

SCHOOL: Atlantic Middle School
ADDRESS: 86 Hollis Avenue
PHONE #: 617 – 984 - 8727

SYLLABUS

TEACHER Mr. Jon Erickson

COURSE/GRADE LEVEL Pre-Algebra, Grade 8, Special Education, Resource Room

INSTRUCTIONAL MATERIALS

McDougal Littell Math, Course 3

MAJOR TOPICS*

Variables and Equations

- Interpreting Graphs
- Order of Operations
- Variable Expressions
- Powers and Exponents
- Equations and Solutions

Integer Operations

- Integers
- Add, Subtract, Multiply, and Divide Integers
- Number Properties and the Distributive Property
- The Coordinate Plane

Solving Equations and Inequalities

- One and Two Step Equations
- Writing Equations
- Geometric Formulas
- Solve Inequalities

Factors, Fractions, and Exponents

- Factors and Prime Factorization
- Greatest Common Factor, Least Common Multiple
- Simplify and Compare Fractions
- Rules of Exponents, Negative and Zero Exponents
- Scientific Notation

Rational Number Operations

- Add, Subtract, Multiply, and Divide Rational Numbers
- Mean, Median, Mode

Multi-Step Equations and Inequalities

- Write and Solve Multi-Step Equations
- Solve Equations Using the Distributive Property and Combining Like Terms
- Solve Equations Involving Circumference
- Solve Inequalities

Ratio, Proportion, and Percent

- Ratios, Rates, Proportion
- Solve Percent Problems
- Rewrite Percents
- Find Percent of Change, Percent Applications
- Probability

Polygons and Transformations

Angles, Triangles, and Polygons

Translations and Rotations

Real Numbers and Right Triangles

Squares, Square Roots

The Pythagorean Theorem

Rational and Irrational Numbers

Measurement, Area, and Volume

Area of Polygons and Circles

Surface Area of Prisms, Cylinders, Cones, and Spheres

Volume of Prisms, Cylinders, Cones, and Spheres

Linear Equations and Graphs

Relations and Functions

Scatter Plots

Equations in Two Variables

Graphs of Linear Equations and Inequalities

Slope and Intercepts

Slope-Intercept Form

Data Analysis and Probability

Stem-and-Leaf Plots

Box-and-Whisker Plots

Counting Principle, Permutations, Combinations, and Probability

***ASSESSMENT TOOLS**

Portfolios

Rubrics

Open ended questions

Word problems

Writing Assignments

Objective Tests/Quizzes

FCA'S for long essays

Homework

***See Individual Student Education Plans for modification where applicable.**

HOMEWORK EXPECTATIONS

Homework is given most nights. In general, it is due the following day. It is graded on completion not accuracy. An assignment, that is complete and on time, is worth 2 points. If it is one day late or incomplete, it is worth 1 point. If it is not done, it is worth 0 points. At the end of the term, a homework average is computed based on the number of points earned divided by the possible number of points. It is then counted as one test grade.

GRADING POLICY

Each test counts as one grade, quizzes for each chapter are averaged and count as one test grade, homework counts as one grade, writing assignments are averaged as one grade. At the end of the term, the final grade is based on the average of tests, quizzes, homework, and writing assignments.

MAKEUP PROCEDURE

If a student is absent, the student should see me on the day of return to school to receive any make-up work. Arrangements will be made on an individual basis as to when missed tests can be taken. Make-up work is to be done in a reasonable amount of time based on the length of absence.

GENERAL INFORMATION

Each student needs to have his or her text, a notebook and a writing instrument each day. It is also strongly recommended that each student have a scientific calculator. The one used in class is a TI-30XIIS.

***Adjustments may be made in this syllabus to meet student needs.**

