**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   1. tell time to the hour and half-hour, using analog and digital clocks; and 2. 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. |