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
5 M 9.5.3	Use models to explain the relationship of concepts to procedures.		
5 M 9.5.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
5 M 9.5.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
5 M 9.5.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 5 - Mathematics	Introduced	Completed
5M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
5M1.1	Read and write numbers, number words, and ordinals		
5M1.2	Use and identify place value		
5M1.3	Round numbers to an appropriate place value		
5M1.4	When rounding, identify which place value will be most helpful in estimating an answer and determine the reasonableness of the answer		
5M1.5	Describe and use properties and relationships of operations (addition, subtraction, multiplication, and division)		
5M1.6	Identify and use least common multiples, greatest common factors		
5M1.7	Identify prime and composite numbers		
5M1.8	Compare and order negative numbers within the context of everyday happenings (e.g., temperature) and plot those numbers on a number line		
5M1.9	Identify fractional parts of regions and sets		
5M1.10	Compare and order fractions and/or decimals with like and unlike denominators		
5M1.11	Describe the place of fractions (including decimal notations) in the number system		
5M1.12	Identify and/or generate equivalent fractions		
5M1.13	Rename, identify fractions in simplest form		
5M1.14	Explain the relationships among fractions, decimals, percents, and ratios, using objects and symbols		
5M1.15	Rename fractions as decimals and vice versa		
5M1.16	Use and apply multiplication and corresponding division through the 12's		
5M1.17	Use basic facts of addition, subtraction, multiplication, and division facts with speed and accuracy in computation and problem solving		
5M1.18	Describe and use algorithms for addition, subtraction, multiplication, and division		
5M1.19	Add and subtract multi-digit numbers		
5M1.20	Multiply multi-digit numbers by two-digit numbers, including strategies for powers of 10		
5M1.21	Divide multi-digit numbers by two-digit numbers, including strategies for powers of 10		
5M1.22	Multiply and divide multi-digit numbers		
5M1.23	Use order of operations to solve problems		
5M1.24	Use models and drawings to identify, compare, add, and subtract fractions with like denominators and to solve problems		
5M1.25	Add and subtract fractions and mixed numbers with like denominators		
5M1.26	Use models and drawings to identify, compare, add, and subtract decimals and to solve problems		
5M1.27	Add and subtract decimals		
5M1.28	Multiply and divide decimals by whole numbers in problems representing practical situations		
5M1.29	Generate and solve addition, subtraction, multiplication, and division problems using whole numbers in practical situations		
5M1.30	Use estimation and mental computation in appropriate situations to solve problems		
5M1.31	Use a variety of appropriate strategies to estimate, compute, and solve mathematical and real-world problems		
5M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
5M2.1	Classify, compare, and contrast numbers and data		
5M2.2	Identify, describe, and explain patterns and relationships in the number system (e.g., patterns formed by triangular numbers, perfect squares, arithmetic and geometric sequences) using concrete materials, paper and pencil, and calculators		
5M2.3	Using whole numbers as a replacement set, find possible solutions to such inequalities as $8 + 4 > n$		
5M2.4	Use variables in open sentences		
5M2.5	Use variables to describe simple functions and relationships		
5M2.6	Generate number sequences given the first term and any basic computations rule (e.g., given a 4 and the rule is "add 6," then the sequence can be written as 10, 16, , 22, 28, …)		
5M2.7	Solve simple equations using a variety of methods (e.g., inverse operations, mental mathematics, and estimation and verify)		
5M3	**MEASUREMENT**		
5M3.1	Measure, compare, and convert length to the closest fractional part (1/4 and 1/2) of inches, feet, yards, and miles		
5M3.2	Measure, compare, and convert length to the closest decimal unit of milli-, centi-, kilo-, and meters		
5M3.3	Estimate measures of length, volume, capacity, quantity, and weight, communicating the degree of accuracy needed and when a more precise measure is required		
5M3.4	Determine totals and change due for monetary amounts in problem solving situations		
5M3.5	Describe and determine the perimeter and area of polygons		
5M3.6	Describe and determine the area and perimeter of right triangles and rectangles including squares		
5M3.7	Communicate the difference between perimeter and area		
5M3.8	Identify equivalent periods of time, including relationships between and among seconds, minutes, hours, days, months, and years, such as 60 sec. = 1 min.		
5M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
5M4.1	Identify, describe, compare, and classify two– and three-dimensional figures by relevant properties including the number of vertices and edges and the number and shapes of faces		
5M4.2	Identify, define, describe, and draw geometric figures, including points, intersecting, perpendicular and parallel lines, line segments, rays, angles, and planes		

Identifier	Lander - Grade 5 - Mathematics	Introduced	Completed
5M4.3	Draw and classify triangles according to their properties (e.g., right, scalene, obtuse, equilateral)		
5M4.4	Identify and draw circles and parts of circles and describe the relationships between the various parts (e.g., arcs, diameter, and central angles)		
5M4.5	Identify shapes that have congruence, similarity, and/or symmetry of figures using a variety of methods (e.g., transformational, motions, models, drawings, and measurement)		
5M4.6	Using a grid, identify coordinates for a given point or locate points of given coordinates in the first quadrant		
5M4.7	Describe uses of geometry in practical problems and situations		
5M5	**DATA ANALYSIS**		
5M5.1	Collect, organize, read, and interpret data using a variety of graphic representations including tables, line plots, stem and leaf plots, scatter plots and histograms		
5M5.2	Describe the limitations of various graph formats		
5M5.3	Select an appropriate type of graph to accurately represent the data and justify the selection		
5M5.4	Use data from graphs, tables, and charts to draw and explain conclusions and predictions		
5M5.5	Conduct simple probability experiments using concrete materials and represent the results using fractions		
5M5.6	Solve probability problems using a variety of methods including constructing sample spaces and tree diagrams		
5M5.7	Model and then compute measures o central tendency including mean, median, and mode.		
5M6	**PROBLEM SOLVING**		
5M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
5M6.2	Apply previous experience and knowledge to new problem-solving situations		
5M6.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
5M6.4	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
5M6.5	Apply previous experience and knowledge to new problem-solving situations		
5M6.6	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
5M6.7	Try more than one strategy when the first strategy proves to be unproductive		
5M6.8	Apply multi-step, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists		
5M6.9	Generalize solutions and strategies from earlier problems to new problem situations		
5M6.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
5M6.11	Use technology, including calculators, to solve problems and verify solutions		
5M6.12	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions		
5M7	**MATHEMATICAL COMMUNICATION**		
5M7.1	Discuss and exchange ideas about mathematics as a part of learning		
5M7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems)		
5M7.3	Identify and translate key words and phrases that imply mathematical operations		
5M7.4	Use physical materials, diagrams, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
5M7.5	Explain and justify thinking about mathematical ideas and solutions		
5M7.6	Make conjectures and present arguments in discussions of mathematical ideas		
5M7.7	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
5M7.8	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
5M7.9	Use mathematical notation to communicate and explain mathematical situations		
5M8	**MATHEMATICAL REASONING**		
5M8.1	Justify answers and the steps taken to solve problems with and without manipulative and physical models		
5M8.2	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
5M8.3	Follow a logical argument and judge its validity		
5M8.4	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
5M8.5	Ask questions to reflect on, clarify, and extend thinking		
5M8.6	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments		
5M8.7	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
5M9	**MATHEMATICAL CONNECTIONS**		
5M9.1	Link new concepts to prior knowledge		
5M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
5M9.3	Use models to explain the relationship of concepts to procedures		
5M9.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
5M9.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
5M9.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 6 - Mathematics	Introduced	Completed
M 6.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 6.1.1A	Compare and order nonnegative rational numbers.		
M 6.1.1B	Generate equivalent forms of rational numbers including whole numbers, fractions, and decimals.		
M 6.1.1C	Use integers to represent real-life situations.		
M 6.1.1D	Write prime factorizations using exponents.		
M 6.1.1E	Identify factors and multiples including common factors and common multiples.		
M 6.1.2A	Model addition and subtraction situations involving fractions with pictures, words, and numbers.		
M 6.1.2B	Use addition and subtraction to solve problems involving fractions and decimals.		
M 6.1.2C	Use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates.		
M 6.1.2D	Estimate and round to approximate reasonable results and to solve problems where exact answers are not required.		
M 6.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 6.2.1A	Use ratios to describe proportional situations.		
M 6.2.1B	Represent ratios and percents with models, fractions, and decimals.		
M 6.2.1C	Use ratios to make predictions in proportional situations.		
M 6.2.2A	Use tables and symbols to represent and describe proportional and other relationships involving conversions, sequences, perimeter, area, etc.		
M 6.2.2B	Generate formulas to represent relationships involving perimeter, area, volume of a rectangular prism, etc., from a table of data.		
M 6.2.3A	Formulate an equation from a problem situation.		
M 6.3	**GEOMETRY AND SPATIAL REASONING**		
M 6.3.1A	Use angle measurements to classify angles as acute, obtuse, or right.		
M 6.3.1B	Identify relationships involving angles in triangles and quadrilaterals.		
M 6.3.1C	Describe the relationship between radius, diameter, and circumference of a circle.		
M 6.3.2A	Locate and name points on a coordinate plane using ordered pairs of nonnegative rational numbers.		
M 6.4	**MEASUREMENT**		
M 6.4.1A	Estimate measurements and evaluate reasonableness of results.		
M 6.4.1B	Select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter and circumference), area, time, temperature, capacity, and weight.		
M 6.4.1C	Measure angles.		
M 6.4.1D	Convert measurements within the same measurement system (customary and metric) based on relationships between units.		
M 6.5	**PROBABILITY AND STATISTICS**		
M 6.5.1A	Construct sample spaces using lists, tree diagrams, and combinations.		
M 6.5.1B	Find the probabilities of a simple event and its complement and describe the relationship between the two.		
M 6.5.2A	Compare different graphical representations of the same data.		
M 6.5.2B	Use median, mode, and range to describe data.		
M 6.5.2C	Sketch circle graphs to display data.		
M 6.5.2D	Solve problems by collecting, organizing, displaying, and interpreting data.		
M 6.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 6.6.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.		
M 6.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 6.6.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 6.6.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.		
M 6.6.3A	Make conjectures from patterns or sets of examples and nonexamples.		
M 6.6.3B	Validate his/her conclusions using mathematical properties and relationships.		

Identifier	Nevada - Grade 6 - Mathematics	Introduced	Completed
6 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
6 M 1.6.1	Read, write, add, subtract, multiply, and divide using decimals, fractions, and percents.		
6 M 1.6.2	Apply decimals, fractions, and percents to solve mathematical and practical problems.		
6 M 1.6.3	Use the concepts of number theory, including prime and composite numbers, factors, multiples, and the rules of divisibility.		
6 M 1.6.6	Compare and order groups of fractions and groups of decimals (e.g., on a number line).		
6 M 1.6.7	Round to a given decimal place value; estimate using decimals, fractions, and percents.		
6 M 1.6.9	Use models and drawings to identify, compare, add, and subtract fractions with unlike denominators; use models to translate among fractions, decimals, and percents.		
6 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
6 M 2.6.1	Use and create tables and charts to extend a pattern in order to describe a rule.		
6 M 2.6.2	Identify, model, describe, and evaluate relationships using charts and tables, with and without technology.		
6 M 2.6.7	Use a rule to create a table and represent the ordered pairs on a coordinate grid.		
6 M 3	**MEASUREMENT**		
6 M 3.6.1	Estimate and convert units of measure for length, weight, and capacity, within the same measurement system (customary or metric).		
6 M 3.6.2	Explain how the size of the unit used affects the precision; given two measurements of the same object, select the one that is more precise.		
6 M 3.6.3	Estimate, measure to the required degree of accuracy, derive, and apply formulas to find the perimeter, circumference, and area of plane figures.		
6 M 3.6.5	Use ratios to describe and compare relationships between various objects.		
6 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
6 M 4.6.1	Measure angles; identify, describe by properties, classify, compare, and draw regular and irregular quadrilaterals; find the sum of the interior angles of triangles and quadrilaterals.		
6 M 4.6.2	Determine actual measurements represented on scale drawings (e.g., maps, blueprints, house plans).		
6 M 4.6.3	Using a coordinate grid, identify coordinates for a given point and locate points of given coordinates; plot geometric shapes in all four quadrants.		
6 M 4.6.4	Make a model of a three-dimensional prism from a two-dimensional drawing and make a two-dimensional drawing of a three-dimensional prism.		
6 M 4.6.5	Model slope (pitch, angle of inclination) using concrete objects and practical examples.		
6 M 4.6.6	Draw complementary and supplementary angles; identify and find measures of complementary and supplementary angles using arithmetic and geometric methods.		
6 M 4.6.7	Determine the measures of missing angles of triangles based on the triangle sum theorem (the sum of the interior angles of a triangle equals 180 degrees).		
6 M 4.6.8	Construct circles, angles, and triangles based on given measurements using a variety of methods (e.g., protractor, paper folding).		
6 M 5	**DATA ANALYSIS**		
6 M 5.6.1	Interpret data using various formats including circle graphs.		
6 M 5.6.2	Conduct simple probability experiments using concrete materials and represent the results using decimals, percents, and ratios.		
6 M 5.6.3	Solve probability problems using a variety of methods including constructing sample spaces and tree diagrams.		
6 M 5.6.5	Analyze the effect a change of format will have on interpretation of statistical charts and graphs.		
6 M 5.6.6	Analyze data in a variety of formats to draw conclusions and make predictions.		
6 M 6	**PROBLEM SOLVING**		
6 M 6.6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
6 M 6.6.2	Apply previous experience and knowledge to new problem-solving situations.		
6 M 6.6.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
6 M 6.6.6	Try more than one strategy when the first strategy proves to be unproductive.		
6 M 6.6.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
6 M 6.6.9	Generalize solutions and strategies from earlier problems to new problem situations.		
6 M 6.6.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
6 M 6.6.13	Use technology, including calculators, to solve problems and verify solutions.		
6 M 6.6.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
6 M 7	**MATHEMATICAL COMMUNICATION**		
6 M 7.6.1	Discuss and exchange ideas about mathematics as a part of learning.		
6 M 7.6.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
6 M 7.6.3	Read expository text to learn about mathematics.		
6 M 7.6.6	Interpret and solve word problems without the necessity of key words or phrases.		
6 M 7.6.8	Use physical material, diagrams, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats.		
6 M 7.6.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
6 M 7.6.11	Make conjectures and present arguments in discussions of mathematical ideas.		
6 M 7.6.13	Explain and evaluate thinking about mathematical ideas and solutions.		

