Teacher: CORE Math Grade 2	Year: 2011-12
Course: Math Grade 2	Month: All Months

August

ADDITION AND SUBTRACTION

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Understanding Addition	•Write an addition equation to represent the sum using two parts. •Solve simple addition word problems.	part whole add sum plus (+) equals (=) addition sentence join				2.NBT.5- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.OA.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.
		Understanding Subtraction	•Write a subtraction equation to represent the difference by taking a part away from the whole. •Solve simple subtraction word problems.	subtract difference subtraction sentence minus (-) separate more fewer related				2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.OA.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.
		Addition Strategies	Solve addition problems correctly using two and three addends.	doubles near doubles addend number sentence				2.NBT.5- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the

								relationship between addition and subtraction. 2.NBT.9- Explain why addition and subtraction strategies work, using place value and the properties of operations. 2.OA.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. 2.OA.2-Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.
	Subtraction Strategies	Solve subtraction problems correctly.	doubles near doubles subtraction difference number sentence				2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.9-

								Explain why addition and subtraction strategies work, using place value and the properties of operations. 2.OA.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. 2.OA.2-Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.
	Addition ans Subtraction Strategies (Fact Families)	Identify related addition and subtraction facts.	doubles near doubles number sentence related addition sentence part subtraction difference fact family				2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.9-Explain why addition and subtraction strategies

								work, using place value and the properties of operations. 2.OA.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. 2.OA.2- Fluently

								add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.

PLACE VALUE 2

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards

September

PLACE VALUE I

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Place Value: Numbers to 999	•Construct and write numbers using tens and ones •Compare two digit numbers •Compare two three-digit numbers •Order numbers in ascending and descending order •Write an even number as	ones tens digits number word greater than (>) less than (equal to (=) before after between least greatest pattern skip counting even odd hundreds chart				2.NBT.3-Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 2.NBT.4-Compare two three-digit numbers based on meanings of the hundreds, tens, and

		a sum of two even addends (even + even = even, even + odd = odd) •Skip count by 2s, 5s, 10s to 100 beginning at a variety of numbers other than 0. •Mentally add 10 to a given number up to 100. (review) •State the value of a given digit. ex. 73, the 7s value is 70. •State the place value of an identified digit. 73, the seven is in the tens place •Write a number in expanded form. ex. 73= 70 +3					ones digits, using >, =, and < symbols to record the results of comparisons. 2.OA.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. 2.NBT.8- Mentally add 10 or 100 to a given number 100â€“900, and mentally subtract 10 or 100 from a given number 100â€“900.

GEOMETRY

Essential	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards

Questions							
	Shapes & Figures	•Identify and construct shapes having specific attributes (number of angles, number of faces) •Describe the differences between 3 dimensional shapes	angles/corner faces/side vertices/edge halves triangles quadrilaterals pentagons hexagons cubes symmetry		Use supplemental materials (toothpicks, marshmellows, AIMS)		2.G.1- Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

Fractions

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Fractions	•Divide/Partition a rectangle into rows and columns of same-size squares and count to find the total number. •Divide/Partition circles and rectangles into two, three, or four equal shares. •Describe an identified fraction as a fourth, third, half •Write a symbolic	part whole equal unequal halves thirds fourths fractions set square units area		series lessons 12-1, 12-2, 12-3, 13-7 for area		2.G.2- Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 2.G.3- Partition circles and rectangles into two, three, or four equal

		representation of a visual or verbal fraction. Say "one-fourth" student draws and writes 1/4.					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.

MEASUREMENT - LENGTH

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Linear Measurement	• Identify and manipulate measuring tools such as a ruler, yardstick, meter stick, and measuring tape •Identify the relationship between an	length unit height inch yard foot centimeter meter ruler yardstick meter stick tape measure		Supplement using AIMS and other materials than series		2.MD.1- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.2- Measure the

			inch, foot, yard, centimeter, and meter by measuring the same item with different tools. • Estimate lengths using units of inches, feet, centimeters, and meters of a given object. •Measure objects using a ruler, yardstick, meterstick and measuring tapes. •Measure to determine how much longer one object is than another. •Solve addition and subtraction word problems involving lengths of same unit within 100.					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.MD.3-Estimate lengths using units of inches, feet, centimeters, and meters. 2.MD.4-Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 2.MD.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. 2.MD.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.

