Teacher: Core Math5 Year: 2011-12

Course: Math Grade 5 Month: All Months

September

Review of 4th grade- 10 (nonconsecutive) days ~ This 4th grade review should be taught in conjunction with the regula curriculum for September. Suggested pacing is 2-3 days per week.

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.01.NO.05.01- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models, explanations, or other representations; and positive fractional numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths, fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in		Review of 4th grade GLE's equivalent fractions compare and order fractions subtract decimals measurement and conversions line plots median, range, mode probability, likely outcomes	review use of calculator review use of protractor understand rational numbers order and compare all numbers including fractions accurately solves problems using multiple operations measures appropriately and consistently using conversions analyze patterns using measures of central tendency predict and prove probability of an event that may or may not contain equally likely outcomes	website resources (see links) N&O 4.4 NECAP Review G&M 4.7NECAP Review DSP 4.2 NECAP REview DSP 4.5 NECAP Review		NECAP Vocabulary analyze, classify, compute, customary metric units determine level of accuracy, distinguish, draw a conclusion, evaluate, expression equation, formulate, infer, interpret, justify, mod notation, predict, produce, reason, record, rela relationship represent, response, ru for a patter simplify, solution, trends, unit measure

	area, set, or linear models using models, explanations, or other representations. M.01.NO.05.02- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to percents); or integers in context using models or number lines. M.01.NO.05.04- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime, or composite numbers; and						NECAP review pacl Everyday Counts Calendar (ECC) Dail Depositor, Number Li Hundreds Chart Problem Solving Strategies (PS) Teacher's Edition Tex (TE) 6-1, 6-

	addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.02.GM.05.06- Demonstrates conceptual understanding of perimeter of polygons, and the area of rectangles or right triangles through models, manipulatives, or formulas, the area of polygons or irregular figures on grids, and volume of rectangular prisms (cubes) using a variety of models, manipulatives, or formulas. Expresses all measures using appropriate units. M.04.DSP.05.02- Analyzes patterns, trends, or distributions in data in a variety of contexts by determining or using measures of central tendency (mean,						

median, or mode) or range to analyze situations, or to solve problems. M.04.DSP.05.05- For a probability event in which the sample space may or may not contain equally likely outcomes, determines the experimental or theoretical probability of an event and expresses the result as a fraction.						

Rational Numbers 1a

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.01.NO.05.01- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models, explanations, or other representations; and positive fractional	How much is one billion? When do we encounter and use large numbers in everyday life? When do we encounter and use decimals in everyday life?	***NEW :*** *place value of whole numbers 0-9,999,999 accurately solve problems in decimals to the hundredths place* place value of decimals (tenths, hundredths, ***thousandths***) review of rounding integers (positive and negative)	demonstrate an understanding ordering of decimals and integers ***(decimal to decimal)*** ***(integers)*** composition decomposition equivalencies	Rounding larger numbers Place Value to Billions		Everyday Counts Calendar (ECC) Daily Depositor, Number Lin Hundred's Chart PS T25,26,2 28 TE 2-4,2-5, 6, 2-7, 2-9, 10, 2-11, 2- 12, 4-15

	numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths, fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in area, set, or linear models using models, explanations, or other representations. M.01.NO.05.02- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to							

percents); or integers in context using models or number lines.						

Rational Numbers will extend into October ~

Addition and subtraction of decimals has been moved to from March to Se
Multiplying decimals remains in March with multiplication.

NEW TO STUDENT: adding and subtracting decimals

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.NO.5.1.2- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to perents); integers in context using models or number lines. M.NO.5.1.3.B- Demonstrates conceptual understanding of		Addition Addition of decimals - ***calculates change back from $1.00, $5.00, $10.00*** Equivalency Subtraction Subtraction of decimals ***calculates change back from $1.00, $5.00, $10.00*** Composition Decomposition Place Value Order of Whole Numbers Comparison of Whole Numbers Rounding (review)	Subtract four digits (with regrouping) Add four digits demonstrates understanding Estimate differences Estimate sums	Website Resources (see links) Everyday Counts Calendar (ECC) Daily Depositor, Numberline, Hundreds Chart Problem Solving Strategies(PS) Sample Lesson- NECAP weakness- fraction to decimal		NECAP Vocabulary line, ray, an ,tyes of lines enpoint vertex, protractor degree types of angles: acute right obtuse straight. Common Vocabulary: place value digit addend sum difference commutativ property associative property estimate rounding Everyday Counts Calendar (ECC) Problem Solving Strtegies (PS