Identifier	Nevada - Grade 6 - Mathematics	Introduced	Completed
6 M 7.6.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
6 M 7.6.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
6 M 7.6.17	Use mathematical notation to communicate and explain mathematical situations.		
6 M 8	**MATHEMATICAL REASONING**		
6 M 8.6.2	Justify answers and the steps taken to solve problems, with and without manipulatives and physical models.		
6 M 8.6.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
6 M 8.6.5	Follow a logical argument and judge its validity.		
6 M 8.6.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
6 M 8.6.8	Ask questions to reflect on, clarify, and extend thinking.		
6 M 8.6.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
6 M 8.6.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
6 M 9	**MATHEMATICAL CONNECTIONS**		
6 M 9.6.1	Link new concepts to prior knowledge.		
6 M 9.6.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
6 M 9.6.3	Use models to explain the relationship of concepts to procedures.		
6 M 9.6.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
6 M 9.6.5	Identify practical applications of mathematical principles that can be applied to other disciplines.		
6 M 9.6.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
6 M 9.6.8	Identify, explain, and use mathematics in everyday life.		

Identifier	**Lander - Grade 6 - Mathematics**	Introduced	Completed
6M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
6M1.1	Compute, model and translate among forms of rational numbers		
6M1.2	Develop accuracy in modeling and computing with fractions, decimals and percents		
6M1.3	Develop estimation and rounding skills		
6M1.4	Develop strategies for solving application problems using decimals, ratios and percents		
6M1.5	Apply the concept of number theory to solve problems		
6M1.6	Compare and order fractions and decimals		
6M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
6M2.1	Describe and evaluate relationships using charts and tables		
6M2.2	Create tables and charts to extend patterns		
6M2.3	Create tables and charts to represent ordered pairs on a coordinate grid		
6M2.4	Model situations using algebraic expressions		
6M3	**MEASUREMENT**		
6M3.1	Estimate and convert units of measure for length, weight, and capacity		
6M3.2	Determine the most precise unit of measurement for a particular situation		
6M3.3	Estimate and use formulas to find the perimeter, circumference and area of plane figures		
6M3.4	Use ratios to compare relationships between objects		
6M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
6M4.1	Measure angles and find the sum of interior angles		
6M4.2	Classify and compare geometric figures		
6M4.3	Identify actual measurements from scale drawings		
6M4.4	Locate and plot points on a coordinate grid		
6M4.5	Build a 3-dimensional model from a 2-dimensional drawing		
6M4.6	Model slope		
6M4.7	Draw and measure angles; find the missing angle of a triangle		
6M4.8	Construct circles, angles and triangles using geometry tools		
6M7	**DATA ANALYSIS**		
6M7.1	Interpret data from graphs, including circle graphs		
6M7.2	Conduct probability experiments		
6M7.3	Solve probability problems		
6M7.4	Analyze different forms of statistical charts and graphs to draw conclusions and make predictions		

Identifier	Kamico - Grade 7 - Mathematics	Introduced	Completed
M 7.1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 7.1.1A	Compare and order integers and positive rational numbers.		
M 7.1.1B	Convert between fractions, decimals, whole numbers, and percents mentally and on paper.		
M 7.1.1C	Represent squares and square roots using geometric models.		
M 7.1.2A	Represent multiplication and division situations involving fractions and decimals with models, pictures, words, and numbers.		
M 7.1.2B	Use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.		
M 7.1.2C	Use models to add, subtract, multiply, and divide integers and connect the actions to algorithms.		
M 7.1.2D	Use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio.		
M 7.1.2E	Simplify numerical expressions involving order of operations and exponents.		
M 7.1.2F	Select and use appropriate operations to solve problems and justify the selections.		
M 7.1.2G	Determine the reasonableness of a solution to a problem.		
M 7.2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 7.2.1A	Estimate and find solutions to application problems involving percent.		
M 7.2.1B	Estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.		
M 7.2.2A	Generate formulas involving conversions, perimeter, area, circumference, volume, and scaling.		
M 7.2.2B	Graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling.		
M 7.2.2C	Describe the relationship between the terms in a sequence and their positions in the sequence.		
M 7.2.3A	Use models to solve equations and use symbols to record the actions.		
M 7.2.3B	Formulate a possible problem situation when given a simple equation.		
M 7.3	**GEOMETRY AND SPATIAL REASONING**		
M 7.3.1A	Use angle measurements to classify pairs of angles as complementary or supplementary.		
M 7.3.1B	Use properties to classify shapes including triangles, quadrilaterals, pentagons, and circles.		
M 7.3.1C	Use properties to classify solids, including pyramids, cones, prisms, and cylinders.		
M 7.3.1D	Use critical attributes to define similarity.		
M 7.3.2A	Locate and name points on a coordinate plane using ordered pairs of integers.		
M 7.3.2B	Graph translations on a coordinate plane.		
M 7.3.3A	Sketch a solid when given the top, side, and front views.		
M 7.3.3B	Make a net (two-dimensional model) of the surface area of a solid.		
M 7.3.3C	Use geometric concepts and properties to solve problems in fields such as art and architecture.		
M 7.4	**MEASUREMENT**		
M 7.4.1A	Estimate measurements and solve application problems involving length (including perimeter and circumference), area, and volume.		
M 7.5	**PROBABILITY AND STATISTICS**		
M 7.5.1A	Construct sample spaces for compound events (dependent and independent).		
M 7.5.2A	Select and use an appropriate representation for presenting collected data and justify the selection.		
M 7.5.2B	Make inferences and convincing arguments based on an analysis of given or collected data.		
M 7.5.3A	Describe a set of data using mean, median, mode, and range.		
M 7.5.3B	Choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular situation.		
M 7.6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 7.6.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.		
M 7.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 7.6.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 7.6.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.		
M 7.6.3A	Make conjectures from patterns or sets of examples and nonexamples.		
M 7.6.3B	Validate conclusions using mathematical properties and relationships.		

Identifier	Nevada - Grade 7 - Mathematics	Introduced	Completed
7 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
7 M 1.7.1	Read, write, and compute ratios and proportions; read, write, add, subtract, multiply, and divide positive and negative numbers.		
7 M 1.7.2	Apply positive and negative numbers, ratios, and proportions to solve mathematical and practical problems.		
7 M 1.7.3	Use absolute value and the properties of real numbers including distributive, commutative, and associative to solve problems.		
7 M 1.7.6	Compare and order groups containing a mix of fractions, percents, and decimals (e.g., on a number line).		
7 M 1.7.7	Select and round to the appropriate significant digit; estimate using a variety of methods.		
7 M 1.7.9	Translate among fractions, decimals, and percents.		
7 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
7 M 2.7.1	Use and create coordinate graphs (i.e., linear, geometric, and exponential) to represent and/or interpret patterns and relationships, with and without calculators.		
7 M 2.7.2	Identify, model, describe, and evaluate relationships using graphs, with and without technology.		
7 M 2.7.3	Evaluate formulas and algebraic expressions for given values of a variable (e.g., A = lw; given l = 6, w = 2, then A = 12).		
7 M 2.7.4	Represent mathematical situations using algebraic language and symbols.		
7 M 2.7.5	Combine like terms in variable expressions (e.g., 2a + 3a = 5a).		
7 M 2.7.6	Model, identify, and solve linear equations and inequalities using concrete and informal methods; relate this process to the order of operations.		
7 M 2.7.7	Generate and graph a set of ordered pairs to solve a linear equation.		
7 M 3	**MEASUREMENT**		
7 M 3.7.1	Estimate and convert units of measure for mass and volume within the same measurement system; compare corresponding units of the two systems.		
7 M 3.7.2	Given a measurement, determine the greatest possible error.		
7 M 3.7.3	Estimate, measure to the required degree of accuracy, derive, and apply standard formulas to find the volume and surface area of solid figures (e.g., cylinders, triangular solids).		
7 M 3.7.5	Write, solve, and apply proportions.		
7 M 3.7.6	Use elapsed time to solve practical problems (e.g., develop schedules, plan trips).		
7 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
7 M 4.7.1	Identify, describe by properties, classify, compare, and draw regular and irregular polygons; find the sum of the interior angles.		
7 M 4.7.2	Use ratio and proportions to create scale drawings.		
7 M 4.7.3	Use coordinate geometry and models to demonstrate geometric transformations including rotate/turn, translate/slide, reflect/flip by finding the ordered pairs that describe the location of the original and the transformed figures.		
7 M 4.7.4	Make a model of a three-dimensional figure from a two-dimensional drawing and make a two-dimensional drawing of a three-dimensional object.		
7 M 4.7.5	Use coordinate geometry to represent slope, midpoint, and horizontal and vertical distance.		
7 M 4.7.6	Describe the properties of geometric relationships including parallel lines, perpendicular lines, bisectors, triangles, and quadrilaterals (e.g., properties of angles formed by a transversal of parallel lines).		
7 M 4.7.7	Model the Pythagorean theorem; solve for the hypotenuse using the theorem.		
7 M 4.7.8	Construct and verify congruent angles and parallel and perpendicular lines using hand tools.		
7 M 5	**DATA ANALYSIS**		
7 M 5.7.1	Organize, display, read, and analyze data, with and without technology, using a variety of displays including frequency distributions and circle graphs.		
7 M 5.7.4	Select, use, and graph (when possible) measures of variability including range, distribution, and possible outliers.		
7 M 5.7.6	Given a set of data, interpolate and extrapolate to make and explain predictions.		
7 M 6	**PROBLEM SOLVING**		
7 M 6.7.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
7 M 6.7.2	Apply previous experience and knowledge to new problem-solving situations.		
7 M 6.7.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
7 M 6.7.6	Try more than one strategy when the first strategy proves to be unproductive.		
7 M 6.7.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
7 M 6.7.9	Generalize solutions and strategies from earlier problems to new problem situations.		

