Mathematics – Second Grade

Marking Period one	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.	Understand place value.	Measure and estimate lengths in standard units.	Reason with shapes and their attributes.
CCSS Standard	1. 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.	 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: a. 100 can be thought of as a bundle of ten tens — called a "hundred." b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (0 tens and 0 ones). 	1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
Learning Target	I can choose when to use addition or subtraction in a word problem. I can represent addition and subtraction word problems using objects, drawing, and equations. I can compare the size of two numbers using subtraction. I can solve addition and subtraction problems involving two steps. I can solve word problems with unknown numbers in different positions.	I can use 10 ones to make 1 ten. I can use 10 tens to make 1 hundred. I can make bundles of 100s. I can read numbers in standard form using place value.	I can choose the right tool to measure length of an object.	I can use attributes to draw shapes. I can use attributes to name shapes. I can identify triangles. I can identify quadrilaterals. I can identify pentagons. I can identify hexagons. I can identify cubes.

Marking Period one	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.	Understand place value.	Measure and estimate lengths in standard units.	Reason with shapes and their attributes.
Mathematical Practices	 #1.Make sense of problems and preserve 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. 	 #2 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.	#4 Model with mathematics. #7 Look for and make use of structure.
MP Learning Targets	I can explain when I need to use addition or subtraction in a word problem. I can tell you how to do addition and subtraction word problems using objects, drawings, or equation. I can explain with others how to compare the bigger number in subtraction. I can explain addition and subtraction word problems involving two steps. I can use a variety of manipulatives to solve an addition or subtraction problem.	I can tell how to make 1 group of ten using ones. I can tell how to make 100 by using groups of ten. I can show that 10 groups of 10 is the same value as 100. I can explain to others what the number is using place value.	I can explain how to choose the best tool to measure an object.	I can discuss attributes to name shapes like: triangles. quadrilaterals, pentagons, hexagons and cubes.

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Represent and solve problems involving addition and subtraction.	Understand place value.	Measure and estimate lengths in standard units.	Reason with shapes and their attributes.
CCSS Standard		2. Count within 1000; skip-count by 5s, 10s, and 100s.	2. 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. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
Learning Target		I can skip count by 5's. I can skip count by 10's. I can skip count by 100's.	I can choose different units or items to measure an object. I can use 2 different size items to measure an object. I can explain how the size of an item can affect the measurement.	I can draw rows and columns of equal size in a rectangle. I can count the equal sides of a square and rectangle.
Mathematical Practices		 #2 Reason abstractly and qualitatively. #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. #5 Use appropriate tools strategically. #6 Attend to precision. #7 Look for and make use of structure. 	 #2 Reason abstractly and quantitatively. #6 Attend to precision. #8 Look for and express regularity in repeated reasoning.
MP Learning Targets		I can show how to skip count by 5's. I can show how to skip count by 10's. I can show how to skip count by 100's.	I can explain to others which units or objects to use to measure an object. I can describe how to use 2 different size items to measure an object. I can tell others how the size of an item can affect the measurement.	I can explain how a rectangle has rows and columns of equal size. I can talk about the equal sides of a square and rectangle.

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Represent and solve problems involving addition and subtraction.	Understand place value.	Measure and estimate lengths in standard units.	Reason with shapes and their attributes.
CCSS Standard		3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	3. Estimate lengths using units of inches, feet, centimeters, and meters.	3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves, thirds, half of, a third of,</i> 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.
Learning Target		I can read numbers to 1000 using base-ten numerals. I can write numbers to 1,000 using number names. I can write numbers to 1,000 using expanded form.	I can estimate the length using inches. I can estimate the length using feet. I can estimate the length using centimeters. I can estimate the length using meters.	 I can divide a circle into two, three, or four equal parts. I can divide a rectangle into two, three, or four equal parts. I can describe the equal share with words. I can describe a whole by the number of equal parts. I can use examples to show ½, 1/3, and ¼ of different shapes.
Mathematical Practices		 #2 Reason abstractly and qualitatively. #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.	 #2 Reason abstractly and quantitatively. #3 Construct viable arguments and critique the reasoning of others. #6 Attend to precision. #8 Look for and express regularity and repeated reasoning.
MP Learning Targets		I can show how to read numbers to 1,000 using base-ten numerals. I can explain the patterns in writing numbers to 1,000 with number names and expanded form.	I can explain how to estimate the length of an object.	I can tell how to divide a circle into two, three, and four equal parts. I can explain how to divide a rectangle into two, thee, or four equal parts. I can discuss whole and equal share with a partner. I can talk about 1/2, 1/3, and 1/4 of different shapes.

