Teacher: CORE Math Grade 3	Year: 2010-11
Course: Math Grade 3	Month: All Months

September

STATISTICS**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Graphs: Bar (Scales With Intervals Of 1,2, 5, 10), Frequency Tables	Collect data using observation of data/surveys Record data using tally marks on a frequency table Create a frequency table to represent data Identify title, scale, axis, data, bar Construct bar graph (vertically/horizontally) using collected/provided data **Interpret Information on a bar graph to answer questions** Formulate conclusions/predictions based on bar graphs to answer questions/solve problems Compare pictograph and bar graph data to answer questions/solve problems	title scale bar data axis labels survey				3.S.2 - Collect da using observatio and survey and record appropriat 3.S.3 - Construct frequency table to represent a collection data 3.S.4 - Identify th parts of pictograph and bar graphs 3.S.5 - Display da in pictograph and bar graphs 3.S.7-Read and interp data in bar graphs and pictograph
	Graphs: Pictograph (1s, 2s, 5s, 10s, 1/2 symbols), Frequency	Locate title, key, symbol on graph Create appropriate	data key frequency				3.S.2 - Collect da using

	Tables	title, key, symbol for graph Collect data using observations of objects/surveys Construct graph using collected/provided data Create a frequency table that represents collected/provided data using tally marks **Interpret information on pictograph to answer questions** Formulate conclusions/predictions based on pictograph data to answer questions/solve problems	table tally marks title symbol survey				observatio and survey and record appropriat 3.S.3 - Construct frequency table to represent a collection data 3.S.4 - Identify th parts of pictograph and bar graphs 3.S.5 - Display da in pictograph and bar graphs 3.S.7-Read and interp data in bar graphs and pictograph

October

MEASUREMENT**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Time: Digital and Analog to half hour, quarter hour, and to the minute	**Write the time read from an analog clock (to the minute)** **Verbally state the time read from an analog clock (to the minute)**	analog digital half past quarter to quarter after o'clock elapse time hour hand minute hand minute hour				3.M.8 - Relate uni fractions t the face of the clock: Whole = 6 minutes Â = 30 minu Â¼ = 15 minutes 3.M.9 -Te time to the minute,

		Match an analog clock to a corresponding digital time (to the minute) Write the time using half past, quarter after, and quarter to					using digit and analog clocks

NUMBER SENSE I**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Place Value: Numbers up to a thousand	**Write numbers 1-1000** **Read number words up to 1000** **Order numbers to 1000** **Classify a quantity as more or less than another given quantity up to 1000** **Classify a quantity as more or less than another given a quantity up to 1000 using**	value place ones place tens place hundrends place thousands place comma digit order compare greater than less than equal to least greatest estimate round standard form expanded form word name place value blocks				3.N.1 -Ski count by 25's, 50's, 100's to 1,000 3.N.2 -Rea and write whole numbers to 1,000 3.N.3 - Compare a order numbers to 1,000 3.N.4 - Understan the place value structure o the base te number system: 10 ones = 1 te 10 tens = 1 hundred 10 hundreds = thousand

			, or = Estimate numbers up to 500 **Rewrite a 3-digit number in terms of ones, tens, and hundreds** **Calculate a 3-digit number when given the amount of ones, tens, and hundreds** **Classify ones, tens, hundreds, and thousands place** Write odd and even numbers					3.N.5 -Use variety of strategies t compose a decompos three-digit numbers 3.A.1-Use the symbo = (with an without th use of a number lir Inequalitie to compar whole numbers a unit fracti 3.N.16 - Identify oc and even numbers

November

OPERATIONS I**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Addition: 2, 3, 4-digit Addends With Regrouping	**Solve addition place value patterns (ex. 20+30 or 900+600) using basic facts**	addends sum plus sign estimate decimal point column regroup (carrying)				3.N.5 -Use variety of strategies t compose ar decompose three-digit numbers 3.N.9 - Understand

		Solve vertical problems with 2, 3, 4-digits Solve money additon problems using decimal point and dollar signs **Solve column addition problems with 3 addends** Estimate to find approximate sums (rounding addends) **Solve addition problems using the commutative property** State whether the sum will be even or odd based on the addends	operation word problems addition dollar sign				and use the associative property of addition 3.N.18 -Us variety of strategies t add and subtract 3-digit numb (with and without regrouping 3.A.2-Describe ar extend numeric (+ and geometric patterns 3.N.17 -Develop ar understand of the properties o odd/even numbers as result of addition or subtraction
	Money: Mixed Coin/Bill Sets	**Add the value of coins (quarters, nickels,**	quarter nickel dime penny dollars ($1,				3.M.7-Cou and repres combined coins and dollars,

		dimes, and pennies) **Add the money value of combinations of bills and coins** Calculate change by counting up Sort coins by their value	$5, $10, & $20) cents change decimal point dollar sign cents sign bills (ones, fives, tens) coins (nickels, dimes, quarters, pennies)				using currency symbols ($0.00)

December

OPERATIONS II**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Subtraction: 2, 3, 4-digits with regrouping	**Solve place value subtraction patterns (50-30, 700-500) using basic facts** **Solve 2 and 3-digit subtraction problems with regrouping (borrowing)** **Solve 3 and 4-digit subtraction with multiple regroupings**	difference quantity regroup (borrow) pattern subtraction how many more more than left remain				3.N.18 -Us variety of strategies t add and subtract 3- digit numb (with and without regrouping 3.A.2- Describe a extend numeric (+ and geomet patterns 3.N.24 - Develop strategies f selecting th appropriate computatio and operational