Identifier	Nevada - Grade 7 - Mathematics	Introduced	Completed
7 M 6.7.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
7 M 6.7.13	Use technology, including calculators, to solve problems and verify solutions.		
7 M 6.7.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
7 M 7	**MATHEMATICAL COMMUNICATION**		
7 M 7.7.1	Discuss and exchange ideas about mathematics as a part of learning.		
7 M 7.7.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
7 M 7.7.3	Read expository text to learn about mathematics.		
7 M 7.7.6	Interpret and solve word problems without the necessity of key words or phrases.		
7 M 7.7.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
7 M 7.7.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
7 M 7.7.11	Make conjectures and present arguments in discussions of mathematical ideas.		
7 M 7.7.13	Explain and evaluate thinking about mathematical ideas and solutions.		
7 M 7.7.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
7 M 7.7.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
7 M 7.7.17	Use mathematical notation to communicate and explain mathematical situations.		
7 M 8	**MATHEMATICAL REASONING**		
7 M 8.7.2	Justify answers and the steps taken to solve problems, with and without manipulatives and physical models.		
7 M 8.7.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
7 M 8.7.5	Follow a logical argument and judge its validity.		
7 M 8.7.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
7 M 8.7.8	Ask questions to reflect on, clarify, and extend thinking.		
7 M 8.7.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
7 M 8.7.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
7 M 9	**MATHEMATICAL CONNECTIONS**		
7 M 9.7.1	Link new concepts to prior knowledge.		
7 M 9.7.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
7 M 9.7.3	Use models to explain the relationship of concepts to procedures.		
7 M 9.7.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
7 M 9.7.6	Use and analyze the connections between mathematics and other disciplines.		
7 M 9.7.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
7 M 9.7.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 7 - Mathematics	Introduced	Completed
7M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
7M1.1	Compute, read and write integers, ratios, and proportions		
7M1.2	Solve problems by applying integers, ratios, proportions, absolute value and the properties of real numbers		
7M1.3	Estimate and round		
7M1.4	Compute with decimals and fractions		
7M1.5	Compare, order and translate among fractions, decimals and percents		
7M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
7M2.1	Create and use coordinate graphs to identify, model and evaluate patterns and relationships		
7M2.2	Evaluate algebraic expressions for given values of a variable		
7M2.3	Use algebra to represent mathematical situations		
7M2.4	Combine like terms in algebraic expressions		
7M2.5	Solve linear equations and inequalities using order of operations		
7M2.6	Solve linear equations by graphing ordered pairs		
7M3	**MEASUREMENT**		
7M3.1	Estimate, convert, and compare units of mass and volume		
7M3.2	Develop accuracy and precision in measurement using customary and metric measurements		
7M3.3	Estimate and use formulas to find volume and surface area		
7M3.4	Solve proportions and problems involving elapsed time		
7M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
7M4.1	Classify and compare polygons; find the sum of the interior angles		
7M4.2	Solve perimeter, area and volume problems		
7M4.3	Create scale drawings		
7M4.4	Demonstrate geometric transformations		
7M4.5	Model 3-dimensional figures from 2-dimensional drawings		
7M4.6	Find the slope and midpoint of a line		
7M4.7	Describe geometric properties and use geometric tools to construct angles and parallel and perpendicular lines		
7M4.8	Solve problems using the Pythagorean Theorem		
7M5	**DATA ANALYSIS**		
7M5.1	Organize, display, read and analyze data		
7M5.2	Select and use multiple measures of variability; such as, range, distribution, and outliers		
7M5.3	Estimate and explain predictions of y-values from a set of data		
7M6	**PROBLEM SOLVING**		
7M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
7M6.2	Apply previous experience and knowledge to new problem-solving situations		
7M6.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
7M6.4	Try more than one strategy when the first strategy proves to be unproductive		
7M6.5	Generalize solutions and strategies from earlier problems to new problem situations		
7M6.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
7M6.7	Use technology to understand quantitative relationships		
7M6.8	Use technology to investigate, define, and describe qualitative relationships such as patterns and functions		
7M7	**MATHEMATICAL COMMUNICATION**		
7M7.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
7M7.2	Identify and translate key words and phrases that imply mathematical operations		
7M7.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
7M7.4	Explain and justify thinking about mathematical ideas and solutions		
7M7.5	Make conjectures and present arguments in discussions of mathematical ideas		
7M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
7M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
7M7.8	Use mathematical notation to communicate and explain mathematical situations		
7M8	**MATHEMATICAL REASONING**		

Identifier	**Lander - Grade 7 - Mathematics**	Introduced	Completed
7M8.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
7M8.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
7M8.3	Ask questions to reflect on, clarify, and extend thinking		
7M8.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
7M9	**MATHEMATICAL CONNECTIONS**		
7M9.1	Link new concepts to prior knowledge		
7M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
7M9.3	Use models to explain the relationship of concepts to procedures		
7M9.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
7M9.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
7M9.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 8 - Mathematics	Introduced	Completed
M 8 1	**NUMBER, OPERATION, AND QUANTITATIVE REASONING**		
M 8.1.1A	Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.		
M 8.1.1B	Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.		
M 8.1.1C	Approximate mentally the value of irrational numbers as they arise from problem situations.		
M 8.1.1D	Express numbers in scientific notation, including negative exponents, in appropriate problem situations.		
M 8.1.2A	Select and use appropriate operations to solve problems and justify the selections.		
M 8.1.2B	Add, subtract, multiply, and divide rational numbers in problem situations.		
M 8.1.2C	Evaluate a solution for reasonableness.		
M 8.1.2D	Use multiplication by a constant factor (unit rate) to represent proportional relationships; for example, the arm span of a gibbon is about 1.4 times its height, a = 1.4h.		
M 8 2	**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING**		
M 8.2.1A	Compare and contrast proportional and nonproportional relationships.		
M 8.2.1B	Estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates.		
M 8.2.2A	Generate a different representation given one representation of data such as a table, graph, equation, or verbal description.		
M 8.2.3A	Estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.		
M 8.2.3B	Use an algebraic expression to find any term in a sequence.		
M 8 3	**GEOMETRY AND SPATIAL REASONING**		
M 8.3.1A	Generate similar shapes using dilations including enlargements and reductions.		
M 8.3.1B	Graph dilations, reflections, and translations on a coordinate plane.		
M 8.3.2A	Draw solids from different perspectives.		
M 8.3.2B	Use geometric concepts and properties to solve problems in fields such as art and architecture.		
M 8.3.2C	Use pictures or models to demonstrate the Pythagorean theorem.		
M 8.3.2D	Locate and name points on a coordinate plane using ordered pairs of rational numbers.		
M 8 4	**MEASUREMENT**		
M 8.4.1A	Find surface area of prisms and cylinders using models and nets (two-dimensional models).		
M 8.4.1B	Estimate answers and use formulas to solve application problems involving surface area and volume.		
M 8.4.2A	Use the Pythagorean theorem to solve real-life problems.		
M 8.4.2B	Use proportional relationships in similar shapes to find missing measurements.		
M 8.4.3A	Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally.		
M 8.4.3B	Describe the resulting effect on volume when dimensions of a solid are changed proportionally.		
M 8 5	**PROBABILITY AND STATISTICS**		
M 8.5.1A	Find the probabilities of compound events (dependent and independent).		
M 8.5.1B	Use theoretical probabilities and experimental results to make predictions and decisions.		
M 8.5.2A	Select the appropriate measure of central tendency to describe a set of data for a particular purpose.		
M 8.5.2B	Draw conclusions and make predictions by analyzing trends in scatterplots.		
M 8.5.2C	Construct circle graphs, bar graphs, and histograms, without technology.		
M 8.5.3A	Evaluate methods of sampling to determine validity of an inference made from a set of data.		
M 8.5.3B	Recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis.		
M 8 6	**UNDERLYING PROCESSES AND MATHEMATICAL TOOLS**		
M 8.6.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.		
M 8.6.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 8.6.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 8.6.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.		
M 8.6.3A	Make conjectures from patterns or sets of examples and nonexamples.		
M 8.6.3B	Validate conclusions using mathematical properties and relationships.		

Identifier	Nevada - Grade 8 - Mathematics	Introduced	Completed
8 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
8 M 1.8.1	Read, write, add, subtract, multiply, and divide real numbers in various forms including radical, exponential, and scientific notation.		
8 M 1.8.2	Compute with rational and irrational numbers to solve a variety of problems including rates, recipes, unit costs, and percents (e.g., discounts, interest, sale, prices, commissions, taxes).		
8 M 1.8.3	Explain and apply number theory and the properties of real numbers to solve problems.		
8 M 1.8.6	Compare and order rational numbers.		
8 M 1.8.7	Estimate in problem-solving situations and in practical applications; determine the reasonableness of the answer and verify the results.		
8 M 1.8.9	Explain the relationship among fractions, decimals, and percents; translate among various representations of equal numbers (e.g., from fractions to decimals to percents, various forms of "1" such as 3/3 or 16/16) to solve problems efficiently.		
8 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
8 M 2.8.1	Use inductive reasoning to find the missing term in number and geometric patterns and to generalize basic patterns to the nth term, with and without calculators; use written, oral, and symbolic language to identify and describe patterns, sequences, and functions.		
8 M 2.8.2	Translate among verbal descriptions, graphic, tabular, and algebraic representations of mathematical situations.		
8 M 2.8.3	Identify, model, describe, and evaluate relationships, including functions, using a variety of methods with and without technology.		
8 M 2.8.4	Add and subtract binomials; describe the connection between the algebraic process and the arithmetic process.		
8 M 2.8.5	Describe how a change in one variable of a mathematical relationship affects the remaining variables using various tools and methods.		
8 M 2.8.6	Model, identify, and solve linear equations and inequalities; relate this process to the order of operations.		
8 M 2.8.7	Solve simple linear equations and connect that process to the order of operations.		
8 M 3	**MEASUREMENT**		
8 M 3.8.2	Demonstrate an understanding of precision, error, and tolerance in measurement using the appropriate measurement tool to the required degree of accuracy.		
8 M 3.8.3	Select and apply appropriate formulas to solve problems; identify the relationship between changes in area and volume and changes in linear measures of figures.		
8 M 3.8.5	Apply ratios and proportions to calculate rates and as a method of indirect measure (e.g., miles per hour, cost per unit).		
8 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
8 M 4.8.2	Apply the properties of equality and proportionality to solve problems involving congruent or similar shapes.		
8 M 4.8.3	Use coordinate geometry and models to change scale (enlarge and reduce).		
8 M 4.8.5	Use coordinate geometry to represent and interpret relationships defined by equations and formulas (including distance, midpoint, and slope), with and without technology.		
8 M 4.8.6	Form generalizations and validate conclusions about properties of geometric shapes including parallel lines, perpendicular lines, bisectors, triangles, and quadrilaterals.		
8 M 4.8.7	Verify and explain the Pythagorean theorem using various methods (e.g., using grid paper, applying it to a missing side of a right triangle); determine missing sides and angles of triangles based on properties of their sides and angles.		
8 M 4.8.8	Use hand tools, technology, and models to construct figures and bisect angles and line segments; distinguish among constructions, sketches, and drawings.		
8 M 5	**DATA ANALYSIS**		
8 M 5.8.1	Organize, display, read, and analyze data, with and without technology, using a variety of displays including box-and-whisker plots.		
8 M 5.8.2	Find the theoretical probability of an event using different counting methods (e.g., tree diagrams, sample spaces, and organized lists) and compare those results with actual (experimental) results, differentiating between the probability of an event and the odds of an event.		
8 M 5.8.3	Find the number of combinations possible in given situations using a variety of counting methods.		
8 M 5.8.5	Evaluate arguments that are based on data analysis for accuracy and validity; analyze the effect a change of scale or a change of format will have on statistical charts and graphs.		
8 M 5.8.6	Formulate reasonable inferences and projections based on interpolations and extrapolations of data to solve problems.		
8 M 6	**PROBLEM SOLVING**		
8 M 6.8.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
8 M 6.8.2	Apply previous experience and knowledge to new problem-solving situations.		
8 M 6.8.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		