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Represent and solve problems involving addition and subtraction.	Understand place value.	Measure and estimate lengths in standard units.	Reason with shapes and their attributes.
CCSS Standard		 4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. 	4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	
Learning Target		I can compare two three-digit numbers using >, <, and =.	I can find the difference in length between two objects using a ruler or yard stick.	
Mathematical Practices		 #2 Reason abstractly and qualitatively. #6 Attend to precision. #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.	
MP Learning Targets		I can explain how to compare two three-digit numbers using >, <, or = and place value.	I can discuss with others how to find the length of an object.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
CCSS Standard	 Fluently add and subtract within using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 	5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	5. 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.	
Learning Target	I can add and subtract mentally. I can add two - one digit numbers mentally.	I can add and subtract numbers up to 100 easily. I can add and subtract numbers by breaking one number into tens and ones. I can use turn around facts (Commutative property of addition). I can add with regrouping (Associative Property of Addition). I can add using zero (Identity Property of 0). I can use addition and subtraction fact families.	I can add and subtract to solve word problems using length. I can use drawings of rulers to solve word problems. I can use a number line to count on and count backwards. I can use a picture, drawing, or letter to show an unknown number.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
Mathematical Practices	#2 Reason abstractly and quantitatively.#7 Look for and make use of structure.#8 Look for and express regularity and repeated reasoning.	 #2 Reason abstractly and qualitatively. #7 Look for and make use of structure. #8 Look for and express regularity in repeated reasoning. 	 #1Make sense of problems and persevere in solving them. #2 Reason abstractly and qualitatively. #4 Model with mathematics. #5 Use appropriate tools strategically. #8 Look for and express regularity in repeated reasoning. 	
MP Learning Targets	I can explain to a partner how to add and subtract mentally. I can explain to a partner how to add two – one digit numbers mentally.	I can explain how to add and subtract numbers up to 100. I can demonstrate how to add and subtract by breaking one number into tens and ones. I can describe turn around facts (Commutative Property of Addition). I can show how to add with regrouping (Associative Property of Addition). I can show how to add using zero (Identity Property of 0). I can explain how to use addition and subtraction with fact families.	I can explain how to use addition and subtraction to find the length of an object. I can use different objects to measure the length of an object. I can discuss how to count on and count backwards. I can talk about how to use an item to show a number that is not known.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
CCSS Standard		6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	6. 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.	
Learning Target		I can add up to four two-digit numbers. I can change the order of numbers either with or without regrouping. I can write story problems using up to four two-digit numbers.	I can create a number line using whole numbers. I can show whole numbers on a number line. I can add and subtract on a number line up to 100.	
Mathematical Practices		 #2 Reason abstractly and qualitatively. #7 Look for and make use of structure. #8 Look for and express regularity in repeated reasoning. 	#2 Reason abstractly and qualitatively. #4 Model with mathematics. #5 Use appropriate tools strategically.	
MP Learning Targets		I can show how to add up to four two-digit numbers. I can explain how to change the order of numbers with or without regrouping. I can explain how to create story problems up to four two-digit numbers. I can discuss large numbers and where their place value is.	I can explain how to create a whole numbers number line. I can describe how to use a number line to add and subtract up to 100.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
CCSS Standard		7. 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.		
Learning		I can add and subtract numbers up		
Target		to 1,000. I can use models or drawings to add and subtract numbers up to 1,000. I can use place value bundles up to 1,000.		
Mathematical Practices		 #2 Reason abstractly and qualitatively. #4 Model with mathematics. #5 Use appropriate tools strategically. #7 Look for and make use of structure. #8 Look for and express regularity in repeated reasoning. 		
MP Learning Targets		I can discuss adding and subtracting numbers up to 1,000. I can explain how models or drawings show how to add and subtract numbers up to 1,000. I can show place value using bundles up to 1,000.		

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
CCSS Standard		8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.		
Learning Target		I can mentally add 10 to a given number. I can mentally subtract 10 from a given number. I can mentally add 100 to a given number. I can mentally subtract 100 from a given number.		
Mathematical Practices		 #2 Reason abstractly and qualitatively. #7 Look for and make use of structure. #8 Look for and express regularity in repeated reasoning. 		
MP Learning Targets		I can explain to others how to add 10 to a given number. I can explain to others how to subtract 10 from a given number. I can explain to others how to add 100 to a given number. I can explain to others how to subtract 100 from a given number.		