GRAPHING

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Pictograph	•Create a picture graph from a given set of data up to four categories using single units •Solve simple addtion and subtraction problems	data symbol pictograph more than less than in all altogether		Topic 16-2		2.MD.10- Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve

		using the picture graph.					simple put-together, take-apart, and compare problems1 using information presented in a bar graph.
	Bar Graph	•Create a bar graph from a given set of data up to four categories using single units •Solve simple addtion and subtraction problems using the bar graph.	data bar graph more than less than in all altogether		Topic 16-3		2.MD.10-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 problems1 using information presented in a bar graph.
	Line Plot	•Create a line plot from data produced by measuring lengths of several objects to	data line plot more than less than in all altogether		Supplement		2.MD.9-Generate measurement data by measuring lengths of several objects to the nearest whole

		the nearest whole unit.					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.
	Gathering Data	Collect and record data using tally marks	tally				2.S.2 - Collect and record data (using tallies) related to the question

MONEY

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Money	•Count sets of coins (review) •Solve word probems involving dollar bills, quarters, dimes, nickels and pennies. •Apply $ and ¢ appropriately.	dime nickel penny quarter cents coins half dollar greatest value least value dollar bill dollar coin dollar sign decimal point tally mark				2.MD.8- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and Â¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how

							many cents do you have? 2.NBT.5- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

TIME

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	TIME	•Tell, write, and recognize time using analog and digital clocks up to five minutes. •Match appropriate activities to a.m. and p.m.	analog clock digital clock minute hand minute hour hand hour half past half hour quarter past quarter to second day a.m. p.m.				2.MD.7- Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

PLACE VALUE 2

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Place Value: Numbers	•Construct and write numbers	ones tens digits				2.NBT.1- Understand that the three digits

		to 999	using hundred, tens and ones •Compare three digit numbers •Compare two three-digit numbers •Order numbers in ascending and descending order •Skip count by 5s, 10s to 100s beginning at a variety of numbers other than 0 up to 1,000 •State the value of a given digit up to 1,000. ex. 173, the 7s value is 70. •State the place value of an identified digit up to 1,000. 1,973, the seven is in the tens place	number word greater than (>) less than (before after between least greatest pattern skip counting even odd hundreds chart three digit number hundreds digit				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.NBT.2-Count within 1000; skip-count by 5s, 10s, and 100s. 2.NBT.3-Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 2.NBT.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. 2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship

			•Write a number in expanded form up to 1,000. ex. 1,973= 1,000 + 900 +70 +3 •Defne 100 as 10 tens. •Write any multiple of 100 in expanded word form ex. 600 is six hundreds, 0 tens, 0 ones					between addition and subtraction. 2.NBT.1a-100 can be thought of as a bundle of ten tens â€" called a â€œhundred.â€ 2.NBT.1b-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).
October	PLACE VALUE 2							
	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Place Value: Numbers to 999	•Construct and write numbers using hundred, tens and ones •Compare three digit numbers •Compare two three-digit numbers •Order numbers in ascending and descending	ones tens digits number word greater than (>) less than (before after between least greatest pattern skip counting even odd hundreds				2.NBT.1-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.NBT.2-Count within 1000; skip-count by 5s, 10s, and 100s.

			order •Skip count by 5s, 10s to 100s beginning at a variety of numbers other than 0 up to 1,000 •State the value of a given digit up to 1,000. ex. 173, the 7s value is 70. •State the place value of an identified digit up to 1,000. 1,973, the seven is in the tens place •Write a number in expanded form up to 1,000. ex. 1,973= 1,000 + 900 +70 +3 •Defne 100 as 10 tens. •Write any multiple of 100 in expanded	chart three digit number hundreds digit				2.NBT.3-Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 2.NBT.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. 2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.1a-100 can be thought of as a bundle of ten tens â€” called a â€œhundred.â€ 2.NBT.1b-The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or

		word form ex. 600 is six hundreds, 0 tens, 0 ones					nine hundreds (and 0 tens and 0 ones).

ADDITION AND SUBTRACTION 3

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards

MULTIPLICATION

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards

ADDITION AND SUBTRACTION 2

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Adding up to four two-digit numbers (*note: must supplement additional materials)	•Add a one-digit number to a two-digit number with or without regrouping. •Add a two-digit number to a two-digit number with or without regrouping. •Add three numbers with one and two-digit addends. •Add four numbers	digits ones tens regroup sum addition				2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.6-Add up to four two-digit numbers using

			with one and two digit addends. •Add money values with up to two-digits. •Solve addition word problems up to two steps. •Write numbers in expanded form					strategies based on place value and properties of operations. 2.NBT.8-Mentally add 10 or 100 to a given number 100â€“900, and mentally subtract 10 or 100 from a given number 100â€“900. 2.NBT.9-Explain why addition and subtraction strategies work, using place value and the properties of operations. 2.OA.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.
	Subtract two-digit numbers	•Subtract a one-digit number from a two-digit number with or without regrouping. •Subtract a two-digit number from a two-digit number with or without regrouping. •Use	subtract difference				2.NBT.5-Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.6-

			addition to check subtraction. •Subtract money values with up to two-digits. •Solve multiple step word problems.					Add up to four two-digit numbers using strategies based on place value and properties of operations. 2.NBT.9-Explain why addition and subtraction strategies work, using place value and the properties of operations. 2.OA.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.