Identifier	Nevada - Grade 8 - Mathematics	Introduced	Completed
8 M 6.8.6	Try more than one strategy when the first strategy proves to be unproductive.		
8 M 6.8.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
8 M 6.8.9	Generalize solutions and strategies from earlier problems to new problem situations.		
8 M 6.8.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
8 M 6.8.11	Apply combinations of proven strategies and previous knowledge to solve nonroutine problems.		
8 M 6.8.13	Use technology, including calculators, to solve problems and verify solutions.		
8 M 6.8.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
8 M 7	**MATHEMATICAL COMMUNICATION**		
8 M 7.8.1	Discuss and exchange ideas about mathematics as a part of learning.		
8 M 7.8.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
8 M 7.8.3	Read expository text to learn about mathematics.		
8 M 7.8.6	Interpret and solve word problems without the necessity of key words or phrases.		
8 M 7.8.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
8 M 7.8.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
8 M 7.8.11	Make conjectures and present arguments in discussions of mathematical ideas.		
8 M 7.8.14	Explain and evaluate thinking about mathematical ideas and solutions based on the roles of definitions, properties, common rules, and symbols in solving problems.		
8 M 7.8.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
8 M 7.8.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
8 M 7.8.17	Use mathematical notation to communicate and explain mathematical situations.		
8 M 8	**MATHEMATICAL REASONING**		
8 M 8.8.3	Construct, justify, and defend mathematical conclusions, using logical arguments, in situations related to mathematics, science, and technology.		
8 M 8.8.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
8 M 8.8.5	Follow a logical argument and judge its validity.		
8 M 8.8.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
8 M 8.8.8	Ask questions to reflect on, clarify, and extend thinking.		
8 M 8.8.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
8 M 8.8.10	Construct valid arguments; make and test conjectures about algebraic and geometric properties based on mathematical principles.		
8 M 8.8.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
8 M 9	**MATHEMATICAL CONNECTIONS**		
8 M 9.8.1	Link new concepts to prior knowledge.		
8 M 9.8.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
8 M 9.8.3	Use models to explain the relationship of concepts to procedures.		
8 M 9.8.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
8 M 9.8.6	Use and analyze the connections between mathematics and other disciplines.		
8 M 9.8.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
8 M 9.8.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 8 - Mathematics	Introduced	Completed
8M1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
8M1.1	Develop accuracy in computation using integers, exponents, and scientific notation		
8M1.2	Solve problems applying number theory and the properties of real numbers		
8M1.3	Solve problems using rates, ratios, and percents		
8M1.4	Compare, order, and find relationships between fractions decimals and percents		
8M1.5	Compute with whole numbers, fractions, and decimals		
8M2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
8M2.1	Analyze and generalize patterns to find the missing term in arithmetic and geometric patterns		
8M2.2	Evaluate function relationships		
8M2.3	Add and subtract binomials		
8M2.4	Model and solve linear equations and inequalities using order of operations		
8M2.5	Evaluate formulas and algebraic expressions		
8M2.6	Add, subtract, multiply, divide, and factor polynomials		
8M2.7	Simplify rational algebraic expressions		
8M2.8	Solve quadratic equations and inequalities using the quadratic formula, zero product property, and completing the square		
8M2.9	Solve systems of equations, linear and quadratic, using graphing, substitution, and linear elimination methods		
8M3	**MEASUREMENT**		
8M3.1	Use appropriate tools to measure precisely and accurately		
8M3.2	Solve problems using formulas and identify relationships between area, volume and distance		
8M3.3	Formulate conclusions about properties of geometric shapes		
8M3.4	Apply concepts to solve problems involving perimeter, area, and volume		
8M3.5	Solve problems using rates, ratios, and proportions		
8M4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
8M4.1	Use models, properties and coordinate geometry to solve problems		
8M4.2	Solve problems involving coordinate geometry including finding the slope, midpoint, and distance		
8M4.3	Formulate conclusions about properties of geometric shapes		
8M4.4	Solve problems using the Pythagorean Theorem		
8M4.5	Construct geometric figures and bisect angles and line segments		
8M4.6	Apply concepts to solve problems involving perimeter, area, and volume		
8M5	**DATA ANALYSIS**		
8M5.1	Display, read, organize, and analyze data		
8M5.2	Find the theoretical probability of an event		
8M5.3	Analyze, evaluate, and make reasonable inferences based on sets of data		
8M6	**PROBLEM SOLVING**		
8M6.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
8M6.2	Apply previous experience and knowledge to new problem-solving situations		
8M6.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
8M6.4	Try more than one strategy when the first strategy proves to be unproductive		
8M6.5	Generalize solutions and strategies from earlier problems to new problem situations		
8M6.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
8M6.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
8M6.8	Use technology, including calculators, to investigate, define, and describe qualitative relationships such as patterns and functions		
8M7	**MATHEMATICAL COMMUNICATION**		
8M7.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
8M7.2	Identify and translate key words and phrases that imply mathematical operations		
8M7.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
8M7.4	Explain and justify thinking about mathematical ideas and solutions		
8M7.5	Make conjectures and present arguments in discussions of mathematical ideas		
8M7.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		

Identifier	**Lander - Grade 8 - Mathematics**	Introduced	Completed
8M7.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
8M7.8	Use mathematical notation to communicate and explain mathematical situations		
8M8	**MATHEMATICAL REASONING**		
8M8.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
8M8.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
8M8.3	Ask questions to reflect on, clarify, and extend thinking		
8M8.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
8M9	**MATHEMATICAL CONNECTIONS**		
8M9.1	Link new concepts to prior knowledge		
8M9.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
8M9.3	Use models to explain the relationship of concepts to procedures		
8M9.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
8M9.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
8M9.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 9 - Mathematics	Introduced	Completed
	FOUNDATIONS FOR FUNCTIONS		
M 9.1.1A	The student describes independent and dependent quantities in functional relationships.		
M 9.1.1B	The student uses data sets to determine functional (systematic) relationships between quantities.		
M 9.1.1C	The student describes functional relationships for given problem situations and writes equations or inequalities to answer questions arising from the situations.		
M 9.1.1D	The student represents relationships among quantities using models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities.		
M 9.1.1E	The student interprets and makes inferences from functional relationships.		
M 9.2.1A	The student identifies the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions.		
M 9.2.1B	For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.		
M 9.2.1C	The student interprets situations in terms of given graphs.		
M 9.2.1D	In solving problems, the student organizes data, interprets scatterplots, and models, predicts, and makes decisions and critical judgments.		
M 9.2.2A	The student uses symbols to represent unknowns and variables.		
M 9.2.2B	Given situations, the student looks for patterns and represents generalizations algebraically.		
M 9.2.3A	The student finds specific function values, simplifies polynomial expressions, transforms and solves equations, and factors as necessary in problem situations.		
M 9.2.3B	The student uses the commutative, associative, and distributive properties to simplify algebraic expressions.		
	LINEAR FUNCTIONS		
M 9.3.1A	The student determines whether or not given situations can be represented by linear functions.		
M 9.3.1B	The student translates among and uses algebraic, tabular, graphical, or verbal descriptions of linear functions.		
M 9.3.2A	The student develops the concept of slope as rate of change and determines slopes from graphs, tables, and algebraic representations.		
M 9.3.2B	The student interprets the meaning of slope and intercepts in situations using data, symbolic representations, or graphs.		
M 9.3.2C	The student investigates, describes, and predicts the effects of changes in m and b on the graph of $y = mx + b$.		
M 9.3.2D	The student graphs and writes equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept.		
M 9.3.2E	The student determines the intercepts of linear functions from graphs, tables, and algebraic representations.		
M 9.3.2F	The student interprets and predicts the effects of changing slope and y-intercept in applied situations.		
M 9.3.2G	The student relates direct variation to linear functions and solves problems involving proportional change.		
M 9.4.1A	Linear functions: The student analyzes situations involving linear functions and formulates linear equations or inequalities to solve problems.		
M 9.4.1B	The student investigates methods for solving linear equations and inequalities using models, graphs, and the properties of equality, selects a method, and solves the equations and inequalities.		
M 9.4.1C	For given contexts, the student interprets and determines the reasonableness of solutions to linear equations and inequalities.		
M 9.4.2A	The student analyzes situations and formulates systems of linear equations to solve problems.		
	QUADRATIC AND OTHER NONLINEAR FUNCTIONS		
M 9.5.1A	The student investigates, describes, and predicts the effects of changes in c on the graph of $y = x^2 + c$.		
M 9.5.2A	The student uses the laws of exponents and applies them in problem-solving situations.		
	GEOMETRY AND SPATIAL REASONING		
M 9.6.1A	Generate similar shapes using dilations including enlargements and reductions.		
M 9.6.1B	Graph dilations, reflections, and translations on a coordinate plane.		
M 9.6.2A	Locate and name points on a coordinate plane using ordered pairs of rational numbers.		
M 9.7.1A	Draw solids from different perspectives.		
M 9.7.1B	Use geometric concepts and properties to solve problems in fields such as art and architecture.		
M 9.7.1C	Use pictures or models to demonstrate the Pythagorean theorem.		
	MEASUREMENT		
M 9.8.1A	Find surface area of prisms and cylinders using models and nets (two-dimensional models).		
M 9.8.1B	Connect models to formulas for volume of prisms, cylinders, pyramids, and cones.		
M 9.8.1C	Estimate answers and use formulas to solve application problems involving surface area and volume.		
M 9.8.2A	Use the Pythagorean theorem to solve real-life problems.		
M 9.8.2B	Use proportional relationships in similar shapes to find missing measurements.		
M 9.8.3A	Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally.		
M 9.8.3B	Describe the resulting effect on volume when dimensions of a solid are changed proportionally.		
	NUMBER, OPERATION, AND QUANTITATIVE REASONING		
M 9.9.1A	Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.		
	PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING		
M 9.9.2A	Estimate and find solutions to application problems involving percents and proportional relationships, such as similarity and rates.		
	PROBABILITY AND STATISTICS		

Identifier	Kamico - Grade 9 - Mathematics	Introduced	Completed
M 9.9.3A	Find the probabilities of compound events (dependent and independent).		
M 9.9.3B	Use theoretical probabilities and experimental results to make predictions and decisions.		
M 9.9.4A	Select the appropriate measure of central tendency to describe a set of data for a particular purpose.		
M 9.9.4B	Construct circle graphs, bar graphs, and histograms, with and without technology.		
M 9.9.5A	Recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis.		
	UNDERLYING PROCESSES AND MATHEMATICAL TOOLS		
M 9.10.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.		
M 9.10.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 9.10.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 9.10.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.		
M 9.10.3A	Make conjectures from patterns or sets of examples and nonexamples.		
M 9.10.3B	Validate conclusions using mathematical properties and relationships.		

Identifier	Nevada - Grade 9 - Mathematics	Introduced	Completed
9 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
9 M 1.12.1	Calculate and estimate sums, differences, products, quotients, powers, and roots using mental math, formulas, and algorithms.		
9 M 1.12.2	Apply the laws of exponents to perform operations on expressions with integral exponents and expressions in scientific notation.		
9 M 1.12.3	Apply the properties and theories of the real-number system to everyday situations.		
9 M 1.12.5	Perform simple operations on matrices.		
9 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
9 M 2.12.2	Represent and solve problems using discrete structures including graphs and matrices, with and without technology.		
9 M 2.12.3	Create and use different forms of a variety of equations, proportions, and/or formulas (e.g., I = PRT or R = I/PT), solving for the needed variable as necessary in given situations.		
9 M 2.12.4	Add, subtract, multiply, and factor (1st and 2nd degree) polynomials, describing each step in the process and the connection between the algebraic process and the arithmetic process; use simple quadratic equations with integer roots to solve practical and mathematical problems.		
9 M 2.12.5	Model practical problems from everyday situations with a variety of models that includes matrices, translating among tabular, symbolic, and graphical representations of functions, with and without technology.		
9 M 2.12.6	Determine the domain and range of linear relations given a graph or a set of ordered pairs; explain their importance in problem-solving situations.		
9 M 2.12.7	Solve systems of two linear equations, both algebraically and graphically; use graphing calculators as a primary tool in solving these problems and to verify solutions found by other methods.		
9 M 3	**MEASUREMENT**		
9 M 3.12.1	Convert between customary and metric systems; convert among monetary systems.		
9 M 3.12.2	Select and use measurement tools, techniques, and formulas to calculate and compare rates, cost, distances, interest, temperatures, and weight/mass.		
9 M 3.12.3	Distinguish and differentiate among the structures, language, and uses of systems of measures (e.g., linear, square units, cubic units); justify and communicate the differences between accuracy, precision, error, and tolerance in measurement; describe how each of these can affect solutions found in problem situations.		
9 M 3.12.4	Use and interpret consumer data (e.g., amortization tables, tax tables, and compound-interest charts) to make informed financial decisions related to practical applications such as budget.		
9 M 3.12.5	Use relationships (e.g., proportions) and formulas (indirect measurement) to determine the measurement of unknown dimensions, angles, areas, and volumes to solve problems.		
9 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
9 M 4.12.1	Identify and use the properties of polygons (including interior and exterior angles) and elements of circles (e.g., angles, arcs, chords, secants, and tangents) to solve practical problems.		
9 M 4.12.5	Use coordinate geometry to graph linear equations, determine slopes of lines, identify parallel and perpendicular lines, and find possible solutions to sets of equations; use algebraic techniques to solve problems determined by geometric relationships.		
9 M 4.12.6	Use complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal, and angles in polygons to solve practical problems.		
9 M 4.12.7	Apply the Pythagorean theorem, its converse, properties of special right triangles, and right-triangle trigonometry to solve practical problems.		
9 M 4.12.8	Use tools, technology, and models to sketch, draw, and construct geometric figures in order to solve problems and to demonstrate the properties of geometric figures.		
9 M 4.12.9	Construct, justify, and defend mathematical conclusions using logical, sequential, deductive reasoning supported by established mathematical principles.		
9 M 5	**DATA ANALYSIS**		
9 M 5.12.1	Use calculators and computers to create and manipulate tables, graphs, and matrices to communicate statistical information; use the shape of graphs of normal distributions to compare and analyze information.		
9 M 5.12.2	Design, conduct, analyze, and communicate the results of multistage probability experiments.		
9 M 5.12.3	Distinguish between and apply permutations and combinations using a variety of methods, including the fundamental counting principle.		
9 M 5.12.4	Select and use the measures of central tendency such as mean, median, mode, and variability including range, distribution, and possible outliers that are appropriate for given situations.		
9 M 5.12.5	Analyze the validity of statistical conclusions noting various sources of bias, misuse, and abuse of data caused by a wide variety of factors including choices of scale, probability versus odds, inappropriate uses of measures of central tendency, inaccurate curve fitting, and inappropriate uses of controls or sample groups.		
9 M 5.12.6	Design, construct, analyze, and select an appropriate type of graph to represent data to communicate the results of statistical experiments (e.g., write a survey question and analyze and communicate the findings).		
9 M 6	**PROBLEM SOLVING**		
9 M 6.12.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
9 M 6.12.2	Apply previous experience and knowledge to new problem-solving situations.		
9 M 6.12.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
9 M 6.12.6	Try more than one strategy when the first strategy proves to be unproductive.		
9 M 6.12.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
9 M 6.12.9	Generalize solutions and strategies from earlier problems to new problem situations.		
9 M 6.12.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		

