Mathematics – First Grade

Marking Period Three	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
CCSS Cluster Statement	Represent and solve problems involving addition and subtraction.	Extend the counting sequence.	Measure lengths indirectly and by iterating length units.	Reason with space and their attributes.
CCSS Standard	**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.**	**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.**		**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.**
Learning Target	I can model addition and subtraction word problems using objects, drawings, and equations with unknown numbers in different positions with sums to 10.	I can count to 120 starting at any number. I can read any number up to 120. I can write any number up to 120. I can label a set of objects up to 120 with the written numeral.		I can explain the difference between defining and non-defining attributes (e.g., color, orientations, overall size).
Mathematical Practices	1.Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitavely. 3.Construct viable arguments and critique the reasoning of others. 4.Model with mathematics. 5. Use appropriate tools strategically. 8. Look for and express regularity in repeated reasoning.	2. Reason abstractly and quantitatively. 7. Look for and make sure of structure. 8. Look for and express regularity in repeated reasoning.		1. Make sense of problems and persevere in solving them. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 7. Look for and make use of structure.
MP Learning Targets	I can use picture to help solve the problem. I can tell why my answer makes sense for a word problem. I can write and equation for a word problem. I can show and tell how to solve and addition/subtraction problem. I can identify the important parts of a word problem. I can use manipulatives to solve problems.	I can find patterns in math. I can build on a pattern. I can notice patterns in math. I can build on a pattern. I can represent numbers through symbols or pictures.		I can figure out how to solve a new problem I can explain "how" to start a problem. I can draw diagrams to look for similarities. I can use manipulatives to solve a problem. I can give reasoning behind my thinking. I can see similar structures.

CCSS Standard	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.			
Learning Target	I can solve word problems with three whole numbers using objects, drawings, and equations. I can add three whole numbers with sums less than or equal to 20. I can solve word problems with three whole numbers using objects drawings and equations.			
Mathematical Practices	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. 8. Look for and express regularity in repeated reasoning.			
MP Learning Targets	I can explain addition and subtraction word problems using objects, drawings and equations with unknown numbers in different positions. I can explain how to add three whole numbers with sums less than or equal to 20. I can explain how to solve word problems with three whole numbers using objects drawings and equations.			

Marking Period Three	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
CCSS Cluster Statement	Understand and apply properties of operations and the relationship between addition and subtraction.	Understand place value.	Tell and write time.	
CCSS Standard	3. Apply properties of operations as strategies to add and subtract.$_3$ *Examples:*	2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the	3. Tell and write time in hours and half-hours using analog and digital clocks.	

	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.)	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).		
Learning Target	I can show adding two numbers in any order, the sum does not change.	I can represent 10 as 10 ones. I can represent the numbers 11 to 19 as a ten and some ones. I can represent multiple sets of ten using number names (2 tens is 20). I can explain the value of each digit in a two-digit number.	I can identify the hours and minutes on a digital and analog clock. I can tell how many minutes are in an hour. I can explain why 30 minutes is a half-hour. I can look at the time on an analog clock saw what time it is, and write the time as it would appear on a digital clock. I can look at the time on a digital clock, say what time it is, and draw in the hands on an analog clock. I can write the time and draw in the hands on an analog clock when someone tells me what time it is.	
Mathematical Practices	2. Reason abstractly and quantitatively. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	1. Reason abstractly and quantitatively. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure.	
MP Learning Targets	I can explain why changing the order of the addends (numbers) does not change the sum (answer). I can explain how when adding three numbers in any order, the sum does not change. I can explain the use of properties of operations to add and subtract.	I can explain the value of each digit in a two-digit number.	I can explain the hours on a digital and analog clock. I can look at the time on an analog clock saw what time it is, and write the time as it would appear on a digital clock. I can look at the time on a digital clock and explain what time it is. I can explain the time and draw in the hands on an analog clock when someone tells me what time it is	
CCSS Standard	**4. Understand subtraction as an unknown-addend problem.** *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*	3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.		
Learning Target	I can rewrite a subtraction equation as an addition equation	I can determine when a two-digit number is greater than, less than,		

	with a missing addend (number).	or equal to another two-digit number. I can record the comparison using the symbols >, <, =.		
Mathematical Practices	2. Reason abstractly and quantitatively. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning	2. Reason abstractly and quantitatively. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.		
MP Learning Targets	I can give an example and explain how a subtraction equation can be rewritten as an addition equation.	I can explain why a two-digit number is greater than, less than, or equal to another two-digit number.		
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Represent and interpret data.	
CCSS Standard				
Learning Target				
Mathematical Practices				
MP Learning Targets				
CCSS Cluster Statement	Work with addition and subtraction equations.			
CCSS Standard				
Learning Target				
Mathematical Practices				
MP Learning Targets				

Math 1 Quarter 3

Marking Period Three	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Represent and interpret data.	
CCSS Standard	**5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).**	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.	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.	
Learning Target	I can subtract by counting all, counting on, and recognizing the +1 means the next number before, and -2 means the number that is two numbers before in the counting sequence.	I can use models or drawings to show a place value (collecting the tens, collecting the ones, and if necessary, composing ten ones to make a ten) or other strategies to add the following (A two-digit number and a one-digit number, A two-digit number and a multiple of 10, A two-digit number and a two-digit number) I can write down the steps that I followed as I used the concrete models or drawings to show how I added.	I can organize and represent data in up to three categories. I can answer questions about the total number of data points and how many data points are in each category. I can determine why a category has more or less than another category. I can determine how many more or how many less one category has than the other.	
Mathematical Practices	7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	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.	
MP Learning Targets	I can use patterns to solve problems. I can find patterns in math. I can use patterns to find shortcuts to solve problems.	I can explain the steps that I followed as I used the concrete models or drawings to show how I added. (A two-digit number and a one-digit number, A two-digit number and a multiple of 10, A two-digit number and a two-digit number)	I explain how to organize and represent data in up to three categories. I can explain about the total number of data points and how many data points are in each category. I can explain why a category has more or less than another category. I can discuss with a partner why a category has more or less than another category.	
CCSS	**6. Add and subtract within 20,**	5. Given a two-digit number, mentally find 10 more		

Standard	**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).**	or 10 less than the number, without having to count; explain the reasoning used.		
Learning Target	I can add and subtract within 20 by using equal but easier numbers (e.g. doubles, doubles plus one, doubles minus one).	I can mentally find 10 more for any two-digit number (e.g., 32+10=42). I can mentally find 10 less for any two-digit number (e.g., 32-10=22).		
Mathematical Practices	2. Reason abstractly and quantitatively. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.		
MP Learning Targets	I can explain taking apart and putting together. I can use patterns to solve problems. I can build on a pattern. I can use repeating addition to solve problems. I can use repeating subtraction to solve problems. I can check if the steps in a problem make sense.	I can explain why the tens digit increases or decreased by 1 when 10 is added or subtracted. I can discuss with a partner why the tens digit increases or decreased by 1 when 10 is added or subtracted.		
Marking Period Three	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
CCSS Cluster Statement	Work with addition and subtraction equations.			
CCSS Standard	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.*			
Learning Target	I can compare the value of both sides of an equation and determine whether the equation is true of false.			

Mathematical Practices	2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 6. Attend to precision. 7. Look for and make use of structure.			
MP Learning Targets	I can explain that the equal sign means "same value as". I can compare with a partner the value of both sides of an equation and determine whether the equation is true of false.			