



TX.111.2.	Kindergarten, Adopted 2012	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5												
(K.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																	
K.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
(K.2)	Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system. The student is expected to:																																	
K.2 (A)	Count forward and backward to at least 20 with and without objects.	1	2	3	4	5	6	7	8	9			12	13		15	16	17	18	19	20													
K.2 (B)	Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures.	1	2	3	4	5	6	7	8	9																								
K.2 (C)	Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.	1	2	3	4	5	6	7	8	9			12	13		15	16	17	18	19	20													
K.2 (D)	Recognize instantly the quantity of a small group of objects in organized and random arrangements.	1	2	3	4	5	6	7	8	9			12			15	16	17	18	19			22	23	24	25	26	27	28	29	30	31	32	33
K.2 (F)	Generate a number that is one more than or one less than another number up to at least 20.		2	3		6									15																			
K.2 (G)	Compare sets of objects up to at least 20 in each set using comparative language.	1				6																												
K.2 (H)	Use comparative language to describe two numbers up to 20 presented as written numerals.					6																22												
K.2 (I)	Compose and decompose numbers up to 10 with objects and pictures.		2	3		5																												

(K.3)	Number and operations. The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems. The student is expected to:																																					
K.3 (A)	Model the action of joining to represent addition and the action of separating to represent subtraction.		2	3	4	5			8	9			12			15	16	17	18	19	20																	
K.3 (B)	Solve word problems using objects and drawings to find sums up to 10 and differences within 10.			3	4	5				9				13			15				18	19	20															
K.3 (C)	Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences.		2	3	4	5			8	9		11	12				15	16	17	18	19	20																
(K.4)	Number and operations. The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions. The student is expected to identify U.S. coins by name, including pennies, nickels, dimes, and quarters.								8				12																									
(K.5)	Algebraic reasoning. The student applies mathematical process standards to identify the pattern in the number word list. The student is expected to recite numbers up to at least 100 by ones and tens beginning with any given number.	1						6	7																											24		
(K.6)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:																																					
K.6 (A)	Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles.				4							11												21														
K.6 (B)	Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world.				4																																	
K.6 (C)	Identify two-dimensional components of three-dimensional objects.				4																																	
K.6 (D)	Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably.				4							11												21														
K.6 (E)	Classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size.	1	2	3	4	5					10																											
K.6 (F)	Create two-dimensional shapes using a variety of materials and drawings.				4							11												21														
(K.7)	Geometry and measurement. The student applies mathematical process standards to directly compare measurable attributes. The student is expected to:																																					
K.7 (A)	Give an example of a measurable attribute of a given object, including length, capacity, and weight.						6			9				13											22	23	24		26									
K.7 (B)	Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.						6							13											22	23	24		26									

(K.8)	Data analysis. The student applies mathematical process standards to collect and organize data to make it useful for interpreting information. The student is expected to:																																			
K.8 (A)	Collect, sort, and organize data into two or three categories.									10				14																						
K.8 (B)	Use data to create real-object and picture graphs.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
K.8 (C)	Draw conclusions from real-object and picture graphs.										10																									



TX.111.3.	Grade 1, Adopted 2012	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5												
(1.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																	
1.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
(1.2)	Number and operations. The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:																																	
1.2 (A)	Recognize instantly the quantity of structured arrangements.	1	2	3	4	5	6	7	8	9			12			15	16	17	18	19			22	23	24	25	26	27	28	29	30	31	32	33
1.2 (B)	Use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones.	1		3			6		8	9			12	13							20													
1.2 (C)	Use objects, pictures, and expanded and standard forms to represent numbers up to 120.							8	9			12								19	20													
1.2 (D)	Generate a number that is greater than or less than a given whole number up to 120.		2	3			6									15																		
1.2 (E)	Use place value to compare whole numbers up to 120 using comparative language.						6															22												
1.2 (F)	Order whole numbers up to 120 using place value and open number lines.	1					6	7					13									22												
1.2 (G)	Represent the comparison of two numbers to 100 using the symbols $>$, $<$, or $=$.						6															22												