Identifier	Nevada - Grade 9 - Mathematics	Introduced	Completed
9 M 6.12.11	Apply combinations of proven strategies and previous knowledge to solve nonroutine problems.		
9 M 6.12.13	Use technology, including calculators, to solve problems and verify solutions.		
9 M 6.12.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
9 M 7	**MATHEMATICAL COMMUNICATION**		
9 M 7.12.1	Discuss and exchange ideas about mathematics as a part of learning.		
9 M 7.12.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
9 M 7.12.3	Read expository text to learn about mathematics.		
9 M 7.12.6	Interpret and solve word problems without the necessity of key words or phrases.		
9 M 7.12.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
9 M 7.12.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
9 M 7.12.11	Make conjectures and present arguments in discussions of mathematical ideas.		
9 M 7.12.14	Explain and evaluate thinking about mathematical ideas and solutions based on the roles of definitions, properties, common rules, and symbols in solving problems.		
9 M 7.12.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
9 M 7.12.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
9 M 7.12.17	Use mathematical notation to communicate and explain mathematical situations.		
9 M 8	**MATHEMATICAL REASONING**		
9 M 8.12.3	Construct, justify, and defend mathematical conclusions, using logical arguments, in situations related to mathematics, science, and technology.		
9 M 8.12.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
9 M 8.12.5	Follow a logical argument and judge its validity.		
9 M 8.12.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
9 M 8.12.8	Ask questions to reflect on, clarify, and extend thinking.		
9 M 8.12.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
9 M 8.12.10	Construct valid arguments; make and test conjectures about algebraic and geometric properties based on mathematical principles.		
9 M 8.12.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
9 M 9	**MATHEMATICAL CONNECTIONS**		
9 M 9.12.1	Link new concepts to prior knowledge.		
9 M 9.12.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
9 M 9.12.3	Use models to explain the relationship of concepts to procedures.		
9 M 9.12.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
9 M 9.12.6	Use and analyze the connections between mathematics and other disciplines.		
9 M 9.12.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
9 M 9.12.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 9 - Mathematics	Introduced	Completed
9M1	**REAL NUMBER SYSTEM**		
9M1.1	Review previous grade topics while engaging in hands-on laboratory activities		
9M1.2	Review previous grade topics along with implementing effective problem solving strategies		
9M1.3	Solve problems using signed numbers, exponents, including integral exponents and radicals		
9M1.4	Apply properties and theories of the real number system including signed numbers, exponents, radicals, and scientific notation		
9M1.5	Evaluate formulas and algebraic expressions, including rational expressions, using multiple strategies		
9M1.6	Demonstrate operations with polynomials, including multiplying and factoring		
9M2	**EQUATIONS AND SYSTEMS OF EQUATIONS**		
9M2.1	Solve problems integrating coordinate geometry and algebra		
9M2.2	Determine solutions for multiple-step linear equations and inequalities involving real numbers		
9M2.3	Solve multi-step linear and non-linear equations and inequalities involving real numbers, with a variety of methods		
9M2.4	Solve systems of linear and non-linear equations and inequalities, with and without technology		
9M2.5	Solve problems involving domain and range of functions and relations		
9M2.6	Describe and explore relations and functions, including notation, domain, and range		
9M2.7	Graph linear and non-linear equations and inequalities		
9M3	**PROBLEM SOLVING**		
9M3.1	Solve theoretical, practical, and work-related problems involving indirect and direct methods, including the appropriateness of an answer or measurement		
9M3.2	Apply a variety of strategies to solve theoretical, practical, and real-world problems		
9M3.3	Justify mathematical solutions using logical reasoning, tools, and models of algebraic thinking that enables students to understand mathematical connections in the real world		
9M3.4	Solve theoretical, practical, and work-related problems integrating geometry, statistics, and algebra		
9M3.5	Solve theoretical, practical, and work-related problems involving indirect measure, using prevision, error, and tolerance		
9M3.6	Solve theoretical, practical, and work-related problems integrating geometry, right triangle, trigonometry, and algebra		
9M3.7	Model theoretical, practical, and real-world problems using multiple representations including matrices and graphs		
9M3.8	Reinforce and maintain basic mathematical skills necessary for further study		
9M3.9	Design and present graphical results of a statistical experiment		
9M4	**MATHEMATICAL COMMUNICATION**		
9M4.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
9M4.2	Identify and translate key words and phrases that imply mathematical operations		
9M4.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
9M4.4	Explain and justify thinking about mathematical ideas and solutions		
9M4.5	Make conjectures and present arguments in discussions of mathematical ideas		
9M4.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
9M4.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
9M4.8	Use mathematical notation to communicate and explain mathematical situations		
9M5	**MATHEMATICAL REASONING**		
9M5.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
9M5.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
9M5.3	Ask questions to reflect on, clarify, and extend thinking		
9M5.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
9M6	**MATHEMATICAL CONNECTIONS**		
9M6.1	Link new concepts to prior knowledge		
9M6.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
9M6.3	Use models to explain the relationship of concepts to procedures		
9M6.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
9M6.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
9M6.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 10 - Mathematics	Introduced	Completed
	FOUNDATIONS FOR FUNCTIONS		
M 10.1.1A	The student describes independent and dependent quantities in functional relationships.		
M 10.1.1B	The student uses data sets to determine functional (systematic) relationships between quantities.		
M 10.1.1C	The student describes functional relationships for given problem situations and writes equations or inequalities to answer questions arising from the situations.		
M 10.1.1D	The student represents relationships among quantities using models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities.		
M 10.1.1E	The student interprets and makes inferences from functional relationships.		
M 10.2.1A	The student identifies the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions.		
M 10.2.1B	For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.		
M 10.2.1C	The student interprets situations in terms of given graphs.		
M 10.2.1D	In solving problems, the student organizes data, interprets scatterplots, and models, predicts, and makes decisions and critical judgments.		
M 10.2.2A	The student uses symbols to represent unknowns and variables.		
M 10.2.2B	Given situations, the student looks for patterns and represents generalizations algebraically.		
M 10.2.3A	The student finds specific function values, simplifies polynomial expressions, transforms and solves equations, and factors as necessary in problem situations.		
M 10.2.3B	The student uses the commutative, associative, and distributive properties to simplify algebraic expressions.		
	LINEAR FUNCTIONS		
M 10.3.1A	The student determines whether or not given situations can be represented by linear functions.		
M 10.3.1B	The student translates among and uses algebraic, tabular, graphical, or verbal descriptions of linear functions.		
M 10.3.2A	The student develops the concept of slope as rate of change and determines slopes from graphs, tables, and algebraic representations.		
M 10.3.2B	The student interprets the meaning of slope and intercepts in situations using data, symbolic representations, or graphs.		
M 10.3.2C	The student investigates, describes, and predicts the effects of changes in m and b on the graph of $y = mx + b$.		
M 10.3.2D	The student graphs and writes equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept.		
M 10.3.2E	The student determines the intercepts of linear functions from graphs, tables, and algebraic representations.		
M 10.3.2F	The student interprets and predicts the effects of changing slope and y-intercept in applied situations.		
M 10.3.2G	The student relates direct variation to linear functions and solves problems involving proportional change.		
M 10.4.1A	The student analyzes situations involving linear functions and formulates linear equations or inequalities to solve problems.		
M 10.4.1B	The student investigates methods for solving linear equations and inequalities using models, graphs, and the properties of equality, selects a method, and solves the equations and inequalities.		
M 10.4.1C	For given contexts, the student interprets and determines the reasonableness of solutions to linear equations and inequalities.		
M 10.4.2A	The student analyzes situations and formulates systems of linear equations to solve problems.		
M 10.4.2B	The student solves systems of linear equations using models, graphs, tables, and algebraic methods.		
M 10.4.2C	For given contexts, the student interprets and determines the reasonableness of solutions to systems of equations.		
	QUADRATIC AND OTHER NONLINEAR FUNCTIONS		
M 10.5.1A	The student investigates, describes, and predicts the effects of changes in a on the graph of $y = ax^2$.		
M 10.5.1B	The student investigates, describes, and predicts the effects of changes in c on the graph of $y = x^2 + c$.		
M 10.5.1C	For problem situations, the student analyzes graphs of quadratic functions and draws conclusions.		
M 10.5.2A	The student solves quadratic equations using models, tables, graphs, and algebraic methods.		
M 10.5.2B	The student relates the solutions of quadratic equations to the roots of their functions.		
M 10.5.3A	The student uses the laws of exponents and applies them in problem-solving situations.		
	GEOMETRY AND SPATIAL REASONING		
M 10.6.1A	Generate similar shapes using dilations including enlargements and reductions.		
M 10.6.1B	Graph dilations, reflections, and translations on a coordinate plane.		
M 10.6.2A	Locate and name points on a coordinate plane using ordered pairs of rational numbers.		
M 10.7.1A	Draw solids from different perspectives.		
M 10.7.1B	Use geometric concepts and properties to solve problems in fields such as art and architecture.		
M 10.7.1C	Use pictures or models to demonstrate the Pythagorean theorem.		
	MEASUREMENT		
M 10.8.1A	Find surface area of prisms and cylinders using models and nets (two-dimensional models).		
M 10.8.1B	Connect models to formulas for volume of prisms, cylinders, pyramids, and cones.		
M 10.8.1C	Estimate answers and use formulas to solve application problems involving surface area and volume.		
M 10.8.2A	Use the Pythagorean theorem to solve real-life problems.		
M 10.8.2B	Use proportional relationships in similar shapes to find missing measurements.		
M 10.8.3A	Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally.		
M 10.8.3B	Describe the resulting effect on volume when dimensions of a solid are changed proportionally.		
	PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING		
M 10.9.1A	Estimate and find solutions to application problems involving percents and proportional relationships, such as similarity and rates.		
	PROBABILITY AND STATISTICS		
M 10.9.2A	Find the probabilities of compound events (dependent and independent).		