	mathematical operations by describing or illustrating the meaning of a remainder with respect to division of whole numbers using models, explanations, or solving problems. M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.7- Makes estimates in a given situation						TE 3-1, 3-3, 3-5, 3-7 T-E 2-1, 2-2 2-4, 2-5, 2-6 2-7, 2-8, 2-9 2-10, 2-11

	by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands. M.NO.5.1.8- Applies properties of numbers (odd, even, and divisibility) and field properties (commutative, associative, identity, and distributive) to solve problems and to simplify computations.						
Oct	Number Sense						
	Standards	Enduring	Content	Skills	Lessons	Resources	Vocabulary

o b e r		Understandings					
	M.NO.5.1.1- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models, explanations, or other representations; and positive fractional numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths, fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in area, set, or linear models		Place Value of whole numbers from 0 to ***9,999,999*** solve problems to the ***hundredths place*** Exponents related to place value Composition and decomposition of whole numbers from 0 to 9,999,999 Addition of 4-digit numbers ***including decimals*** Subtraction of 4-digit numbers ***including decimals***	Demonstrates conceptual understanding using models, explanations, or other representations Orders Compares Estimates sums and differences using appropriate strategy Rounds numbers to specific place value ***Label decimals on a number line - tenths, hundredths, and thousandths***	Understanding Place Value NECAP WEAKNESS Sample Lesson- NECAP weakness- decimal number line		Calculators Place Value Charts I have___, who has ____? cards NECAP Vocabulary line, ray, angle ,tyes o lines, enpoi vertex, protractor degree type of angles: acute right obtuse straight. Common Vocabulary TE 2-4, 2-5, 2-6, 2-14, 2- 15

	using models, explanations, or other representations. M.NO.5.1.2- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to perents); integers in context using models or number lines. M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite							

	numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands. M.NO.5.1.8- Applies properties of numbers (odd,							

even, and divisibility) and field properties (commutative, associative, identity, and distributive) to solve problems and to simplify computations.							

Patterns-last week of Oct

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.FA.5.1.1- Identifies and extends to specific cases a variety of patterns represented in models, tables, sequences, or in problem situations; and writes a rule in words or symbols for finding specific cases of a linear relationship. M.FA.5.1.2- Demonstrates conceptual understanding of linear relationships (y = kx) as a constant rate of change by identifying, describing, or comparing		Linear Patterns Using Models Linear Patterns Using Tables Linear Patterns Using Sequences Linear Relationships as a Constant Rate of Change	Identifies Extends Compare Writes a rule in words or symbols Describes			NECAP Vocabulary line, ray, ang ,tyes of lines enpoint vert protractor degree types of angles: acute right obtuse straight. **Common Vocabulary** pattern linear patter rate Input/Outpu Machine PS

	situations that represent constant rates of change						
				describe compare Identifies			

November

Multiplication-will take approx 5 weeks

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.FA.5.1.3- Demonstrates conceptual understanding of algebraic expressions by using letters to represent unknown quantities to write linear algebraic expressions involving any two of the four operations; or by evaluating linear algebraic expressions using whole numbers. M.FA.5.1.4- Demonstrate conceptual understanding of equality by showing equivalence between two expressions using models or different representations		Algebraic expression using letters Review multiplication facts - ***up to a product of 144*** Algebraic expression using symbols Properties of Factors and Multiples Multiplicative Property of Zero Commutative Property Associative Property Order of operations Prime and composite numbers ***accurately solves problems involving prime and composite numbers***	Applies properties of numbers Demonstrates knowledge Write simple linear algebraic expressions Applies properties Evaluate simple linear algebraic expressions Uses mental computation Show equivalence between two expressions using models Estimates- ***determine the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results***	NECAP WEAKNESS		NECAP Vocabulary Common Vocabulary: array product factors communativ property associative property square numb composite number prime numb Hundreds Chart TE 1-7, 2-3, 1, 3-3, 3-6, 4 13, 4-14, 5-8

