



Madawaska Middle/High School
Home of the Owls



**Grade 7
Math**

(Resource Room)
School Year 2011-2012

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Course Description:

This course is designed to provide instruction on basic math skills and operations. Students will develop and strengthen a strong number sense and relate mathematical concepts to everyday situations. All mathematical skills presented throughout this course correlate to the National Council of Teachers of Mathematics and the Common Core Standards. Instruction is geared to the individual learner's needs and programming goals.

Text book: *Basic Math Skills*

Required Materials:

- Student must bring the following to every class:
 - Binder
 - Pencil
 - Correcting pen
 - Math textbook
 - Homework planner

Grading:

- 40% Homework/Class work
- 30% Test/Quizzes
- 30% Class Participation/Effort

Course Expectations:

- All students will come to class prepared and on time
- Respect will be shown to peers, teachers, and learning at all times
- Absent work is to be collected by the student on the first day of their return to school (orange ASSIST sheet in working folder)

Curriculum:

Quarter 1:

Number and Operations

- Identify the place value of a digit in a number up to 100,000
- Read and write numbers in word, standard and expanded form
- Round numbers up to 10,000
- Compute with whole numbers
 - Subtract large numbers with regrouping and across 0
 - Find products of whole numbers with 1 and 2 digits
 - Divide whole numbers by 1 digit divisors with and without remainders
 - Fluently demonstrate multiplication facts up to 12
- Apply the order of operations to basic problems involving multiple operations
- Demonstrate the meaning of commutative, associative and distributive properties

Graphs

- Read and construct pictographs, bar graphs, double bar graphs, line graphs and circle graphs
- Identify the meaning of mode, range and median of a given set of data
- Choose the most appropriate graph for a given set of data

Quarter 2:

Measurement/Time

- Add, subtract and rename units of time (seconds, minutes, hours, days, weeks, and years)
- Find the amount of elapsed time when shown an analog and digital clock
- Measure line segments to the nearest tenth of a centimeter
- Determine the area and perimeter of rectangles
- Estimate accurately the best unit for measuring a distance

Number Theory

- Identify prime and composite numbers
- Use multiplication and factor trees to find the factors of a whole number
- Find and describe number patterns
- Determine if numbers are divisible by 2, 5, and 10
- Find the least common multiple for pairs of numbers
- Find the greatest common factor for pairs of numbers

Quarter 3:

Fractions

- Develop an understanding of fractions as numbers
- Compare fractions
- Rename mixed numbers and improper fractions
- Multiply and divide fractions
- Add and subtract fractions with like denominators

Decimals

- Read and write decimals through the thousandths place
- Compare, order and round decimals to the nearest tenth and hundredth
- Add and subtracts decimals presented in vertical form
- Multiply and divide decimals
- Rename decimals as fractions and fractions as decimals

Quarter 4:

Geometry

- Recognize a drawing as a point, line, line segment, ray or angle
- Identify an angle as acute, right, obtuse, or straight
- Use a protractor to measure and construct angles
- Identify figures as polygons based on the number of sides

Introduction to Algebra

- Solve simple variables/missing numbers