Identifier	Kamico - Grade 10 - Mathematics	Introduced	Completed
M 10.9.2B	Use theoretical probabilities and experimental results to make predictions and decisions.		
M 10.9.3A	Select the appropriate measure of central tendency to describe a set of data for a particular purpose.		
M 10.9.3B	Construct circle graphs, bar graphs, and histograms, with and without technology.		
M 10.9.4A	Recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis.		
	UNDERLYING PROCESSES AND MATHEMATICAL TOOLS		
M 10.10.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.		
M 10.10.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		
M 10.10.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		
M 10.10.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.		
M 10.10.3A	Make conjectures from patterns or sets of examples and nonexamples.		
M 10.10.3B	Validate conclusions using mathematical properties and relationships.		

Identifier	Nevada - Grade 10 - Mathematics	Introduced	Completed
10 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
10 M 1.12.1	Calculate and estimate sums, differences, products, quotients, powers, and roots using mental math, formulas, and algorithms.		
10 M 1.12.2	Apply the laws of exponents to perform operations on expressions with integral exponents and expressions in scientific notation.		
10 M 1.12.3	Apply the properties and theories of the real-number system to everyday situations.		
10 M 1.12.5	Perform simple operations on matrices.		
10 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
10 M 2.12.2	Represent and solve problems using discrete structures including graphs and matrices, with and without technology.		
10 M 2.12.3	Create and use different forms of a variety of equations, proportions, and/or formulas (e.g., I = PRT or R = I/PT), solving for the needed variable as necessary in given situations.		
10 M 2.12.4	Add, subtract, multiply, and factor (1st and 2nd degree) polynomials, describing each step in the process and the connection between the algebraic process and the arithmetic process; use simple quadratic equations with integer roots to solve practical and mathematical problems.		
10 M 2.12.5	Model practical problems from everyday situations with a variety of models that includes matrices, translating among tabular, symbolic, and graphical representations of functions, with and without technology.		
10 M 2.12.6	Determine the domain and range of linear relations given a graph or a set of ordered pairs; explain their importance in problem-solving situations.		
10 M 2.12.7	Solve systems of two linear equations, both algebraically and graphically; use graphing calculators as a primary tool in solving these problems and to verify solutions found by other methods.		
10 M 3	**MEASUREMENT**		
10 M 3.12.1	Convert between customary and metric systems; convert among monetary systems.		
10 M 3.12.2	Select and use measurement tools, techniques, and formulas to calculate and compare rates, cost, distances, interest, temperatures, and weight/mass.		
10 M 3.12.3	Distinguish and differentiate among the structures, language, and uses of systems of measures (e.g., linear, square units, cubic units); justify and communicate the differences between accuracy, precision, error, and tolerance in measurement; describe how each of these can affect solutions found in problem situations.		
10 M 3.12.4	Use and interpret consumer data (e.g., amortization tables, tax tables, and compound-interest charts) to make informed financial decisions related to practical applications such as budget.		
10 M 3.12.5	Use relationships (e.g., proportions) and formulas (indirect measurement) to determine the measurement of unknown dimensions, angles, areas, and volumes to solve problems.		
10 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
10 M 4.12.1	Identify and use the properties of polygons (including interior and exterior angles) and elements of circles (e.g., angles, arcs, chords, secants, and tangents) to solve practical problems.		
10 M 4.12.5	Use coordinate geometry to graph linear equations, determine slopes of lines, identify parallel and perpendicular lines, and find possible solutions to sets of equations; use algebraic techniques to solve problems determined by geometric relationships.		
10 M 4.12.6	Use complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal, and angles in polygons to solve practical problems.		
10 M 4.12.7	Apply the Pythagorean theorem, its converse, properties of special right triangles, and right-triangle trigonometry to solve practical problems.		
10 M 4.12.8	Use tools, technology, and models to sketch, draw, and construct geometric figures in order to solve problems and to demonstrate the properties of geometric figures.		
10 M 4.12.9	Construct, justify, and defend mathematical conclusions using logical, sequential, deductive reasoning supported by established mathematical principles.		
10 M 5	**DATA ANALYSIS**		
10 M 5.12.1	Use calculators and computers to create and manipulate tables, graphs, and matrices to communicate statistical information; use the shape of graphs of normal distributions to compare and analyze information.		
10 M 5.12.2	Design, conduct, analyze, and communicate the results of multistage probability experiments.		
10 M 5.12.3	Distinguish between and apply permutations and combinations using a variety of methods, including the fundamental counting principle.		
10 M 5.12.4	Select and use the measures of central tendency such as mean, median, mode, and variability including range, distribution, and possible outliers that are appropriate for given situations.		
10 M 5.12.5	Analyze the validity of statistical conclusions noting various sources of bias, misuse, and abuse of data caused by a wide variety of factors including choices of scale, probability versus odds, inappropriate uses of measures of central tendency, inaccurate curve fitting, and inappropriate uses of controls or sample groups.		
10 M 5.12.6	Design, construct, analyze, and select an appropriate type of graph to represent data to communicate the results of statistical experiments (e.g., write a survey question and analyze and communicate the findings).		
10 M 6	**PROBLEM SOLVING**		
10 M 6.12.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
10 M 6.12.2	Apply previous experience and knowledge to new problem-solving situations.		
10 M 6.12.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
10 M 6.12.6	Try more than one strategy when the first strategy proves to be unproductive.		
10 M 6.12.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
10 M 6.12.9	Generalize solutions and strategies from earlier problems to new problem situations.		
10 M 6.12.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
10 M 6.12.11	Apply combinations of proven strategies and previous knowledge to solve nonroutine problems.		
10 M 6.12.13	Use technology, including calculators, to solve problems and verify solutions.		

Identifier	Nevada - Grade 10 - Mathematics	Introduced	Completed
10 M 6.12.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
10 M 7	**MATHEMATICAL COMMUNICATION**		
10 M 7.12.1	Discuss and exchange ideas about mathematics as a part of learning.		
10 M 7.12.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
10 M 7.12.3	Read expository text to learn about mathematics.		
10 M 7.12.6	Interpret and solve word problems without the necessity of key words or phrases.		
10 M 7.12.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
10 M 7.12.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
10 M 7.12.11	Make conjectures and present arguments in discussions of mathematical ideas.		
10 M 7.12.14	Explain and evaluate thinking about mathematical ideas and solutions based on the roles of definitions, properties, common rules, and symbols in solving problems.		
10 M 7.12.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
10 M 7.12.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
10 M 7.12.17	Use mathematical notation to communicate and explain mathematical situations.		
10 M 8	**MATHEMATICAL REASONING**		
10 M 8.12.3	Construct, justify, and defend mathematical conclusions, using logical arguments, in situations related to mathematics, science, and technology.		
10 M 8.12.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
10 M 8.12.5	Follow a logical argument and judge its validity.		
10 M 8.12.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
10 M 8.12.8	Ask questions to reflect on, clarify, and extend thinking.		
10 M 8.12.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
10 M 8.12.10	Construct valid arguments; make and test conjectures about algebraic and geometric properties based on mathematical principles.		
10 M 8.12.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
10 M 9	**MATHEMATICAL CONNECTIONS**		
10 M 9.12.1	Link new concepts to prior knowledge.		
10 M 9.12.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
10 M 9.12.3	Use models to explain the relationship of concepts to procedures.		
10 M 9.12.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
10 M 9.12.6	Use and analyze the connections between mathematics and other disciplines.		
10 M 9.12.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
10 M 9.12.8	Identify, explain, and use mathematics in everyday life.		

Identifier	**Lander - Grade 10 - Mathematics**	Introduced	Completed
10M1	**POLYNOMIALS AND RATIONAL EXPRESSIONS**		
10M1.1	Solve problems using the properties of real numbers		
10M1.2	Add, subtract, multiply, divide, and factor polynomials		
10M1.3	Solve problems, using powers and radicals		
10M1.4	Evaluate algebraic expressions		
10M1.5	Simplify rational algebraic expressions		
10M2	**EQUATIONS AND SYSTEMS OF EQUATIONS**		
10M2.1	Solve and graph linear equations and inequalities in one and two variables, including absolute value and radicals		
10M2.2	Solve problems involving coordinate geometry: determine the slope, identify the x- and y- intercepts, and derive the equation of a line		
10M2.3	Explore the effects of how changes in one variable affects other relationships		
10M2.4	Distinguish between functions and relations, and be able to identify given ranges and domains		
10M2.5	Solve quadratic equations and inequalities using the quadratic formula, zero product property, and completing the square		
10M2.6	Solve systems of equations, linear and quadratic, using graphing, substitution, and linear combination methods		
10M3	**PROBLEM SOLVING**		
10M3.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
10M3.2	Apply previous experience and knowledge to new problem-solving situations		
10M3.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
10M3.4	Try more than one strategy when the first strategy proves to be unproductive		
10M3.5	Generalize solutions and strategies from earlier problems to new problem situations		
10M3.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
10M3.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
10M3.8	Use technology, including calculators, to investigate, define, and describe qualitative relationships such as patterns and functions		
10M3.9	Solve real-world problems using appropriate formulas, relations, and functions, and properties		
10M3.10	Solve real-world problems using direct and indirect methods		
10M3.11	Solve real-world problems using appropriate strategies and tools		
10M3.12	Generalize conclusions, make inferences, and justify reasonableness of mathematical problems		
10M4	**MATHEMATICAL COMMUNICATION**		
10M4.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
10M4.2	Identify and translate key words and phrases that imply mathematical operations		
10M4.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
10M4.4	Explain and justify thinking about mathematical ideas and solutions		
10M4.5	Make conjectures and present arguments in discussions of mathematical ideas		
10M4.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
10M4.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
10M4.8	Use mathematical notation to communicate and explain mathematical situations		
10M5	**MATHEMATICAL REASONING**		
10M5.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
10M5.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
10M5.3	Ask questions to reflect on, clarify, and extend thinking		
10M5.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
10M6	**MATHEMATICAL CONNECTIONS**		
10M6.1	Link new concepts to prior knowledge		
10M6.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
10M6.3	Use models to explain the relationship of concepts to procedures		
10M6.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
10M6.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
10M6.6	Identify, explain, and use mathematics in everyday life		

Identifier	Kamico - Grade 11 - Mathematics		Introduced	Completed
	FOUNDATIONS FOR FUNCTIONS			
M 11.1.1A	The student describes independent and dependent quantities in functional relationships.			
M 11.1.1B	The student uses data sets to determine functional (systematic) relationships between quantities.			
M 11.1.1C	The student describes functional relationships for given problem situations and writes equations or inequalities to answer questions arising from the situations.			
M 11.1.1D	The student represents relationships among quantities using models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities.			
M 11.1.1E	The student interprets and makes inferences from functional relationships.			
M 11.2.1A	The student identifies the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions.			
M 11.2.1B	For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.			
M 11.2.1C	The student interprets situations in terms of given graphs.			
M 11.2.1D	In solving problems, the student organizes data, interprets scatterplots, and models, predicts, and makes decisions and critical judgments.			
M 11.2.2A	The student uses symbols to represent unknowns and variables.			
M 11.2.2B	Given situations, the student looks for patterns and represents generalizations algebraically.			
M 11.2.3A	The student finds specific function values, simplifies polynomial expressions, transforms and solves equations, and factors as necessary in problem situations.			
M 11.2.3B	The student uses the commutative, associative, and distributive properties to simplify algebraic expressions.			
	LINEAR FUNCTIONS			
M 11.3.1A	The student determines whether or not given situations can be represented by linear functions.			
M 11.3.1B	The student translates among and uses algebraic, tabular, graphical, or verbal descriptions of linear functions.			
M 11.3.2A	The student develops the concept of slope as a rate of change and determines slopes from graphs, tables, and algebraic representations.			
M 11.3.2B	The student interprets the meaning of slope and intercepts in situations using data, symbolic representations, or graphs.			
M 11.3.2C	The student investigates, describes, and predicts the effects of changes in m and b on the graph of $y = mx + b$.			
M 11.3.2D	The student graphs and writes equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept.			
M 11.3.2E	The student determines the intercepts of linear functions from graphs, tables, and algebraic representations.			
M 11.3.2F	The student interprets and predicts the effects of changing slope and y-intercept in applied situations.			
M 11.3.2G	The student relates direct variation to linear functions and solves problems involving proportional change.			
M 11.4.1A	The student analyzes situations involving linear functions and formulates linear equations or inequalities to solve problems.			
M 11.4.1B	The student investigates methods for solving linear equations and inequalities using models, graphs, and the properties of equality, selects a method, and solves the equations and inequalities.			
M 11.4.1C	For given contexts, the student interprets and determines the reasonableness of solutions to linear equations and inequalities.			
M 11.4.2A	The student analyzes situations and formulates systems of linear equations to solve problems.			
M 11.4.2B	The student solves systems of linear equations using models, graphs, tables, and algebraic methods.			
M 11.4.2C	For given contexts, the student interprets and determines the reasonableness of solutions to systems of equations.			
	QUADRATIC AND OTHER NONLINEAR FUNCTIONS			
M 11.5.1A	The student investigates, describes, and predicts the effects of changes in a on the graph of $y = ax^2$.			
M 11.5.1B	The student investigates, describes, and predicts the effects of changes in c on the graph of $y = x^2 + c$.			
M 11.5.1C	For problem situations, the student analyzes graphs of quadratic functions and draws conclusions.			
M 11.5.2A	The student solves quadratic equations using models, tables, graphs, and algebraic methods.			
M 11.5.2B	The student relates the solutions of quadratic equations to the roots of their functions.			
M 11.5.3A	The student uses the laws of exponents and applies them in problem-solving situations.			
	GEOMETRY			
M 11.6.1A	Geometric Structure	The student selects an appropriate representation (pictorial, graphical, verbal, or symbolic) in order to solve problems.		
M 11.6.2A	Geometric Patterns	The student uses numeric and geometric patterns to make generalizations about geometric properties, including properties of polygons, ratios in similar figures and solids, and angle relationships in polygons and circles.		
M 11.6.2B	Geometric Patterns	The student uses the properties of transformations and their compositions to make connections between mathematics and the real world in applications such as tessellations or fractals.		
M 11.6.2C	Geometric Patterns	The student identifies and applies patterns from right triangles to solve problems, including special right triangles (45-45-90 and 30-60-90) and triangles whose sides are Pythagorean triples.		
M 11.6.3A	Congruence and Geometry of Size	The student uses congruence transformations to make conjectures and justify properties of geometric figures.		
M 11.7.1A	Dimensionality and Geometry of Location	The student uses nets to represent three-dimensional objects.		
M 11.7.1B	Dimensionality and Geometry of Location	The student uses top, front, side, and corner views of three-dimensional objects to create accurate and complete representations and solve problems.		
M 11.7.2A	Dimensionality and Geometry of Location	The student uses one- and two-dimensional coordinate systems to represent points, lines, line segments, and figures.		
M 11.7.2B	Dimensionality and Geometry of Location	The student uses slopes and equations of lines to investigate geometric relationships, including parallel lines, perpendicular lines, and triangles and other polygons.		
M 11.7.2C	Dimensionality and Geometry of Location	The student uses formulas, including distance and midpoint.		

