Mackay Elementary School

Grade Level: 5 Date: 8/17/11

Teacher with contact information: Michelle Peterson

Mackay Elementary

588-2834 ext 20

michpete@mackayschools.org

SUBJECT INFORMATION

Mathematics :

Understand and use numbers, Perform computations accurately, Estimate and judge reasonableness of results, Understand and use U.S. customary and metric measurements. Use algebraic symbolism as a tool to represent mathematical relationships, Evaluate algebraic expressions, Solve algebraic equations and inequalities, Understand the concept of functions, Represent equations, inequalities and functions in a variety of formats, Represent equations, inequalities and functions in a variety of formats, Apply concepts of size, shape, and spatial relationships, Apply the geometry of right triangles, : Apply graphing in two dimensions, Understand data analysis, Collect, organize, and display data, Apply simple statistical measurements, Understand basic concepts of probability, Make predictions or decisions based on data.

COMMON CORE / STATE CONTENT STANDARDS/VOCABULARY OBJECTIVES

- Read, write, compare, and order whole numbers through one million and decimal numbers through thousandths.
- Identify and apply place value in whole numbers and decimal numbers to thousandths.
- Compare and order commonly used fractions and their equivalents.
- Identify decimal equivalents of commonly used fractions.
- Apply the number theory concepts of primes, composites, multiples, and factors.
- Add and subtract decimal numbers through thousandths.
- Multiply and divide whole numbers.
- Add and subtract with like denominators without simplification.
- Use a variety of strategies to solve real life problems.
- Select and use appropriate units and tools to make formal measurements of length, temperature, weight, and volume (capacity) in real-world problems using standard units.
- Tell time to the nearest second.
- Calculate the perimeter of polygons and the area of rectangles and squares.
- Recall length, volume (capacity), and mass equivalences involving millimeters, centimeters,
- meters, milliliters, liters, grams, and kilograms in the metric system.

- Write a division problem as a proper and an improper fraction.
- Write a fact family when given two factors.
- Read and use symbols (<, >, =) to express relationships.
- Use the following properties as they relate to addition and multiplication: commutative, associative, and distributive.
- Solve missing factor equations.
- Classify angles without formal measures as acute, right, obtuse, or straight.
- Identify and label points, lines, line segments, rays, and angles.
- Collect, organize, and display data with appropriate notation in tables, charts, bar graphs, and line graphs.
- Find measures of central tendency—median and mode—with simple sets of data using whole numbers.

INSTRUCTIONAL MATERIALS

Scott Foresman-Addison Wesley Envision Math Textbook, Grade 5

Math manipulatives – hands on learning

Worksheets assigned as needed

UNITS WITH INSTRUCTIONAL DATES

Week	Lesson	Description/Objective
1	Assessments	Placement, benchmark testing
2	1.1 1.2 1.3	Place Value – students write in standard, expanded and word forms Comparing and Ordering Whole Numbers through billions Decimal Place Value – students write decimals in expanded, standard and word forms
3	1.4 1.5 Review for test Topic 1 test	Comparing and Ordering Decimals through thousandths Problem Solving: Students will look for a pattern to solve problems
4	2.1 2.2 2.3 2.4	Mental Math – students compute sums and differences mentally Rounding whole numbers through millions, decimals to thousandths Estimating sums and differences – students use rounding & compatible numbers Problem solving: draw a picture and write equation
5	2.5 2.6	Adding & subtracting – students compute sums and differences of two large numbers Adding decimals–students compute sums of decimals to thousandths

	2.7 2.8	Subtracting Decimals Problem solving : multiple step problems
6	Review Topic 2 Test Topic 2	
7	3.1 3.2 3.3 3.5 3.5 3.6	Multiplication Properties Using mental math to multiply Estimating Products Multiplying by 1-digit numbers Multiplying by 2-digit numbers Multiplying greater numbers
8	3.7 3.8 Review Topic Topic 3 Test	Exponents – students will use exponential notation Problem Solving: Draw a picture and write an equation
9	4.1 4.2 4.3 4.4	Dividing Multiples of 10 and 100 Estimating Quotients Problem Solving: Reasonableness Connecting Models and Symbols
*End of 1st Quarter		
10	4.5 4.6 4.7 4.8	Dividing by 1 digit divisors Zeros in the quotient Understanding factors Prime and composite numbers
11	4.9 Review Topic Topic Test 5.1	Problem solving: Draw a picture and write an equation Using patterns to divide
12	5.2 5.3 5.4 5.5	Estimating quotients with 2 digit divisors Problem solving: Multiple Step Problems Dividing by multiples of 10 1-Digit quotients
13	5.6	2-Digit quotients

	5.7 5.8 Review	Estimating and dividing with greater numbers Problem solving: missing or extra information
14	Topic 5 Test 6.1 6.2 6.3	 Variables and expressions Patterns and expressions More patterns and expressions
15	6.4 6.5 6.6 Review Topic	Distributive property Order of operations Problem solving: Acting it out & reasonableness
16	Topic 6 test 7.1 7.2 7.3	 Multiplying decimals by 10 100 or 1000 Multiplying a decimal by a whole number Estimating the product of a decimal and a whole number
17	7.4 7.5 7.6 7.7	Multiplying two decimals Dividing decimals by 10 100 or 1000 Dividing a decimal by a whole number Estimation: Decimals divided by whole numbers
18	7.8 7.9 Review Topic Topic Test	Dividing a decimal by a decimal Problem Solving: Multiple Step Problems
**End of	1st Semester	End of 2nd quarter ******
19	8.1 8.2 8.3 8.4	Basic Geometric shapes Measuring and classifying angles Polygons Triangles
20	8.5 8.6 Review Topic Topic Test	Quadrilaterals Problem Solving: Make and test generalizations
21	9.1 9.2	Meanings of fractions Fractions and division

