

*Central Middle School
1012 Hancock St.
617-984-8725*

*Syllabus for APC Grade & Pre-Algebra
Margaret Rosenbuam*

General Expectations: Students come to class with all necessary materials (1.5 in. 3 ring binder, homework, agenda, pencils, etc) and are ready to listen, follow directions, and be respectful.

Instructional Materials: Mcdougall Littell's *Pre-Algebra*, Massachusetts Grade 7 Mathematics Standards, Quincy Public Schools Frameworks, and additional resources for gifted and talented.

Homework Policy: The purpose of homework is to provide an important opportunity to practice skills and strategies learned in class that day or to promote deeper understanding of the topic. Homework is given Monday - Friday and is reviewed and assessed for completion and understanding the following day.

Math Binder Daily: Daily notes, class work, and warm ups in the binder are reviewed and assessed frequently.

Grading: Homework completion - 15%, class participation (notebook completion, group work, etc.) - 15%, tests, quizzes, projects - 70%.

Absence Policy: The student is responsible for meeting with me upon his/her return to record and then complete missed assignment and to schedule missed quizzes or tests.

Major Topics

Exploring Patterns: number patterns and operations, powers and square roots, order of operations, variables and expressions, tables and graphs, patterns in geometry and technology

Investigations in Algebra: distributive property, combining like terms, one-step and multi-step equations, model verbal expressions and sentences, problem solving using equations, using formulas from geometry to solve problems

Integers: integers and absolute value, operations on integers, problem solving using integers, patterns on the coordinate plane

Number Theory: rules of divisibility, factors and primes, greatest common factor, least common multiple, rational numbers and decimals, powers and exponents, negative and zero exponents, scientific notation

Rational Numbers and Percents: operations and rational numbers, write proportions/ratios as percents, convert percents to decimals and decimals to percents, convert fractions to percents and decimals, write the percent of a number, problem solving with percents

Proportion, Percent, and Probability: rates, ratios, proportions, solving problems with proportions, solving three types of percent problems with proportions, find percent of increase and decrease, discounts, commissions, using counting principle and Pascal's Triangle to find probability, theoretical and experimental probabilities

Real Numbers and Inequalities: squares, square roots, Pythagorean Theorem, solving and graphing inequalities, the Triangle Inequality

Data and Graphs: picture graphs, bar graphs, line graphs, histograms, line plots, scatter plots, surveys and their uses in other disciplines

Assessment Tools

1. Pre-assessments to determine learning readiness
2. Tests and quizzes, both summative and formative
3. Daily "warm-up" problems and activities
4. Homework completion and correction
5. Extended written responses to assess math vocabulary and understanding
6. Class and small group participation
7. Projects based on rubrics

*Assessments may be adjusted based on individual learning plans

*Additional assessment tools may be developed as needed