

SCHOOL: Broad Meadows Middle School
ADDRESS: 50 Calvin Road
PHONE #: 617-984-8723

SYLLABUS

TEACHER Elva Hazelton

COURSE/GRADE LEVEL Algebra 1, Honors, Grade 8

INSTRUCTIONAL MATERIALS

McDougal Littell Algebra 1, *Connected Math Series*, *Exemplar* Open Response Questions

MAJOR TOPICS*

I. Connections to Algebra

Numbers and Number Operations

Variables in Algebra

Exponents and Powers

Order of Operations

Equations and Inequalities

II. Rules of Algebra

Addition and Subtraction of Real Numbers

Multiplication and Division of Real Numbers

The Distributive Property

Rates and Ratios

III. Solving Linear Equations

Solving Equations Using One Transformation

Solving Equations Using One, Two, or More Transformations

IV. Geometry

Perimeter, Circumference, Area

Volume, Surface Area

V. Graphing Linear Equations

Graphing Linear Equations in One Variable

Graphing Linear Equations in Two Variables

Quick Graphs Using Intercepts

The Slope of a Line

Quick Graphs Using Slope-Intercept Form

VI. Powers and Exponents

Multiplication Properties of Exponents

Negative and Zero Exponents

Division Properties of Exponents

Scientific Notation

Problem Solving and Scientific Notation

Problem Solving: Compound Interest and Exponential Growth

Exponential Growth and Decay

VII. Quadratic Equations

Square Roots and the Pythagorean Theorem

Solving Quadratic Equations by Finding Square Roots

Graphs of Quadratic Equations

The Quadratic Formula

Problem Solving Using the Discriminant

VIII. Polynomials and Factoring

Adding, Subtracting, and Multiplying Polynomials

Factoring Special Products and Quadratic Trinomials

Solving Quadratic Equations by Factoring and Completing the Square

*ASSESSMENT TOOLS

Rubrics

Projects

Notebooks

Interdisciplinary activities

Open ended questions

Word problems

Co-operative learning projects

Objective Tests/Quizzes

Essays

Presentations

FCA'S for long essays

Attendance

Final Exam

Homework

***See Individual Student Education Plans or 504 Plans for modification where applicable.**

HOMEWORK EXPECTATIONS

Homework is given most nights. The homework is usually due the following day. It is graded on its completion, not on its accuracy. On time assignments are worth 2 points. One day late or incomplete is worth 1 point. Not done 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. This average replaces the lowest quiz grade in that the term. Homework is also completed in the notebook. The problem, any work needed, and the answer clearly written is expected with every assignment. Notebooks are a test grade.

GRADING POLICY

Each test counts as two test grades, homework replaces the lowest quiz score and counts as part of the notebook grade, writing assignments or projects are averaged as one test grade, quizzes are averaged to two test grades, one for each half of the term. At the end of the term, the final grade is based on the average of tests (35%), quizzes (30%), homework (15%), notebook (15%), class participation (5%), and writing assignments.

MAKEUP PROCEDURE

Students are given, five, (5) school days to make up work from when they are absent. The student may either see myself, or the white board in the class for the work missed. Arrangements will be made at the time of their return as to when missed tests can be taken after school.

GENERAL INFORMATION

Students need to have a notebook, text, agenda book, pencil and calculator for class each day. The Calculator of choice is the TI 30xIIs

Three of the four projects listed below are assigned in class, one each, in terms, two, three, and four.

--Creating a house floor plan

-- Math-a-thon

--Tetrahedron

-- Patterns

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