Grade 1 – Crosswalk (Summary of Revisions): 2016 *Mathematics Standards of Learning and Curriculum Framework*

Additions (2016 SOL)	Deletions from Grade 1 (2009 SOL)
• 1.2b – Compare two numbers between 0 and 110 represented pictorially or with concrete objects, using the words *greater than, less than,* or *equal to* • 1.2c – Order three or fewer sets, each set containing up to 110 objects, from least to greatest and greatest to least • 1.3 – Indicate ordinal position of each object, first through tenth [Moved from K.3] • 1.7 – Recognize and describe with fluency part-whole relationships with numbers up to 10 • 1.10 EKS – Identify a balance or pan scale as instrument to measure weight [Moved from K.8 EKS]	• 1.5 – Recall facts for sums/differences 11-18 [Included in 2.5] • 1.7a – Identify the number of pennies equivalent to a nickel, a dime, and a quarter [Included in K.7] • 1.7b – Determine the value of a collection of pennies, nickels, and dimes – [Included in 2.10a] • 1.11 – Identify days of week and months of year [Moved to K.8]
Parameter Changes/Clarifications (2016 SOL)	**Moves within Grade 1 (2009 SOL to 2016 SOL)**
• 1.1a – Count forward orally by ones to 110, starting at any number between 0 and 110 • 1.1b – Write numerals 0-110 in sequence and out of sequence • 1.1c – Count backward orally by ones when given any number between 1 and 30 • 1.1d – Count forward orally by ones, twos, fives, and tens to determine the total number of objects to 110 • 1.2 EKS – Identifies the number of tens and ones that can be made from any number up to 100; identifies the place and value of each digit in a two-digit numeral • 1.4a – Represent and solve practical problems involving equal sharing with two or four sharers • 1.4b – Represent and name fractions for halves and fourths, using models • 1.6 – Create and solve single-step story and picture problems using addition and subtraction increased from 18 to 20 • 1.6 EKS – Combine parts contained in larger numbers up to 20 by using related combinations; Explain strategies used to solve addition and subtraction problems within 20 • 1.7b – Demonstrate fluency with addition and subtraction within 10 [Fluency with 11-18 included in 2.5] • 1.8 – Determine the value of a collection of *like* coins (pennies, nickels, or dimes) • 1.8 EKS – Group a collection of pennies by fives and tens as a way to determine the value • 1.9a – Tell time to the hour and half hour [Time to hour moved from K.9] • 1.9 EKS – Identify different types of clocks as instruments to measure time [Moved from K.8] • 1.13 EKS – Label attributes of a set of objects that has been sorted; name multiple ways to sort a set of objects	• 1.1b – [Moved to 1.2a] • 1.2 – [Moved to 1.1cd] • 1.3 – [Moved to 1.4] • 1.4 – [Moved to 1.5] • 1.5 – [Moved to 1.7] • 1.7 – [Moved to 1.8] • 1.8 – [Moved to 1.9a] • 1.9 – [Moved to 1.10] • 1.11 – [Moved to 1.9b] • 1.12 – [Moved to 1.11a] • 1.13 – [Moved to 1.11b] • 1.14 – [Moved to 1.12a] • 1.15 – [Moved to 1.12b] • 1.16 – [Moved to 1.13] • 1.17 – [Moved to 1.14] • 1.18 – [Moved to 1.15]

EKS = Essential Knowledge and Skills, referring to the column on the right side of the Curriculum Framework

Comparison of Mathematics Standards of Learning – 2009 to 2016

2009	2016
Number and Number Sense	

1.1 The student will
   a) count from 0 to 100 and write the corresponding numerals; and
   b) group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value. [Moved to 1.2a]
	1.1 The student will
	   a) count forward orally by ones to 110, starting at any number between 0 and 110 [Reordered];
	   b) write the numerals 0 to 110 in sequence and out-of-sequence;
	   c) count backward orally by ones when given any number between 1 and 30; [Moved from 1.2] and
	   d) count forward orally by ones, twos, fives, and tens to determine the total number of objects to 110. [Moved from 1.2]

1.2 The student will count forward by ones, twos, fives, and tens to 100 and backward by ones from 30. [Moved to 1.1c, d]	

	1.2 The student, given up to 110 objects, will
	   a) group a collection into tens and ones and write the corresponding numeral; [Moved from 1.1b]
	   b) compare two numbers between 0 and 110 represented pictorially or with concrete objects, using the words *greater than, less than* or *equal to*; and
	   c) order three or fewer sets from least to greatest and greatest to least.

