

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

SYLLABUS

TEACHER Mrs. Mary E. Lydon

COURSE/GRADE LEVEL Pre-Algebra, Grade 8, Standard

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 Multi-Step 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 or 504 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 calculator.

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