	of the expressions. M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.6- Mentally calculates change back from $1.00, $5.00, and $10.00; calculates multiplication and related division facts to a product of 144; multiplies a two-digit whole number by a one-digit		multiplication of 3 digits by 2 digits, ***powers of 10 (10, 100, 1,000)*** Mental Math - ***two digit by one digit, two digit by multiples of ten, three digit by multiples of 100, two or three digit which are multiples of 10 or 100 respectively (e.g. 400x50, 400x600) distributive property - uses distributive properties to solve problems***	Shows equivalency by using different representations for expressions Solve problems using order of operations			

	whole number two-digit whole numbers that are multiples of ten, a three-digit whole number that is a multiple of 100 by a two- or three-digit number which is a multiple of 10 or 100, respectively, and divides 3- and 4-digit multiples of powers of ten by their compatible factors M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the						

	reasonableness of solutions appropriate to grade level GLEs across content strands. M.NO.5.1.8- Applies properties of numbers (odd, even, and divisibility) and field properties (commutative, associative, identity, and distributive) to solve problems and to simplify computations.						

December

Division-will require approx 5 weeks goes to Jan. ~

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.FA.5.1.1- Identifies and extends to specific cases a variety of patterns represented in models, tables, sequences, or in problem situations; and writes a rule in words or symbols for finding specific cases		Algebraic expression using symbols As an intro to division-show relationship between subtraction and division with no remainders Long division without remainders Inverse relationship	Demonstrate understanding by describing Evaluate simple linear algebraic expressions - ***in problem situations and for finding specific cases of linear relationships*** Show equivalence between two	NECAP WEAKNESS Sample Lesson- NECAP weakness		NECAP Vocabulary line, ray, ang ,tyes of lines enpoint vertex, protractor degree types of angles: acute right obtuse straight. Common Vocabulary divisor dividend

	of a linear relationship. M.FA.5.1.2- Demonstrates conceptual understanding of linear relationships (y = kx) as a constant rate of change by identifying, describing, or comparing situations that represent constant rates of change M.FA.5.1.4- Demonstrate conceptual understanding of equality by showing equivalence between two expressions using models or different representations of the expressions. M.NO.5.1.3.B- Demonstrates conceptual understanding of mathematical operations by describing or illustrating the meaning of a remainder with respect to division of whole		between multiplication and division of whole numbers Long division with remainders ***division of whole numbers up to a two digit divisor*** Algebraic expression using letters rules of divisibility 3 digit by 2 digit division mental math - ***divides three and four digit multiples of powers of ten by their compatible factors(e.g. 360 divided by 6, 360 divided by 60, 3,600 divided by 6, 3,600 divided by 60, 3,600 divided by 600)***	expressions using models Demonstrate understanding by illustrating Estimate Show equivalency by using different representation of expressions using parentheses Solves problems using order of operations Write simple linear algebraic expressions - **x/a=c, where a,b,c,are whole numbers with a is not equal to 0 or by determining which values of a replacement set make the equation (multi-step of the form ax plus/minus b=c where a,b,c, are whole numbers with a not equal to 0 a true statement (e.g. 2x+3 = 11. (x:x=**			quotient remainder factors TE 3-4, 3-5, 1, 4-2, 4-3, 4 4, 5-1, 5-3 TE 4-7, 4-8, 11, 4-12, 5-4 5-5, 5-7

	numbers using models, explanations, or solving problems. M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining			**2,3,4,5)**			

	the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.						
J a n u a r y	Measurement						
	Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
	M.GM.5.1.7- Measures and uses units of measures appropriately and consistently, and makes conversions within systems when solving problems across the content strands. M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate,		Time: Seconds in a minute, minutes in an hour, hours in a day, days in a week, days in a year Temperature: C and F degree (to 1 degree) Time: Hour to 5 minute interval review Time: Hour to 1 minute interval	Uses - review meaning of decimals, addition, subtraction before multiplication. Estimates Convert within systems when solving problems	NECAP WEAKNESS		NECAP Vocabulary line, ray, ang ,tyes of lines enpoint vert protractor degree types of angles: acute right obtuse straight. Common Vocabulary: elapsed time Fahrenheit Celsius TE 11-8

	selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.							

