

MATH - Grade 2

CUSD 303

Year 2012-2013

Domain	Cluster Standard	Standard	Skill Statement	Resources
Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction	2.OA1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem	T1.2.OA1 Solve one-step addition word problems involving situations of adding to or putting together with unknowns in all positions up to a sum of 100 with manipulatives	<i>Eureka Math, 2015 (Great Minds)</i>
			2.OA1 Solve one-step addition word problems involving situations of adding to or putting together with unknowns in all positions up to a sum of 100	
			T2.2.OA1 Solve two-step addition word problems involving situations of adding to or putting together with unknowns in all positions up to a sum of 100 with manipulatives	
			2.OA1 Solve two-step addition word problems involving situations of adding to or putting together with unknowns in all positions up to a sum of 100	
			T1.2.OA1 Solve one-step subtraction word problems involving situations of taking from or taking apart with unknowns in all positions with a minuend up to 100 with manipulatives	
			2.OA1 Solve one-step subtraction word problems involving situations of taking from or taking apart with unknowns in all positions with a minuend up to 100	
			T2.2.OA1 Solve two-step subtraction word problems involving situations of taking from or taking apart with unknowns in all positions with a minuend up to 100 with manipulatives	
			2.OA1 Solve two-step subtraction word problems involving situations of taking from or taking apart with unknowns in all positions with a minuend up to 100	
	Add and subtract within 20	2.OA2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers	2.OA2 Fluently add two one-digit numbers using mental strategies up to a sum of 20***	
			2.OA2 Fluently subtract a one-digit number from any number up to 20 using mental strategies**	
			2.OA2 Recall from memory all sums of two one-digit numbers**	
	Work with equal groups of objects to gain foundations for multiplication	2.OA3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends	2.OA3 Determine whether a group of objects (up to 20) has an odd or even number of members by pairing the objects	
			2.OA3 Write an equation to express an even number as a sum (up to 20) of two equal addends	
2.OA4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends				
		2.OA4 Add to find the total number of objects arranged in rectangular arrays with up to 5 rows and 5 columns		
		2.OA4 Write an equation using equal addends to express the total as a sum (up to 25)		
Number and Operations in Base Ten	Understand place value	2.NBT1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:	2.NBT1 Recognize that the placement of a digit represents its value (up to 3 digits)	
		2.NBT1a 100 can be thought of as a bundle of ten tens — called a "hundred"	2.NBT1a Identify 10 bundles of 10 as "a hundred"	

Domain	Cluster Standard	Standard	Skill Statement	Resources
Number and Operations in Base Ten (cont'd)	Understand place value (cont'd)	2.NBT1b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones)	2.NBT1b Recognize that the numbers 100, 200, 300...900 refer to one, two, three...nine hundreds and 0 tens and 0 ones	Eureka Math, 2015 (Great Minds)
		2.NBT2 Count within 1000; skip-count by 5s, 10s, and 100s	T1.2.NBT2 Skip-count by 5s within 1000 using the number grid	
			2.NBT2 Skip-count by 5s within 1000	
			2.NBT2 Skip-count by 10s within 1000	
			2.NBT2 Skip-count by 100s within 1000	
		2.NBT3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form	2.NBT3 Read numbers to 1000 using base-ten numerals	
			T1.2.NBT3 Read numbers to 100 using number names	
			2.NBT3 Read numbers to 1000 using number names	
			T1.2.NBT3 Read numbers to 100 using expanded form	
			2.NBT3 Read numbers to 1000 using expanded form	
	2.NBT3 Write numbers to 1000 using base-ten numerals			
	2.NBT4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons	T1.2.NBT3 Write numbers to 100 using number names		
		2.NBT3 Write numbers to 1000 using number names		
		T1.2.NBT3 Write numbers to 100 using expanded form		
2.NBT3 Write numbers to 1000 using expanded form				
Use place value understanding and properties of operations to add and subtract	2.NBT5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction	2.NBT5 Fluently add within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction		
		2.NBT5 Fluently subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction		
	2.NBT6 Add up to four two-digit numbers using strategies based on place value and properties of operations	T1.2.NBT6 Add up to three two-digit numbers using strategies based on place value and properties of operations		
		2.NBT6 Add up to four two-digit numbers using strategies based on place value and properties of operations		
	2.NBT7 Add and subtract within 1000, 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. Understand that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds	T1.2.NBT7 Explain that in adding or subtracting two-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones		
		2.NBT7 Demonstrate that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones		
		T1.2.NBT7 Change a number by composing or decomposing tens or hundreds when necessary to solve an addition or subtraction problem within 100		
		2.NBT7 Change a number by composing or decomposing tens or hundreds when necessary to solve an addition or subtraction problem within 1000		
2.NBT8 Mentally add 10 or 100 to a given number 100–900, and mentally	T1.2.NBT7 Define place value, properties of operations, and identify strategies used to solve an addition or subtraction problem within 1000 based the relationship between addition and subtraction			
	2.NBT7 Model or draw strategy used to solve an addition or subtraction problem within 1000 based on place value, properties of operations, and/or the relationship between addition and subtraction			
Number and Operations in Base Ten (cont'd)	Use place value understanding and properties of operations to add and subtract (cont'd)	2.NBT7 Model or draw strategy used to solve an addition or subtraction problem within 1000 based on place value, properties of operations, and/or the relationship between addition and subtraction	Eureka Math, 2015 (Great Minds)	
		2.NBT7 Represent a model or drawing with a standard equation		
		2.NBT8 Mentally add 10 or 100 to a given number 100–900		

