

DOBBS FERRY MIDDLE SCHOOL
Dobbs Ferry, New York 10522

COURSE OUTLINE

SUBJECT: Mathematics

GRADE: 7

Course Description:

The mathematics course for seventh grade will provide students with the opportunity to learn mathematics with understanding and to acquire the skills needed to solve mathematical problems. Students should enter the grade with an in-depth knowledge of the traditional basics of mathematics of the Common Core grade 6.

Anticipated student outcomes:

Concepts are outlined in the Common Core Learning Standards on EngageNY.org, as well as in the front of the Glencoe Math textbook. The seventh grade curriculum builds upon the concepts previously mastered in the sixth grade.

Mastery of the following units is expected:

Ratios and Proportional Relationships

- Analyze proportional relationships and use them to solve real-world and mathematical problems.

The Number System

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Expressions and Equations

- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Geometry

- Describe the relationships between the diameter, circumference and area of a circle.

Statements of Inquiry:

- Systems of relationships are equivalent and have multiple representations.
- Using methods/models help discover equivalence and generalizations of relationships.

Materials required:

1. Five-subject spiral notebook with pockets
2. Two Folders
3. Scientific calculator [*Suggested calculator: TI-30XIIS (Texas Instruments)*]
4. Mechanical pencils/ pencils with sharpener
5. Red pens
6. Highlighters

Criteria for grading:

Grades will be determined by the percentage of *points earned* out of the *total number of possible points*. These points will be earned by student performance in the following areas: assessments (75%), homework (15%), and class participation (10%) based on the Math Class Rubric.

All graded assignments will be available on the parent portal. Please see the 7th grade e-chalk page for announcements regarding updates and returned graded assignments/assessments.

Resources:

The textbook for this course is Glencoe Math. There is an online component to this textbook that can be accessed by the following website: **ConnectEd.McGraw-Hill.com**. The online textbook has various resources, such as tutorials, e-help, and self-check quizzes. Students are encouraged to use the resources available for homework help and review for assessments.

Opportunities for Enrichment:

Various aspects of the instruction and group work will be based on students' readiness levels. For re-teaching and extra practice, please visit <http://www.ixl.com> or the Glencoe Math online textbook.