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Add and Subtract within 20.	Use place value understanding and properties of operations to add and subtract.	Relate addition and subtraction to length.	
CCSS Standard		9. Explain why addition and subtraction strategies work, using place value and the properties of operations.		
Learning Target		I can explain addition and subtraction using place value. I can use turn around facts (Commutative Property of Addition). I can add by regrouping (Associative Property of Addition). I can add using zero (Identity Property of 0). I can use addition and subtraction fact families.		
Mathematical Practices		#2 Reason abstractly and qualitatively.#3 Construct viable arguments and critique the reasoning of others.#4 Model with mathematics.		
		 #5 Use appropriate tools strategically. #7 Look for and make use of structure. #8 Look for and express regularity in repeated reasoning. 		
MP Learning Targets		I can demonstrate addition and subtraction using place value. I can explain to others how to use turn around facts (Commutative Property of Addition). I can explain addition with regrouping (Associative Property of Addition). I can explain adding zero (Identity Property of 0). I can discuss with others addition and subtraction fact families.		

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Work with equal groups of objects to gain foundations for multiplication.		Work with time and money.	
CCSS Standard	3. 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.		7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	
Learning Target	I can name an odd or even number. I can compare an odd or even number. I can count an odd or even number by 2's, 3's, 5's, and 10's. I can write a number sentence using even addends.		I can tell the difference between a.m. and p.m. I can read an analog clock or digital clock to the hour. I can write the time of an analog clock to the hour. I can write the time to the hour from a digital clock. I can tell the time to the nearest 5 minutes on an analog clock. I can tell the time to the nearest 5 minutes on a digital clock. I can use the terms: half past, quarter after/past, quarter to, minutes after/past, minutes to.	
Mathematical Practices	 #2 Reason abstractly and quantitatively. #7 Look for and make use of structure. #8 Look for and express regularity and repeated reasoning. 		#5 Use appropriate tools strategically. #6 Attend to precision.	
MP Learning Targets	I can explain to others an odd or even number. I can explain odd or even numbers by 2's, 3's, 5's, and 10's. I can create a number sentence using even addends.		I can explain the time on an analog clock to the hour. I can explain how to tell the time on an analog clock and digital clock to the hour. I can explain how to tell the time to the nearest 5 minutes on an analog and digital clock. I can explain the terms: half past, quarter after/past, quarter to, minutes after/past, minutes to.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement	Work with equal groups of objects to gain foundations for multiplication.		Work with time and money.	
CCSS Standard	Add and subtract within 20.		8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you</i> <i>have 2</i> <i>dimes and 3 pennies, how many</i> <i>cents do you have?</i>	
Learning Target			I can give the value of money using: pennies, nickels, dimes, quarters, and dollar bills. I can use \$ and ¢ symbols. I can solve word problems using money. I can count coins.	
Mathematical Practices			 #1Make sense of problems and persevere in solving them. #2 Reason abstractly and qualitatively. #4 Model with mathematics. #5 Use appropriate tools strategically. #8 Look for and express regularity in repeated reasoning. 	
MP Learning Targets			I can explain the value of money using pennies, nickels, dimes, quarters, and dollar bills. I can explain \$ and ¢ symbols. I can make and discuss word problems using money.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement			Represent and interpret data.	
CCSS Standard			9. 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.	
Learning Target			I can measure lengths of objects. I can write down measured lengths to the nearest whole number. I can create a line plot. I can write length measurements on a line-plot.	
Mathematical Practices			#4 Model with mathematics. #5 Use appropriate tools strategically. #6 Attend to precision. #8 Look for and express regularity in repeated reasoning.	
MP Learning Targets			I can discuss how to measure the lengths of objects. I can discuss how to write lengths. I can explain a line plot.	

Marking	Operations and	Number and Operations in Base	Measurement	Geometry
Period	Algebraic Thinking	Ten	and Data	
one				
CCSS Cluster Statement			Represent and interpret data.	
CCSS Standard			10. Draw a pictograph 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 using information presented in a bar graph.	
Learning Target			I can draw and make a picture graph. I can draw and make a bar graph. I can compare data on a pictograph. I can compare data on a bar graph. I can solve addition and subtraction problems using data from a pictograph. I can solve addition and subtraction problems using data from a bar graph.	
Mathematical Practices			 #1Make sense of problems and persevere in solving them. #2 Reason abstractly and qualitatively. #4 Model with mathematics. #5 Use appropriate tools strategically. #6 Attend to precision. #8 Look for and express regularity in repeated reasoning. 	
MP Learning Targets			I can explain how to make a picture graph or bar graph. I can discuss the data on a picture graph or bar graph. I can explain addition or subtraction using a picture graph or bar graph.	

Math 2