(1.3)	Number and operations. The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. The student is expected to:																														
1.3 (A)	Use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99.	1		3	5			9									19														
1.3 (B)	Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = []; 3 + [] = 7; and 5 = [] - 3.			3	4	5		9			13		15				18	19	20												
1.3 (C)	Compose 10 with two or more addends with and without concrete objects.		2	3		5																									
1.3 (D)	Apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10.		2	3	4	5								15	16	17	18														
1.3 (E)	Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences.		2	3	4	5		8	9		11	12			15	16	17	18	19	20											
1.3 (F)	Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.	1	2	3	4	5	6	7			12			15	16	17	18		20				24								
(1.4)	Number and operations. The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions. The student is expected to:																														
1.4 (A)	Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them.							8			12								22												
1.4 (B)	Write a number with the cent symbol to describe the value of a coin.							8			12								22												
1.4 (C)	Use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.							8																							
(1.5)	Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:																														
1.5 (A)	Recite numbers forward and backward from any given number between 1 and 120.	1		3																											
1.5 (B)	Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.	1			4		6	7											24												
1.5 (C)	Use relationships to determine the number that is 10 more and 10 less than a given number up to 120.	1					6	7											24												
1.5 (D)	Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.			3	4	5		9			13		15				18	19	20												
1.5 (E)	Understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s).					5	6																								
1.5 (F)	Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.		2	3	4	5	6		9		12			15	16	17	18	19	20	21			24		26	27		29	30	31	32
1.5 (G)	Apply properties of operations to add and subtract two or three numbers.		2	3	4	5		8	9		11	12			15	16	17	18	19												

(1.6)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:																												
1.6 (A)	Classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language.			4					11										21										
1.6 (B)	Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.			4					11										21										
1.6 (C)	Create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons.																		21										
1.6 (D)	Identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.			4					11										21										
1.6 (E)	Identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language.			4																									
1.6 (F)	Compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible.			4					11										21										
1.6 (G)	Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.														16	17										31	32	33	
1.6 (H)	Identify examples and non-examples of halves and fourths.														16	17											31	32	33
(1.7)	Geometry and measurement. The student applies mathematical process standards to select and use units to describe length and time. The student is expected to:																												
1.7 (A)	Use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement.					6				13									22	23	24		26						
1.7 (B)	Illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.					6				13											24								
1.7 (C)	Measure the same object/distance with units of two different lengths and describe how and why the measurements differ.									13													26						
1.7 (D)	Describe a length to the nearest whole unit using a number and a unit.					6				13									22	23	24		26						
1.7 (E)	Tell time to the hour and half hour using analog and digital clocks.					7									16														
(1.8)	Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:																												
1.8 (A)	Collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts.								10				14																
1.8 (B)	Use data to create picture and bar-type graphs.								10				14										26						
1.8 (C)	Draw conclusions and generate and answer questions using information from picture and bar-type graphs.								10				14																



TX. 111.4.	Grade 2, Adopted 2012.	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5													
(2.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																		
2.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
2.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
(2.2)	Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:																																		
2.2 (A)	Use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones.	1		3			6		8	9			12	13							20														
2.2 (B)	Use standard, word, and expanded forms to represent numbers up to 1,200.	1						8	9			12								19	20														
2.2 (C)	Generate a number that is greater than or less than a given whole number up to 1,200.		2	3			6								15																				
2.2 (D)	Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (> < or =)						6															22													
2.2 (E)	Locate the position of a given whole number on an open number line.	1					6	7					13																						
2.2 (F)	Name the whole number that corresponds to a specific point on a number line.	1					6	7					13																						

