California Common Core State Standards Comparison- FIRST GRADE

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics.

5. Use appropriate tools strategically
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Current CA Math Standards	California Common Core State Standards - Mathematics	Notes
NUMBER SENSE: **NS 1.0** Students understand and use numbers up to 100	**Number and Operations in Base Ten 1.NBT** **-Extend the counting sequence.** **-Understand place value.** (Cluster Statement)	
*NS 1.1 Count, read, and write numbers to 100.	1.NBT.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	
*NS 1.2 Compare and order whole numbers to 100 by using the symbols for less than, equal to, or greater than. (<,>,=)	1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols **>**, **=**, and **<**.	
NS1.3 Represent equivalent forms of the same number through the use of physical models, diagrams, and number expressions (to 20) (8 may be represented as 4+4, 5+3).	1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	

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California Common Core State Standards Comparison-
FIRST GRADE

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NS 1.4 Count and group objects in ones and tens. (three groups of 10 and 4 equals 34, or 30 + 4)	1NBT. 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	
NS 1.5 Identify and know the value of coins and show different combinations of coins that equal the same value.		*2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using dollar signs and cents sign appropriately.*

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California Common Core State Standards Comparison- FIRST GRADE

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NS 2.0 Students demonstrate the meaning of addition and subtraction and use these operations to solve problems.	**Number and Operations in Base Ten 1.NBT** **-Use place value understanding and properties of operations to add and subtract.** **Operations and Algebraic Thinking 1.OA** **-Represent and solve problems involving addition and subtraction.** **-Understand and apply properties of operations and the relationship between addition and subtraction.** **-Add and subtract within 20.** **-Work with addition and subtraction equations.** (Cluster Statements)	
NS 2.1 Know the addition facts (sums to 20) and the corresponding subtraction facts and commit them to memory.	1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	*2.OA.2: Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers.*
***NS 2.2** Use the inverse relationship between addition and subtraction to solve problems.	1.OA.4. Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*	
***NS 2.3** Identify one more than, one less than, 10 more than, 10 less than a given number.	1.NBT.5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	
***NS 2.4** Count by 2's, 5's, 10's to 100	1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)	*K.CC.1: Count to 100 by ones and by tens.* *2.NBT.2: Count within 1000; by 5s, 10s, and 100s.*

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California Common Core State Standards Comparison- FIRST GRADE

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*NS2.5 Show the meaning of addition (putting together, increasing) and subtraction (taking away, comparing, finding the difference).	1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. *(See Table 1)*	
NS2.6 Solve addition and subtraction problems with one- and two- digit numbers ($5+58=\_\_$).	1.NBT.4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
NS 2.7 Find the sum of three one-digit numbers.	1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 1.OA.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = \square - 3$, $6 + 6 =$.*	

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California Common Core State Standards Comparison-
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	1.OA.3. Apply properties of operations as strategies to add and subtract.*(Students need not use formal terms for these properties.)* *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*	
NS 3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, and hundreds places.		
NS3.1 Make reasonable estimates when comparing larger or smaller numbers		
ALGEBRA AND FUNCTIONS **AF 1.0** Students use number sentences with operational symbols and expressions to solve problems:	**Operations and Algebraic Thinking 1.OA** **-Represent and solve problems involving addition and subtraction.** **-Work with addition and subtraction equations.** (Cluster Statements)	
AF 1.1 Write and solve number sentences from problem situations that express relationships involving addition and subtraction	1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. *(See Table 1)*	
AF 1.2 Understand the meaning of the symbols +, -, =.	1.OA.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*	

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FIRST GRADE

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AF 1.3 Create problem situations that might lead to given number sentences involving addition and subtraction.		
MEASUREMENT AND GEOMETRY: **MG 1.0** Students use direct comparison and nonstandard units to describe the measurement of objects.	**Measurement and Data 1.MD** **-Measure lengths indirectly and by iterating length units.** **-Tell and write time.** (Cluster Statements)	
MG 1.1 Compare the length, weight, and volume of two or more objects by using direct comparison or a nonstandard unit.	1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*	
MG 1.2 Tell time to the nearest half hour and relate time to events (before/after, shorter/longer).	1.MD.3. Tell and write time in hours and half-hours using analog and digital clocks.	
MG 2.0: Students identify common geometric figures, classify them by common attributes, and describe their relative position on their location in space.	**Geometry 1.G** **-Reason with shapes and their attributes.**	
MG 2.1 Identify, describe, and compare triangles, rectangles, and squares, and circles, including the faces of three-dimensional objects.		

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California Common Core State Standards Comparison- FIRST GRADE

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MG 2.2 Classify familiar plane and solid objects by common attributes such as color, position, shape, size, roundness, or number of corners, and explain which attributes are being used for classification.	1.G.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	
MG 2.3 Give and follow directions about location.		
MG 2.4 Arrange and describe objects in space by proximity, position, and direction (near, far, below, above, up, down, behind, in front of, next to, left, and right of.)		*K.G.1: Describe objects in the environment using names of shapes and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.*
	1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quartercircles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. *(Students do not need to learn the formal names.)*	
	1,G,3. Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	

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FIRST GRADE

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STATISTICS, DATA ANALYSIS AND PROBABILITY **SDAP 1.0:** Students organize, represent, and compare data by category on simple graphs and charts.	**Measurement and Data 1.MD** **-Represent and Interpret data.** (Cluster Statement)	
SDAP 1.1: Sort objects and data by common attributes and describe the categories.		
SDAP 1.2 Represent and compare data (largest, smallest, most often, least often) by using pictures, bar graphs, tally charts, and picture graphs.	1.MD.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	
SDAP 2.0 Students sort objects and create and describe patterns by numbers, shapes, sizes, rhythms, or colors:	**Measurement and Data 1.MD** **-Represent and Interpret data.** (Cluster Statement)	
*SDAP 2.1 Describe, extend, and explain ways to get to a next element in simple repeating patterns (rhythmic, numeric, color and shape)		

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