	1.3 The student, given an ordered set of ten objects and/or pictures, will indicate the ordinal position of each object, first through tenth. [Moved from K.3]

1.3 The student will identify the parts of a set and/or region that represent fractions for halves, thirds, and fourths and write the fractions.	1.4 The student will
	   a) represent and solve practical problems involving equal sharing with two or four sharers; and
	   b) represent and name fractions for halves and fourths, using models.

	1.5 The student, given a familiar problem situation involving magnitude, will
	   a) select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, 500); and
	   b) explain the reasonableness of the choice.
	[Moved from Computation and Estimation Strand 1.4]

2009	2016
Computation and Estimation	
1.4 The student, given a familiar problem situation involving magnitude, will a) select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, 500); and b) explain the reasonableness of the choice. [Moved to Number and Number Sense Strand]	
1.5 The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts. [Moved to 1.7b; fluency for 11 to 18 included in 2.5b]	
1.6 The student will create and solve one-step story and picture problems using basic addition facts with sums to 18 or less and the corresponding subtraction facts.	1.6 The student will create and solve single-step story and picture problems using addition and subtraction within 20.
	1.7 The student will a) recognize and describe with fluency part-whole relationships for numbers up to 10; and b) demonstrate fluency with addition and subtraction within 10.
Measurement and Geometry	
1.7 The student will a) identify the number of pennies equivalent to a nickel, a dime, and a quarter;[Included in K.7] and b) determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less.	1.8 The student will determine the value of a collection of like coins (pennies, nickels, or dimes) whose total value is 100 cents or less.
1.8 The student will tell time to the half-hour, using analog and digital clocks.	1.9 The student will investigate the passage of time and a) tell time to the hour and half-hour, using analog and digital clocks; and b) read and interpret a calendar. [Moved from 1.11]
1.9 The student will use nonstandard units to measure length, weight/mass, and volume.	1.10 The student will use nonstandard units to measure and compare length, weight, and volume.
1.10 The student will compare, using the concepts of more, less, and equivalent, a) the volumes of two given containers; and b) the weight/mass of two objects, using a balance scale. [Compare combined with 1.10]	

2009	2016
Measurement and Geometry	
1.11 The student will use calendar language appropriately (e.g., names of the months, *today, yesterday, next week, last week*). [Moved to K.8 and 1.9b]	
1.12 The student will identify and trace, describe, and sort plane geometric figures (triangle, square, rectangle, and circle) according to number of sides, vertices, and right angles.	1.11 The student will a) identify, trace, describe, and sort plane figures (triangles, squares, rectangles, and circles) according to number of sides, vertices, and angles; and b) identify and describe representations of circles, squares, rectangles, and triangles in different environments, regardless of orientation, and explain reasoning. [Moved from 1.13]
1.13 The student will construct, model, and describe objects in the environment as geometric shapes (triangle, rectangle, square, and circle) and explain the reasonableness of each choice. [Moved to 1.11b]	
Probability and Statistics	
1.14 The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream) [Examples moved to 1.12 US], using tables, picture graphs, and object graphs. [Moved to 1.12a]	1.12 The student will a) collect, organize, and represent various forms of data using tables, picture graphs, and object graphs; and b) read and interpret data displayed in tables, picture graphs, and object graphs, using the vocabulary *more, less, fewer, greater than, less than,* and *equal to*. [Moved from 1.15]
1.15 The student will interpret information displayed in a picture or object graph, using the vocabulary *more, less, fewer, greater than, less than,* and *equal to*. [Moved to 1.12b]	
Patterns, Functions, and Algebra	
1.16 The student will sort and classify concrete objects according to one or more attributes, including color, size, shape, and thickness. [Attributes included in EKS]	1.13 The student will sort and classify concrete objects according to one or two attributes.
1.17 The student will recognize, describe, extend, and create a wide variety of growing and repeating patterns.	1.14 The student will identify, describe, extend, create, and transfer growing and repeating patterns. [Transfer included to match EKS]
1.18 The student will demonstrate an understanding of equality through the use of the equal sign.	1.15 The student will demonstrate an understanding of equality through the use of the equal symbol.