(2.7)	Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:																															
2.7 (A)	Determine whether a number up to 40 is even or odd using pairings of objects to represent the number.			4																												
2.7 (B)	Use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200.	1				6	7																			24						
2.7 (C)	Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.			3	4	5				9				13		15				18	19	20										
(2.8)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:																															
2.8 (A)	Create two-dimensional shapes based on given attributes, including number of sides and vertices.																														21	
2.8 (B)	Classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language.				4																											
2.8 (C)	Classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices.				4						11																			21		
2.8 (D)	Compose two-dimensional shapes and three-dimensional solids with given properties or attributes.				4						11																			21		
2.8 (E)	Decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.				4						11																			21		
(2.9)	Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:																															
2.9 (A)	Find the length of objects using concrete models for standard units of length.													13																		
2.9 (B)	Describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object.													13														26				
2.9 (C)	Represent whole numbers as distances from any given location on a number line.	1				6	7							13																		
2.9 (D)	Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes.					6								13												22	23	24		26		
2.9 (E)	Determine a solution to a problem involving length, including estimating lengths.													13													22	23	24			
2.9 (F)	Use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit.																										22	23	24	25	26	27
2.9 (G)	Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.						7										16	17												30		

(2.10)	Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:																												
2.10 (A)	Explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category.									10				14															
2.10 (B)	Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more.									10				14											26				
2.10 (C)	Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.									10				14															
2.10 (D)	Draw conclusions and make predictions from information in a graph.									10				14															



TX. 111.5.	Grade 3, Adopted 2012.	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5														
(3.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																			
3.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
3.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33		
(3.2)	Number and operations. The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value. The student is expected to:																																			
3.2 (A)	Compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate.								8	9			12								19	20														
3.2 (B)	Describe the mathematical relationships found in the base-10 place value system through the hundred thousands place.												12																							
3.2 (C)	Represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers.	1					6	7					13																							
3.2 (D)	Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.					6																	22													

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(3.4)	Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:																																
3.4 (A)	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.	2	3	4	5			8	9		11	12			15	16	17	18	19														
3.4 (B)	Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems											13																					
3.4 (C)	Determine the value of a collection of coins and bills.							8																									
3.4 (D)	Determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10																	18					22	23	24	25	26	27	28	29	30	31	32
3.4 (E)	Represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting																	18					22	23	24	25	26	27	28	29	30	31	32
3.4 (F)	Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts.																						22	23	24	25	26	27	28	29	30	31	32
3.4 (G)	Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.																										27						
3.4 (H)	Determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally																											28	29	30	31	32	
3.4 (I)	Determine if a number is even or odd using divisibility rules.	2	3	4																						26							
3.4 (J)	Determine a quotient using the relationship between multiplication and division.																											28	29	30	31	32	
3.4 (K)	Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts																						22	23	24	25	26	27	28	29	30	31	32
(3.5)	Algebraic reasoning. The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to:																																
3.5 (A)	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.				5	6																											
3.5 (B)	Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations																							24		26	27						
3.5 (C)	Describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24.																	18			21	22	23	24	25	26	27	28	29	30	31	32	
3.5 (D)	Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.																						22	23	24	25	26	27	28	29	30	31	32

(3.6)	Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
3.6 (A)	Classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language.				4															11															21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											



TX. 111. 6.	Grade 4, Adopted 2012.	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5												
(4.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																	
4.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
4.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
(4.2)	Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:																																	
4.2 (B)	Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.	1		3					8	9			12	13						19	20													
4.2 (C)	Compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =.					6																22												
4.2 (D)	Round whole numbers to a given place value through the hundred thousands place.												13																					

(4.3)	Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:																																		
4.3 (A)	Represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$.																															31	32		
4.3 (B)	Decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations.																																31	32	
4.3 (C)	Determine if two given fractions are equivalent using a variety of methods.																																	33	
4.3 (D)	Compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$.																																	33	
4.3 (G)	Represent fractions and decimals to the tenths or hundredths as distances from zero on a number line. (NOTE: Perceptions Green covers this in fractions only.)																																	32	
(4.4)	Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:																																		
4.4 (A)	Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.		2	3	4	5			8	9		11	12			15	16	17	18	19															
4.4 (B)	Determine products of a number and 10 or 100 using properties of operations and place value understandings.																							22	23	24	25	26	27						
4.4 (D)	Use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.																																27		
4.4 (G)	Round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers.									10			13	14											24		26								
4.4 (H)	Solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.																			20		22	23	24	25	26	27	28	29	30	31	32			
(4.5)	Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:																																		
4.5 (A)	Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.					5	6																												
4.5 (C)	Use models to determine the formulas for the perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special form for perimeter of a square ($4s$)										11											21	22	23	24	25		27							
4.5 (D)	Solve problems related to perimeter and area of rectangles where dimensions are whole numbers.										11											21	22	23	24	25	26	27							