Identifier	Kamico - Grade 11 - Mathematics		Introduced	Completed
M 11.7.3A	Congruence and Geometry of Size	The student analyzes the characteristics of three-dimensional figures and their component parts.		
M 11.8.1A	Congruence and Geometry of Size	The student finds area of polygons and composite figures.		
M 11.8.1B	Congruence and Geometry of Size	The student finds areas of sectors and arc lengths of circles using proportional reasoning.		
M 11.8.1C	Congruence and Geometry of Size	The student uses the Pythagorean theorem.		
M 11.8.1D	Congruence and Geometry of Size	The student finds surface area and volumes of prisms, pyramids, spheres, cones, and cylinders in problem situations.		
M 11.8.2A	Similarity and Geometry of Shape	The student uses similarity properties and transformations to justify conjectures about geometric figures.		
M 11.8.2B	Similarity and Geometry of Shape	The student uses ratios to solve problems involving similar figures.		
M 11.8.2C	Similarity and Geometry of Shape	In a variety of ways, the student applies and justifies triangle similarity relationships, such as right triangle ratios and Pythagorean triples.		
M 11.8.2D	Similarity and Geometry of Shape	The student describes the effect on perimeter, area, and volume when length, width, or height of a three-dimensional solid is changed and applies this idea in solving problems.		
	PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING			
M 11.9.1A	Estimate and find solutions to application problems involving percents and proportional relationships, such as similarity and rates.			
	PROBABILITY AND STATISTICS			
M 11.9.2A	Find the probabilities of compound events (dependent and independent).			
M 11.9.2B	Use theoretical probabilities and experimental results to make predictions and decisions.			
M 11.9.3A	Select the appropriate measure of central tendency to describe a set of data for a particular purpose.			
M 11.9.3B	Construct circle graphs, bar graphs, and histograms, with and without technology.			
M 11.9.4A	Recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis.			
	UNDERLYING PROCESSES AND MATHEMATICAL TOOLS			
M 11.10.1A	Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.			
M 11.10.1B	Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.			
M 11.10.1C	Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.			
M 11.10.2A	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.			
M 11.10.3A	Make conjectures from patterns or sets of examples and nonexamples.			
M 11.10.3B	Validate conclusions using mathematical properties and relationships.			

Identifier	Nevada - Grade 11 - Mathematics	Introduced	Completed
11 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
11 M 1.12.1	Calculate and estimate sums, differences, products, quotients, powers, and roots using mental math, formulas, and algorithms.		
11 M 1.12.2	Apply the laws of exponents to perform operations on expressions with integral exponents and expressions in scientific notation.		
11 M 1.12.3	Apply the properties and theories of the real-number system to everyday situations.		
11 M 1.12.5	Perform simple operations on matrices.		
11 M 2	**PATTERNS, FUNCTIONS AND ALGEBRA**		
11 M 2.12.2	Represent and solve problems using discrete structures including graphs and matrices, with and without technology.		
11 M 2.12.3	Create and use different forms of a variety of equations, proportions, and/or formulas (e.g., I = PRT or R = I/PT), solving for the needed variable as necessary in given situations.		
11 M 2.12.4	Add, subtract, multiply, and factor (1st and 2nd degree) polynomials, describing each step in the process and the connection between the algebraic process and the arithmetic process; use simple quadratic equations with integer roots to solve practical and mathematical problems.		
11 M 2.12.5	Model practical problems from everyday situations with a variety of models that includes matrices, translating among tabular, symbolic, and graphical representations of functions, with and without technology.		
11 M 2.12.6	Determine the domain and range of linear relations given a graph or a set of ordered pairs; explain their importance in problem-solving situations.		
11 M 2.12.7	Solve systems of two linear equations, both algebraically and graphically; use graphing calculators as a primary tool in solving these problems and to verify solutions found by other methods.		
11 M 3	**MEASUREMENT**		
11 M 3.12.1	Convert between customary and metric systems; convert among monetary systems.		
11 M 3.12.2	Select and use measurement tools, techniques, and formulas to calculate and compare rates, cost, distances, interest, temperatures, and weight/mass.		
11 M 3.12.3	Distinguish and differentiate among the structures, language, and uses of systems of measures (e.g., linear, square units, cubic units); justify and communicate the differences between accuracy, precision, error, and tolerance in measurement; describe how each of these can affect solutions found in problem situations.		
11 M 3.12.4	Use and interpret consumer data (e.g., amortization tables, tax tables, and compound-interest charts) to make informed financial decisions related to practical applications such as budget.		
11 M 3.12.5	Use relationships (e.g., proportions) and formulas (indirect measurement) to determine the measurement of unknown dimensions, angles, areas, and volumes to solve problems.		
11 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
11 M 4.12.1	Identify and use the properties of polygons (including interior and exterior angles) and elements of circles (e.g., angles, arcs, chords, secants, and tangents) to solve practical problems.		
11 M 4.12.5	Use coordinate geometry to graph linear equations, determine slopes of lines, identify parallel and perpendicular lines, and find possible solutions to sets of equations; use algebraic techniques to solve problems determined by geometric relationships.		
11 M 4.12.6	Use complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal, and angles in polygons to solve practical problems.		
11 M 4.12.7	Apply the Pythagorean theorem, its converse, properties of special right triangles, and right-triangle trigonometry to solve practical problems.		
11 M 4.12.8	Use tools, technology, and models to sketch, draw, and construct geometric figures in order to solve problems and to demonstrate the properties of geometric figures.		
11 M 4.12.9	Construct, justify, and defend mathematical conclusions using logical, sequential, deductive reasoning supported by established mathematical principles.		
11 M 5	**DATA ANALYSIS**		
11 M 5.12.1	Use calculators and computers to create and manipulate tables, graphs, and matrices to communicate statistical information; use the shape of graphs of normal distributions to compare and analyze information.		
11 M 5.12.2	Design, conduct, analyze, and communicate the results of multistage probability experiments.		
11 M 5.12.3	Distinguish between and apply permutations and combinations using a variety of methods, including the fundamental counting principle.		
11 M 5.12.4	Select and use the measures of central tendency such as mean, median, mode, and variability including range, distribution, and possible outliers that are appropriate for given situations.		
11 M 5.12.5	Analyze the validity of statistical conclusions noting various sources of bias, misuse, and abuse of data caused by a wide variety of factors including choices of scale, probability versus odds, inappropriate uses of measures of central tendency, inaccurate curve fitting, and inappropriate uses of controls or sample groups.		
11 M 5.12.6	Design, construct, analyze, and select an appropriate type of graph to represent data to communicate the results of statistical experiments (e.g., write a survey question and analyze and communicate the findings).		
11 M 6	**PROBLEM SOLVING**		
11 M 6.12.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
11 M 6.12.2	Apply previous experience and knowledge to new problem-solving situations.		
11 M 6.12.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
11 M 6.12.6	Try more than one strategy when the first strategy proves to be unproductive.		
11 M 6.12.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
11 M 6.12.9	Generalize solutions and strategies from earlier problems to new problem situations.		

Identifier	Nevada - Grade 11 - Mathematics	Introduced	Completed
11 M 6.12.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
11 M 6.12.11	Apply combinations of proven strategies and previous knowledge to solve nonroutine problems.		
11 M 6.12.13	Use technology, including calculators, to solve problems and verify solutions.		
11 M 6.12.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
11 M 7	**MATHEMATICAL COMMUNICATION**		
11 M 7.12.1	Discuss and exchange ideas about mathematics as a part of learning.		
11 M 7.12.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
11 M 7.12.3	Read expository text to learn about mathematics.		
11 M 7.12.6	Interpret and solve word problems without the necessity of key words or phrases.		
11 M 7.12.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
11 M 7.12.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
11 M 7.12.11	Make conjectures and present arguments in discussions of mathematical ideas.		
11 M 7.12.14	Explain and evaluate thinking about mathematical ideas and solutions based on the roles of definitions, properties, common rules, and symbols in solving problems.		
11 M 7.12.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
11 M 7.12.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
11 M 7.12.17	Use mathematical notation to communicate and explain mathematical situations.		
11 M 8	**MATHEMATICAL REASONING**		
11 M 8.12.3	Construct, justify, and defend mathematical conclusions, using logical arguments, in situations related to mathematics, science, and technology.		
11 M 8.12.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
11 M 8.12.5	Follow a logical argument and judge its validity.		
11 M 8.12.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
11 M 8.12.8	Ask questions to reflect on, clarify, and extend thinking.		
11 M 8.12.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
11 M 8.12.10	Construct valid arguments; make and test conjectures about algebraic and geometric properties based on mathematical principles.		
11 M 8.12.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
11 M 9	**MATHEMATICAL CONNECTIONS**		
11 M 9.12.1	Link new concepts to prior knowledge.		
11 M 9.12.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
11 M 9.12.3	Use models to explain the relationship of concepts to procedures.		
11 M 9.12.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
11 M 9.12.6	Use and analyze the connections between mathematics and other disciplines.		
11 M 9.12.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
11 M 9.12.8	Identify, explain, and use mathematics in everyday life.		