Feb

Angles

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabu
M.GM.5.1.1- Uses properties or attributes of angles (rights, acute, or obtuse) or sides (number of conguent sides, parallelism, or perpendicularity) to identify, describe, classify, or distinguish among different types of triagles (right, acute, obtuse,		Properties or attributes of angles - ***right, acute, obtuse, number of congruent sides, classify different types of triangles (right,acute, obtuse, equiangular, or equilateral) or quadrilaterals (rectangles, squares,rhombi,trapezoid, parallelograms) Measuring of scale- show similarity by describing the proportional effect on the linear dimensions of triangles and rectangles when scaling up or down***	Identify within two-dimensional shapes Classify angles relative to 90 degrees as more than, less than, or equal to	NECAP WEAKNESS		NECAP Vocabu line, ray angle ,t of lines enpoint vertex, protract degree types o angles: acute ri obtuse straight Commo Vocabu greater less tha

equiangular, or equilateral) or quadrilaterals (rectangles, squares, rhombi, trapezoids, or parallelograms).		***while preserving angle measures***				90° TE 6-1, 6-3, 6-4

Three Dimensional Shapes

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.GM.5.1.3- Uses properties or attributes (shape of bases, number of lateral faces, or number of bases) to identify, compare, or describe three-dimensional shapes (rectangular prisms, triangular prisms, cylinders, spheres, pyramids, or cones). M.GM.5.1.10- Demonstrates conceptual understanding of spatial reasoning and visualization by building models of rectangular and triangular prisms, cones, cylinders, and pyramids from		Three dimensional shapes **Volume of rectangular prisms (cube)**	Identify using properties or attributes Compare using properties or attributes - ***number of bases, pyramids or cones*** Describe using properties or attributes Build models- ***triangular prisms, cones, cylinders, and pyramids***			NECAP Vocabulary line, ray, an ,tyes of lines enpoint vertex, protractor degree types of angles: acute right obtuse straight. Common Vocabulary: solid figure rectangular prism cylinder sphere face edge vertex TE 11-1, 11 11-3, 11-4

two- or three-dimensional representations.						

Two-dimensional shapes

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.GM.5.1.1- Uses properties or attributes of angles (rights, acute, or obtuse) or sides (number of conguent sides, parallelism, or perpendicularity) to identify, describe, classify, or distinguish among different types of triagles (right, acute, obtuse, equiangular, or equilateral) or quadrilaterals (rectangles, squares, rhombi, trapezoids, or parallelograms). M.GM.5.1.5- Demonstrates conceptual understanding of similarity by describing the proportional effect on the linear dimensions of triangles and rectangles when scaling up or		Congruent shapes Properties or attributes (number of sides) Similar shapes Properties or attributes (length of sides) Congruency using reflections Congruency using translations Properties or attributes (parallelism) Properties or attributes (perpendicularity) Congruency using rotations (flips, slides, or turns) Point and line symmetry	Apply scales on maps Compose using models or explanations identify Identify similar figures Decompose using models or explanations describe Demonstrates understanding of congruency by matching Solve problems (may need to use order of operations) distinguish among Describes relationships using models or explanations Copy, compare, draw Create symmetrical figure(s)			NECAP Vocabulary l ray, angle ,ty of lines, enp vertex, protractor degree types angles: acute right obtuse straight. Common Vocabulary: plane figure polygon quadrilateral rhombi trapezoid hexagon octagon congruent rotation(turn translation(s reflection(fli symmetry TE 6-6, 6-7,

	down while preserving angle measures, or by solving related problems (including applying scales on maps). Describes effects using models orsc explanations. M.GM.5.1.10- Demonstrates conceptual understanding of spatial reasoning and visualization by building models of rectangular and triangular prisms, cones, cylinders, and pyramids from two- or three-dimensional representations.						

March

Decimals

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.GM.5.1.7- Measures and uses units of measures appropriately and consistently, and makes conversions within systems when solving problems across the		Metric Measurement Units of Measurement: centimeter(to .5), meter(to .5), kilometer(as used in scale), centimeters to meters Units of Capacity: liter	Measure Order using models, number lines or explanations ***(decimals to decimals***) Solve problems (may need order of operations)	Sample Lesson- NECAP weakness NECAP WEAKNESS		PS NECAP Vocabulary line, ray, angle ,tyes o lines, enpoi vertex, protractor degree types of angles: acute right obtuse straight.