(4.6)	Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:																												
4.6 (A)	Identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.										11																		
4.6 (D)	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.			4							11											21							
(4.8)	Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:																												
4.8 (A)	Identify relative sizes of measurement units within the customary and metric systems.									9			12																
4.8 (B)	Convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table.									9			12																
(4.9)	Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:																												
4.9 (A)	Represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions.										10			14											26				
4.9 (B)	Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot.										10			14											26				



TX. 111. 7.	Grade 5, Adopted 2012.	Unit 1								Unit 2								Unit 3								Unit 4								Unit 5							
(5.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																								
5.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
5.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33							
(5.2)	Number and operations. The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value. The student is expected to:																																								
5.2 (A)	Represent the value of the digit in decimals through the thousandths using expanded notation and numerals.							8				12																													
(5.3)	Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy. The student is expected to:																																								
5.3 (A)	Estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division.										10			13	14										24		26														
5.3 (K)	Add and subtract positive rational numbers fluently.											12																													

(5.4)	Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:																																		
5.4 (B)	Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.			3	4	5	6			9				13		15			18	19	20		22	23		25	26	27	28	29	30	31	32		
5.4 (D)	Recognize the difference between additive and multiplicative numerical patterns given in a table or graph.	1		3	4	5	6	7								16	17	18	19	20	21	22	23	24	25	26	27	28							
5.4 (E)	Describe the meaning of parentheses and brackets in a numeric expression.				4	5																													
5.4 (F)	Simplify numerical expressions that do not involve exponents, including up to two levels of grouping.				4	5																													
5.4 (H)	Represent and solve problems related to perimeter and/or area and related to volume.										11											21	22	23	24	25	26	27							
(5.5)	Geometry and measurement. The student applies mathematical process standards to classify two-dimensional figures by attributes and properties. The student is expected to classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties.				4						11											21													
(5.7)	Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement. The student is expected to solve problems by calculating conversions within a measurement system, customary or metric.									9		12											22	23	24		26	27			30				
(5.9)	Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:																																		
5.9 (A)	Represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots.									10				14													26								
5.9 (C)	Solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot.									10				14													26								



TX.111.26.	Grade 6, Adopted 2012.	Unit 1					Unit 2					Unit 3					Unit 4					Unit 5												
(6.1)	Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:																																	
6.1 (A)	Apply mathematics to problems arising in everyday life, society, and the workplace.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (B)	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (C)	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (D)	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (E)	Create and use representations to organize, record, and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (F)	Analyze mathematical relationships to connect and communicate mathematical ideas.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
6.1 (G)	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
(6.2)	Number and operations. The student applies mathematical process standards to represent and use rational numbers in a variety of forms. The student is expected to:																																	
6.2 (B)	Identify a number, its opposite, and its absolute value.															15	16	17	18	19														
6.2 (C)	Locate, compare, and order integers and rational numbers using a number line.																															32		
6.2 (D)	Order a set of rational numbers arising from mathematical and real-world contexts.																																	33
(6.3)	Number and operations. The student applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions. The student is expected to:																																	
6.3 (D)	Add, subtract, multiply, and divide integers fluently.		2	3	4	5	6		8	9		11	12	13		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
(6.4)	Proportionality. The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. The student is expected to:																																	
6.4 (H)	Convert units within a measurement system, including the use of proportions and unit rates.								9			12																						
(6.6)	Expressions, equations, and relationships. The student applies mathematical process standards to use multiple representations to describe algebraic relationships. The student is expected to:																																	

[illegible]

[illegible]