Identifier	**Lander - Grade 11 - Mathematics**	Introduced	Completed
11M1	**REASONING AND LOGIC**		
11M1.1	Justify and solve problems using geometric models and tools		
11M1.2	Solve problems using the rules of logic and Venn diagrams		
11M1.3	Solve real-world problems involving plane figures and three-dimensional objects		
11M1.4	Justify and solve problems using geometric constructions		
11M1.5	Design proofs using deductive and inductive methods, indirect, paragraph, flow, and two-column formats		
11M1.6	Use technology to extend problem-solving strategies, develop reasoning and communication skills, and increase the students ability to inquire		
11M2	**CONNECTING GEOMETRY AND ALGEBRA**		
11M2.1	Represent and solve problems using transformations and tessellations		
11M2.2	Solve real-world problems using properties of congruence, similarity, and symmetry		
11M2.3	Solve real-world problems involving properties of polygons, circles, and the Pythagorean theorem		
11M2.4	Develop strategies for computing the area, perimeter, volume, and surface area of objects		
11M2.5	Develop estimation skills and accuracy in direct and indirect measurement		
11M2.6	Represent and solve problems using coordinate geometry		
11M3	**PROBLEM SOLVING**		
11M3.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
11M3.2	Apply previous experience and knowledge to new problem-solving situations		
11M3.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
11M3.4	Try more than one strategy when the first strategy proves to be unproductive		
11M3.5	Generalize solutions and strategies from earlier problems to new problem situations		
11M3.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
11M3.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern		
11M3.8	Use technology, including calculators, to investigate, define, and describe qualitative relationships such as		
11M3.9	Solve real-world problems using appropriate formulas, relations, and functions, and properties		
11M3.10	Solve real-world problems using direct and indirect methods		
11M3.11	Solve real-world problems using appropriate strategies and tools		
11M3.12	Generalize conclusions, make inferences, and justify reasonableness of mathematical problems		
11M4	**MATHEMATICAL COMMUNICATION**		
11M4.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
11M4.2	Identify and translate key words and phrases that imply mathematical operations		
11M4.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
11M4.4	Explain and justify thinking about mathematical ideas and solutions		
11M4.5	Make conjectures and present arguments in discussions of mathematical ideas		
11M4.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
11M4.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
11M4.8	Use mathematical notation to communicate and explain mathematical situations		
11M5	**MATHEMATICAL REASONING**		
11M5.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical		
11M5.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
11M5.3	Ask questions to reflect on, clarify, and extend thinking		
11M5.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
11M6	**MATHEMATICAL CONNECTIONS**		
11M6.1	Link new concepts to prior knowledge		
11M6.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
11M6.3	Use models to explain the relationship of concepts to procedures		
11M6.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
11M6.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music		
11M6.6	Identify, explain, and use mathematics in everyday life		

Identifier	Nevada - Grade 12 - Mathematics	Introduced	Completed
12 M 1	**NUMBERS, NUMBER SENSE, AND COMPUTATION**		
12 M 1.12.1	Calculate and estimate sums, differences, products, quotients, powers, and roots using mental math, formulas, and algorithms.		
12 M 1.12.2	Apply the laws of exponents to perform operations on expressions with integral exponents and expressions in scientific notation.		
12 M 1.12.3	Apply the properties and theories of the real-number system to everyday situations.		
12 M 1.12.5	Perform simple operations on matrices.		
12 M 2	**PATTERNS, FUNCTIONS, AND ALGEBRA**		
12 M 2.12.2	Represent and solve problems using discrete structures including graphs and matrices, with and without technology.		
12 M 2.12.3	Create and use different forms of a variety of equations, proportions, and/or formulas (e.g., I = PRT or R = I/PT), solving for the needed variable as necessary in given situations.		
12 M 2.12.4	Add, subtract, multiply, and factor (1st and 2nd degree) polynomials, describing each step in the process and the connection between the algebraic process and the arithmetic process; use simple quadratic equations with integer roots to solve practical and mathematical problems.		
12 M 2.12.5	Model practical problems from everyday situations with a variety of models that includes matrices, translating among tabular, symbolic, and graphical representations of functions, with and without technology.		
12 M 2.12.6	Determine the domain and range of linear relations given a graph or a set of ordered pairs; explain their importance in problem-solving situations.		
12 M 2.12.7	Solve systems of two linear equations, both algebraically and graphically; use graphing calculators as a primary tool in solving these problems and to verify solutions found by other methods.		
12 M 3	**MEASUREMENT**		
12 M 3.12.1	Convert between customary and metric systems; convert among monetary systems.		
12 M 3.12.2	Select and use measurement tools, techniques, and formulas to calculate and compare rates, cost, distances, interest, temperatures, and weight/mass.		
12 M 3.12.3	Distinguish and differentiate among the structures, language, and uses of systems of measures (e.g., linear, square units, cubic units); justify and communicate the differences between accuracy, precision, error, and tolerance in measurement; describe how each of these can affect solutions found in problem situations.		
12 M 3.12.4	Use and interpret consumer data (e.g., amortization tables, tax tables, and compound-interest charts) to make informed financial decisions related to practical applications such as budget.		
12 M 3.12.5	Use relationships (e.g., proportions) and formulas (indirect measurement) to determine the measurement of unknown dimensions, angles, areas, and volumes to solve problems.		
12 M 4	**SPATIAL RELATIONSHIPS AND GEOMETRY**		
12 M 4.12.1	Identify and use the properties of polygons (including interior and exterior angles) and elements of circles (e.g., angles, arcs, chords, secants, and tangents) to solve practical problems.		
12 M 4.12.5	Use coordinate geometry to graph linear equations, determine slopes of lines, identify parallel and perpendicular lines, and find possible solutions to sets of equations; use algebraic techniques to solve problems determined by geometric relationships.		
12 M 4.12.6	Use complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal, and angles in polygons to solve practical problems.		
12 M 4.12.7	Apply the Pythagorean theorem, its converse, properties of special right triangles, and right-triangle trigonometry to solve practical problems.		
12 M 4.12.8	Use tools, technology, and models to sketch, draw, and construct geometric figures in order to solve problems and to demonstrate the properties of geometric figures.		
12 M 4.12.9	Construct, justify, and defend mathematical conclusions using logical, sequential, deductive reasoning supported by established mathematical principles.		
12 M 5	**DATA ANALYSIS**		
12 M 5.12.1	Use calculators and computers to create and manipulate tables, graphs, and matrices to communicate statistical information; use the shape of graphs of normal distributions to compare and analyze information.		
12 M 5.12.2	Design, conduct, analyze, and communicate the results of multistage probability experiments.		
12 M 5.12.3	Distinguish between and apply permutations and combinations using a variety of methods, including the fundamental counting principle.		
12 M 5.12.4	Select and use the measures of central tendency such as mean, median, mode, and variability including range, distribution, and possible outliers that are appropriate for given situations.		
12 M 5.12.5	Analyze the validity of statistical conclusions noting various sources of bias, misuse, and abuse of data caused by a wide variety of factors including choices of scale, probability versus odds, inappropriate uses of measures of central tendency, inaccurate curve fitting, and inappropriate uses of controls or sample groups.		
12 M 5.12.6	Design, construct, analyze, and select an appropriate type of graph to represent data to communicate the results of statistical experiments (e.g., write a survey question and analyze and communicate the findings).		
12 M 6	**PROBLEM SOLVING**		
12 M 6.12.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.		
12 M 6.12.2	Apply previous experience and knowledge to new problem-solving situations.		
12 M 6.12.5	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.		
12 M 6.12.6	Try more than one strategy when the first strategy proves to be unproductive.		
12 M 6.12.7	Apply multistep, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists.		
12 M 6.12.9	Generalize solutions and strategies from earlier problems to new problem situations.		
12 M 6.12.10	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.		
12 M 6.12.11	Apply combinations of proven strategies and previous knowledge to solve nonroutine problems.		
12 M 6.12.13	Use technology, including calculators, to solve problems and verify solutions.		
12 M 6.12.14	Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions.		
12 M 7	**MATHEMATICAL COMMUNICATION**		
12 M 7.12.1	Discuss and exchange ideas about mathematics as a part of learning.		
12 M 7.12.2	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems.		
12 M 7.12.3	Read expository text to learn about mathematics.		
12 M 7.12.6	Interpret and solve word problems without the necessity of key words or phrases.		
12 M 7.12.9	Model and explain mathematical relationships using oral, written, graphical, and algebraic methods.		
12 M 7.12.10	Evaluate the effectiveness of written and oral presentations of mathematics.		
12 M 7.12.11	Make conjectures and present arguments in discussions of mathematical ideas.		

Identifier	Nevada - Grade 12 - Mathematics	Introduced	Completed
12 M 7.12.14	Explain and evaluate thinking about mathematical ideas and solutions based on the roles of definitions, properties, common rules, and symbols in solving problems.		
12 M 7.12.15	Use everyday language to explain thinking about strategies and solutions to mathematical problems.		
12 M 7.12.16	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.		
12 M 7.12.17	Use mathematical notation to communicate and explain mathematical situations.		
12 M 8	**MATHEMATICAL REASONING**		
12 M 8.12.3	Construct, justify, and defend mathematical conclusions, using logical arguments, in situations related to mathematics, science, and technology.		
12 M 8.12.4	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.		
12 M 8.12.5	Follow a logical argument and judge its validity.		
12 M 8.12.7	Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.		
12 M 8.12.8	Ask questions to reflect on, clarify, and extend thinking.		
12 M 8.12.9	Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.		
12 M 8.12.10	Construct valid arguments; make and test conjectures about algebraic and geometric properties based on mathematical principles.		
12 M 8.12.11	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.		
12 M 9	**MATHEMATICAL CONNECTIONS**		
12 M 9.12.1	Link new concepts to prior knowledge.		
12 M 9.12.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.		
12 M 9.12.3	Use models to explain the relationship of concepts to procedures.		
12 M 9.12.4	Use the connections among mathematical topics to develop multiple approaches to problems.		
12 M 9.12.6	Use and analyze the connections between mathematics and other disciplines.		
12 M 9.12.7	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).		
12 M 9.12.8	Identify, explain, and use mathematics in everyday life.		

Identifier	Lander - Grade 12 - Mathematics	Introduced	Completed
12M1	**RELATIONS AND FUNCTIONS**		
12M1.1	Solve problems involving equations and inequalities using algebraic techniques		
12M1.2	Graph functions and their inverses		
12M1.3	Compare relationships among families of lines, and the effects of changing the parameters of an equation		
12M1.4	Solve and graph systems of equations and inequalities		
12M1.5	Create mathematical models including matrices to solve real-world problems		
12M1.6	Solve problems involving real and complex numbers: exponential and logarithmic equations, literal exponents, and radicals		
12M2	**GEOMETRY AND ALGEBRA CONNECTIONS**		
12M2.1	Solve real-world application problems using linear programming techniques		
12M2.2	Analyze the nature of roots		
12M2.3	Compare the effect of parameter changes on a graph		
12M2.4	Model and solve algebraic problems involving geometric properties		
12M2.5	Solve problems using finite and infinite series and sequences		
12M2.6	Develop the concept of a limit through converging and diverging series		
12M3	**DATA ANALYSIS, PROBABILITY, AND STATISTICS CONNECTIONS**		
12M3.1	Collect, organize, and analyze data using a variety of statistical techniques		
12M3.2	Interpret and predict events		
12M3.3	Solve real-world problems using technology		
12M4	**PROBLEM SOLVING**		
12M4.1	Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts		
12M4.2	Apply previous experience and knowledge to new problem-solving situations		
12M4.3	Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation		
12M4.4	Try more than one strategy when the first strategy proves to be unproductive		
12M4.5	Generalize solutions and strategies from earlier problems to new problem situations		
12M4.6	Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable		
12M4.7	Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)		
12M4.8	Use technology, including calculators, to investigate, define, and describe qualitative relationships such as patterns and functions		
12M4.9	Solve real-world problems using appropriate formulas, relations, and functions, and properties		
12M4.10	Solve real-world problems using direct and indirect methods		
12M4.11	Solve real-world problems using appropriate strategies and tools		
12M4.12	Generalize conclusions, make inferences, and justify reasonableness of mathematical problems		
12M5	**MATHEMATICAL COMMUNICATION**		
12M5.1	Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems		
12M5.2	Identify and translate key words and phrases that imply mathematical operations		
12M5.3	Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats		
12M5.4	Explain and justify thinking about mathematical ideas and solutions		
12M5.5	Make conjectures and present arguments in discussions of mathematical ideas		
12M5.6	Use everyday language to explain thinking about strategies and solutions to mathematical problems		
12M5.7	Express mathematical ideas and use them to define, compare, and solve problems orally and in writing		
12M5.8	Use mathematical notation to communicate and explain mathematical situations		
12M6	**MATHEMATICAL REASONING**		
12M6.1	Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems		
12M6.2	Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning		
12M6.3	Ask questions to reflect on, clarify, and extend thinking		
12M6.4	Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems		
12M7	**MATHEMATICAL CONNECTIONS**		
12M7.1	Link new concepts to prior knowledge		
12M7.2	Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics		
12M7.3	Use models to explain the relationship of concepts to procedures		
12M7.4	Identify practical applications of mathematical principles that can be applied to other disciplines		
12M7.5	Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)		
12M7.6	Identify, explain, and use mathematics in everyday life		