	content strands. M.NO.5.1.1- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models, explanations, or other representations; and positive fractional numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths, fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in area, set, or linear models using models,		mass, kilogram (to whole kilogram), gram (to whole gram) Decimals Multiplication of decimals	Uses - review meaning of decimals, addition, subtraction before multiplication. Compare using models, number lines, or explanations Estimates Identify using models, number lines or explanations Convert within systems Demonstrate understanding of tenths (metric measurement) Demonstrate understanding of hundredths (money) Round to hundredths			Common Vocabulary: decimal gram liter meter stick TE 10-1, 10 10-3, 10-4, 11-9, 11-10, 11-12, 11-1 ECC

	explanations, or other representations. M.NO.5.1.2- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to perents); integers in context using models or number lines. M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite numbers; and						

	addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.						
	Perimeter and Area						

	Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
	M.GM.5.1.6- Demonstrate conceptual understanding of perimeter of polygons, and the area of rectangles or right triangles through models, manipulative, or formulas, the area of polygons or irregular figures on grids, and volume of rectangular prisms (cubes) using a variety of models, manipulative, or formulas. Expresses all measures using appropriate units.		area of rectangles perimeter of polygons ***(right triangles)*** Area of polygons **- (right triangles)** Area of irregular shapes on grids	Demonstrates understanding using models Demonstrates understanding using manipulatives Demonstrates understanding using formulas Solve problems (may need to use order of operations)			NECAP Vocabulary line, ray, ang ,tyes of lines enpoint vertex, protractor degree types of angles: acute right obtuse straight. Common Vocabulary: area perimeter square units TE 10-5, 10- 10-8, 10-10, 10-11, 10-12 10-13, 10-14
A p r i l	Fractions 1						
	Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
	M.GM.5.1.7- Measures and uses units of measures appropriately and consistently, and makes conversions		Proper fractions in an area <u>Standard Measurement</u> **Units of Length:** Inch (to 1/4), foot, yard, mile (as	demonstrates understanding Describe or illustrate understanding Measure Order using models, number lines,	NECAP WEAKNESS		NECAP Vocabulary line, ray, ang ,tyes of lines enpoint vert protractor degree types of angles: acute right

	within systems when solving problems across the content strands. M.NO.5.1.0- Number and Operation M.NO.5.1.2- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to perents); integers in context using models or number lines. M.NO.5.1.3- Addition and subtraction of decimals and positive proper fractions with unlike denominators.		used in scale), inches to feet, feet to yards, inches to yards **Units of Capacity:** pints, quarts, gallons Addition with like denominators Proper fractions in a set Proper fractions in linear models Subtraction with like denominators	or explanations Solve problems using models, number lines, or explanations Practical uses Estimate Compare using models, number lines or explanations Convert within system when problem solving			obtuse straight. Common Vocabulary: numerator denominator pint quart gallon TE 7-1, 7-2, 3, 7-4, 7-5, 7 6, 7-7, 7-9, 7 10, 7-11, 8-1 8-2, 8-3, 8-4 8-5, 8-6, 8-8 8-10, 8-11, 8 12, 8-14, 8-1

	M.NO.5.1.4- Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.) M.NO.5.1.7- Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the						

effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.						

Fraction 2

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.01.NO.05.01- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models, explanations, or other representations; and positive fractional numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths,		proper , mixed, improper, equivalent (halves, fourths, eigths, thirds, sixths, ***twelfths***, fifths) Review Least Commom Multiple understanding of Greatest Common Factor	identify ***order and compare fraction to fraction*** convert a fraction to decimal form understand rules of divisibility			TE 7-1, 7-2 7-3, 7-4, 7-6 7-11 ECC Counting Tape, Fracti a Day

	fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in area, set, or linear models using models, explanations, or other representations. M.01.NO.05.02- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to percents); or integers in context using models or number lines.						
	M.01.NO.05.03-		proper	review of			TE 8-1, 8-2,

Demonstrates conceptual understanding of mathematical operations by describing or illustrating the meaning of a remainder with respect to division of whole numbers using models, explanations, or solving problems.		fractions	adding and subtracting fractions with like denominators demonstrate an understanding of adding and subtracting unlike fractions ***accurately solve problems involving the addition and subtraction positive proper fractions with unlike denominators***			8-3, 8-4, 8-5 ECC Fracti a Day, Counting Tape