	9.3	Mixed numbers and improper fractions
	9.4	Equivalent fractions
22	9.5	Comparing and ordering fractions and mixed numbers
	9.6	Common factors and greatest common factor
	9.7	Fractions in simplest form
	9.8	Tenths and Hundredths
23	9.9	Thousandths
	9.10	Fractions and decimals on the number line
	9.11	Problem solving: Writing to explain
	Review Topic	
24	Review Cont.	
	Topic Test	
	10.1	Adding and subtracting fractions with like denominators
	10.2	Common Multiples and least common multiple
25	10.3	Adding fractions with Unlike denominators
	10.4	Subtracting fractions with unlike denominators
	10.5	Adding mixed numbers
	10.6	Subtracting mixed numbers
26	10.7	Problem solving: Try, check and revise
	Topic review	
	Topic Test	
	11.1	Multiplying fractions and whole numbers
27	11.2	Multiplying two fractions
	11.3	Multiplying mixed numbers
	11.4	Relating division to multiplication of fractions
	11.5	Problem solving: Draw a picture and write an equation
**End	Of third	Quarter ****
28	12.1	Using customary units of length
	12.2	Using metric units of length
	12.3	Perimeter
	12.4	Area of squares and rectangles
29	12.5	Area of parallelograms
	12.6	Area of triangles
	12.7	Circles and circumference

	12.8	Problem Solving: Draw a picture and make an organized list
30	13.1 13.2 13.3 13.4	Solids Relating shapes and solids Surface Area View of Solids
31	13.5 13.6 13.7 Topic Review	Volume Irregular shapes and solids Problem solving: Use objects and solve a simpler problem
32	Topic 13 Test 14.1 14.2 14.3	 Customary Units of capacity Metric units of capacity Units of weight and mass
33	14.4 14,5 Review first ½ of topic	Converting customary units Converting metric units
34	14.6 14.7\ 14.8 14.9	Elapsed time Elapsed time in other units Temperature change Problem solving: Make a table
35	Topic 14 Review Topic 14 Test Begin Review for ISAT	
36	ISAT Review	
37	ISAT	
38	Year long Reivew	
39	End of year benchmark	

Vocabulary :

Composite ~ whole number that has more than two factors.
Conjecture ~ a inference that is based on unproven mathematical proof.
Equivalent ~ equal to.
Factor ~ a number that is multiplied by another number.
Hundredth ~ one of one hundred equal parts, 2nd place value.
Improper Fraction ~ a fraction with a numerator that is greater than or equal to the denominator.
Mixed Number ~ whole number and a fraction.
Multiple ~ product of that number and any whole number.
Numerical Expression ~ combination of numbers and operations.
Overestimate ~ estimate that is too high.
Parenthesis ~ curved marks used in a logical mathematical equation.
Prime ~ whole number with the factors of 1 and itself.
Proper Fraction ~ a fraction in which the numerator is less than the denominator.
Tenth ~ one of one tenth equal parts. 1st place value.
Thousandth ~ one of one thousand equal parts. 3rd place value.
Underestimate ~ estimate that is too low.
Area ~ the number of square units needed to cover the surface of a closed figure.
Century ~ 100 years.
Decade ~ 10 years.
Mass ~ measure of the amount of mater in an object.
Milliliter ~ metric unit used to measure capacity. 1000 ml= 1M.
Perimeter ~ distance around a polygon.
Polygon ~ closed figure made of line segments that do not cross
Acute Angle ~ less than 90 degrees.
Congruent ~ same shape, same size.
Line Segment ~ part of a line that connects two points.
Obtuse Angle ~ greater than 90 degrees.
Polyhedra ~ the plural for polyhedron three- dimensional figure with faces that are polygons.
Ray ~ a line that starts at a point and extends forever in one direction.
Similar ~ same shape not necessarily the same size.
Straight Angle ~ an angle that is 180 degrees.
Symmetrical ~ two congruent halves.
Turn ~ a rotation of a figure that does not change the size or
Fraction Notation ~ a number written in the form of a/b where b is non zero.
Median ~ middle number in a set of data that is written in order from least to greatest.
Order ~ sequence; arrange according to a certain rule or condition.
Range ~ the difference between the greatest and the least value

ASSESSMENTS / TESTS

Beginning of the year placement test, Topic Tests, Cumulative and Benchmark tests throughout the year

GRADING PROCEDURES

Grades are determined on a percentage scale

A+ 100% A 93.5-99.5 A- 89.5-93.5

B+ 87.5-89.5 B 83.5-87.5 B- 79.5-83.5

C+ 77.5-79.5 C 73.5-77.5 C- 69.5-73.5

D+ 67.5-69.5 D 63.4-67.5 D- 59.5-63.5

Additional points may be earned through extra credit

CLASS RULES

Students are expected to participate in class and treat all classmates with respect.

MISCELLANEOUS

This schedule is subject to change. Please check frequently to check for schedule changes.