Domain	Cluster Standard	Standard	Skill Statement	Resources
		subtract 10 or 100 from a given number 100–900	2.NBT8 Mentally subtract 10 or 100 from a given number 100–900	
		2.NBT9 Explain why addition and subtraction strategies work, using place value and the properties of operations	T1.2.NBT9 Define properties of operations for addition and place value to 1000 and apply with teacher support T1.2.NBT9 Define properties of operations for subtraction and place value to 1000 and apply with teacher support 2.NBT9 Explain why addition strategies work, using place value and the properties of operations 2.NBT9 Explain why subtraction strategies work, using place value and the properties of operations	
Measurement and Data	Measure and estimate lengths in standard units	2.MD1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes	2.MD1 Select the appropriate tool to measure the length of an object 2.MD1 Measure the length of an object using the appropriate tool	
		2.MD2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen	2.MD2 Measure the length of an object using two different standard units 2.MD2 Describe how the two measurements relate to the size of the unit chosen	
		2.MD3 Estimate lengths using units of inches, feet, centimeters, and meters	T1.2.MD3 Estimate lengths using units of inches and centimeters 2.MD3 Estimate lengths using units of inches, feet, centimeters, and meters	
		2.MD4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit	2.MD4 Compare the length of two objects expressing the difference as a standard unit	
	Relate addition and subtraction to length	2.MD5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem	2.MD5 Solve addition word problems within 100 involving lengths of the same unit 2.MD5 Solve subtraction word problems within 100 involving lengths of the same unit	
		2.MD6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram	2.MD6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ... 2.MD6 Represent whole-number sums and differences within 100 on a number line diagram	
	Work with time and money	2.MD7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	2.MD7 Tell time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. 2.MD7 Write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	
		2.MD8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	2.MD8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately	

Domain	Cluster Standard	Standard	Skill Statement	Resources
Measurement and Data (<i>cont'd</i>)	Represent and interpret data	2.MD9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units	2.MD9 Generate measurement data by measuring lengths of several objects to the nearest whole unit	<i>Eureka Math, 2015 (Great Minds)</i>
			2.MD9 Construct a horizontal line plot of measurements gathered (marked in whole number units)	
		2.MD10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems ⁴ using information presented in a bar graph	2.MD10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories	
			2.MD10 Solve simple addition and subtraction problems using data presented on a bar graph	
Geometry	Reason with shapes and their attributes	2.G1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. ⁵ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes	2.G1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes	
			2.G1 Recognize and draw shapes with a given number of angles or equal faces	
		2.G2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them	2.G2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them	
		2.G3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape	2.G3 Partition circles and rectangles into two, three, or four equal shares	
			2.G3 Describe the shares of a circle or rectangle using the words halves, thirds, half of, a third of, etc.	
			2.G3 Describe the whole as two halves, three thirds, four fourths	
**Fluency	Add and subtract within 20	2.OA2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers	2.OA2 Fluently add two one-digit numbers using mental strategies up to a sum of 20	
			2.OA2 Fluently subtract a one-digit number from any number up to 20 using mental strategies	
			2.OA2 Recall from memory all sums of two one-digit numbers	
Literacy of Math	Craft and Structure	RST4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone	2.RST4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area	
	Integration of Knowledge and Ideas	RST7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words	2.RST7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text	
	Text Types and Purposes	WHST2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content	2.WHST2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section	
Mathematical Practices			MP1 Make sense of problems and persevere in solving them	
			MP2 Reason abstractly and quantitatively	
			MP3 Construct viable arguments and critique the reasoning of others	
			MP4 Model with mathematics	
			MP5 Use appropriate tools strategically	
			MP6 Attend to precision	
			MP7 Look for and make use of structure	
			MP8 Look for and express regularity in repeated reasoning	