Percents

Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
M.NO.5.1.1- Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 9,999,999 through equivalency, composition, decomposition, or place value using models,		percent (***10%, 25%, 50%, 75%, 100%)***	Identify using models, explanations or other representations order and compare ***(percent to percent)*** identify relationships between decimals, fractions, and percents accurately			TE 7-12, 7- TE 12-5, 12 12-7

	explanations, or other representations; and positive fractional numbers (proper, mixed number, and improper) (halves, fourths, eighths, thirds, sixths, twelfths, fifths, or powers of ten (10, 100, 1000)), decimals (to thousandths), or benchmark percents (10%, 25%, 50%, 75% or 100%) as a part to whole relationship in area, set, or linear models using models, explanations, or other representations. M.NO.5.1.2- Demonstrates understanding of the relative magnitude of numbers by ordering, comparing, or identifying equivalent positive fractional numbers, decimals, or			convert decimals to fractions to percents			

	benchmark percents within number formats (fractions to fractions, decimals to decimals, or percents to perents); integers in context using models or number lines.						
May	Graphing						
	Standards	Enduring Understandings	Content	Skills	Lessons	Resources	Vocabulary
	M.DSP.5.1.2- Analyzes patterns, trends, or distributions in data in variety of contexts by determining or using measures of central tendency (mean, median, or mode) or range to analyze situations, or to solve problems. M.DSP.5.1.3- Organizes and displays data using tables, bar graphs, or line graphs to answer questions related to the data, to analyze		Coordinate grid Line plots, tables, bar graphs, pictographs, stem and leaf plots, or circle graphs Median Mode Range ***mean - analyze mean in situations and problems***	Analyze pattern, trends, or distributions Formulate or justify conclusions interpret- ***gives directions between locations on a map or coordinate grid - all four quadrants, plotting points in four quadrants in context (e.g. games, mapping, identifying the vertices of polygons as they are reflected,***	sample lesson - NECAP review NECAP WEAKNESS		NECAP Vocabulary line, ray, angle ,tyes o lines, enpoi vertex, protractor degree type of angles: acute right obtuse straight. Common Vocabulary median mode range line plot bar graph pictograph stem and lea plot circle graph coordinate grid ordered pair TE 1-1, 1-2

	the data to formulate or justify conclusions, to make predictions, or to solve problems. M.DSP.5.1.3.B-Identifies or describes representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M.DSP.5.1 M.DSP.5.1.6-In response to a teacher or student generated question or hypothesis decides the most effective method to collect the data (numerical or categorical) necessary to answer the question; collects, organizes, and appropriately displays the data; analyzes the data to draw conclusions			***rotated, and translated interprets representation of a line graph*** make predictions Plot points (1st quadrant) Give directions between locations (map or coordinate grid) Collect data Find distance between points (vertical and horizontal) in 1st quadrant Organize and display data Analyze data Solve problems (may need order of operations)			1-3, 1-4, 1-8 1-9, 1-10

	about the question or hypothesis being tested, and when appropriate makes predictions; and asks new questions and makes connections to real world situations. M.GM.5.1.9- Demonstrates understanding of spatial relationships using location and position by interpreting and giving directions between locations on a map or coordinate grid (all four quadrants); plotting points in four quadrants in context and determining horizontal and vertical distances between points on a coordinate grid in the first quadrant.						
Jun	Probability						
	Standards	Enduring	Content	Skills	Lessons	Resources	Vocabulary

e							
	Understandings						
	M.DSP.5.1.5- Predicts the likelihood of an event as a fraction and tests the prediction through experiments; and determines if a game is fair. M.DSP.5.1.5.B- For a probability event in which the sample space may or may not contain equally likely outcomes, determines the experimental or theoretical probability of an event and expresses the result as a fraction.		Combinations Events with unequal likely outcomes	Determine the theoretical probability (parts to whole) - ***expresses the result as a fraction*** Solve problems using counting techniques: organized lists, tables, tree diagrams, handshake problems, menu ordering, clothes matching Test predictions Determine fairness of a game			NECAP Vocabulary line, ray, angle ,tyes o lines, enpoi vertex, protractor degree type of angles: acute right obtuse straight. Common Vocabulary organized li handshake problems menu orderi clothes matching most likely less likely predictions fairness PS TE 12-9, 12 10, 12-12