			Solve 3 and 4-digit subtraction problems that require regrouping (borrowing) across zeroes (ex. 300-184) **Solve addition and subtraction word problems in which students are required to determine which operation to use** Calculate the amount of change given using subtraction method Solve subtraction problems with money using decimal points and dollar signs State whether the difference is even or odd based on the numbers					method in problem solving situations 3.N.17 - Develop an understandi of the properties o odd/even numbers as result of addition or subtraction

			being subtracted					

January

OPERATIONS III**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Multiplication: Factors up to 12	Create arrays to solve basic multiplication problems Create equal groups of objects to solve multiplication problems **Memorize and develop fluency with single digit basic multiplication facts (0-9)** **Solve equations using commutative property of multiplication** Solve problems using 1 as the identity element for multiplication Solve problems using the zero property for multiplication	factor product times groups of array basic facts area model table patterns number sentences multiplication				3.N.21 -Us the area model, tabl patterns, arrays, and doubling to provide meaning fo multiplicat 3.N.19 - Develop fluency wit single-digit multiplicat facts 3.N.6 -Use and explain the commutati property of addition an multiplicat 3.N.7 -Use as the ident element for multiplicat 3.N.8 -Use the zero property of multiplicat 3.N.20 -Us variety of strategies t solve multiplicat problems with factor up to 12 x

		Solve multiplication equations by using tables, area models, patterns, arrays, repeated addition, and doubling Solve word problems by selecting the appropriate computational and operational in multiplication problem solving situations Solve problems up to 12x12 using different strategies						

Feb

OPERATIONS IV**

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Division: Divisors up to 9	Solve basic divison problems by dividing objects and symbols into equal groups **Solve basic**	quotient dividend divisor equal groups division				3.N.22 - Demonstrat fluency and apply singl digit divisio facts 3.N.23 -Us tables, patterns,

			division facts using the repeated subtraction strategy **Memorize all basic division facts with quotients up to 81** Formulate fact families that demonstrate an understanding between multiplication and division **Solve multiplication and division word problems that require students to determine which operation to use**					halving, an manipulativ to provide meaning fo division 3.N.24 - Develop strategies f selecting th appropriate computatio and operational method in problem solving situations

M a r c h	NUMBER SENSE IV**							
	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Number System: Fractions	**Write fractions as part of a whole unit and as parts of a collection** **Identify the numerator and**	numerator denominator equivalent fraction whole unit part compare order				3.A.1-Use t symbols , = (with and without the use of a number line Inequalities compare

			denominator in a fraction **Write fractional numbers as equal parts of a whole** Match equivalent fractions (1/2, 1/3, 1/4) Write unit fractions (1/2, 1/3, 1/4) on a number line	equal parts				whole numbers an unit fractio 3.N.12 - Understand and recogni the meanin of numerato and denominato in the symbolic fo of a fractio 3.N.13- Recognize fractional numbers as equal parts a whole 3.N.10 - Develop an understandi of fractions part of a whole unit and as parts a collection 3.N.11 -Use manipulativ visual mode and illustrations name and 3.N.14 - Explore equivalent fractions (Â ?, Â¼) 3.N.15 - Compare ar order unit fractions (Â ?, Â¼) and find their approximat locations or

							number line

VISUAL AND SPATIAL REASONING **

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Shapes: 2-dimensional and 3-dimensional	**Name and define 3-dimensional shapes (cube, rectangular prism, pyramid, triangular prism, sphere, cylinder, and cone)** **Name and define 2-dimensional shapes (triangle, square, rectangle, trapezoid, rhombus, circle, hexagon)** Sort congruent and similar figures Name the flat shapes that make up the faces of 3-dimensional objects Construct	circle square rectangle triangle hexagon trapezoid cube cylinder sphere prism cone symmetry congruent				3.G.1-Defi and use correct terminolog when referring t shapes (circle, triangle, square, rectangle, rhombus, trapezoid, and hexagon) 3.G.3 - Name, describe, compare, a sort three-dimension shapes: cu cylinder, sphere, prism, and cone 3.G.2 - Identify congruent and simila figures 3.G.4 - Identify th faces on a three-dimension shape as two-dimension shapes

		lines of symmetry and choose correct lines of given symmetry					3.G.5- Identify ar construct lines of symmetry 3.A.2- Describe a extend numeric (+) and geometric patterns

April

MEASUREMENT I **

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Linear Measurement: Standard Units: Inch, Feet, Yard	**Measure to the nearest standard unit (whole and 1/2 inches, whole feet and whole yards) using a ruler/yardstick** Choose appropriate tool (ruler/yardstick) to measure an object Choose appropriate standard measurement (inches/feet/yard) needed to measure the length of an object Select and use standard (customary) and	inches feet yard ruler yardstick length estimate measure/measurement				3.M.10-Sel and use standard (customary) and non-standard un to estimate measureme 3.M.1-Selec tools and units (customary) appropriate for the leng measured 3.M.2 -Use ruler/yardst to measure the nearest standard un (whole and Â½ inches, whole feet, and whole yards)

		non-standard units to estimate measurements						
	Mass: Weight	Determine which unit of measure (ounces, pounds) is used when given an object	ounces pounds					3.M.3 - Measure objects, using ounc and pound
	Capacity:		cups pints quarts gallons capacity					3.M.4 - Recognize capacity as an attribut that can be measured 3.M.5- Compare capacities (e.g., Whic contains more? Which contain less?) 3.M.6 - Measure capacity, using cups pints, quar and gallon

May

NUMBER SENSE V

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Number Systems: Fractions	Order and compare (,=) using unit fractions (1/2, 1/3, 1/4)					3.N.14 - Explore equivalent fractions (Â½, ?, Â¹ 3.N.15 - Compare a

			Match equivalent fractions (1/2, 1/3, 1/4)					order unit fractions (Â½, ?, Â¼ and find th approxima locations o a number line