Grade 7 MATH SYLLABUS

Throughout the year, students will complete a wide array of mathematics units. Each unit explains the mathematical principles and reasoning which is covered based on the Common Core State Standards. Each unit will begin with a pretest of the material covered to assess students' current level of knowledge and inform teacher instruction.

Common Core Standards:

The Number System

7. NS.A.1: Apply and extend previous understandings of operations with fractions to add and subtract rational numbers: represent addition and subtraction on a horizontal or vertical number line diagram.

7.NS.A.2: Apply and extend previous understandings of operations with fractions to multiply and divide rational numbers.

7.NS.A.3: Solve real world and mathematical problems involving the four operations using rational numbers

Expressions and Equations

7.EE.A.1: Use properties of operations to add, subtract, factor and expand linear expressions.

7.EE.A.2: Understand that equivalent expressions can be rewritten in different forms.

7.EE.A.3: Solve real-life and mathematical problems using numerical and algebraic expressions and equations

7.EE.A.4: Use variables to represent quantities in a real-world or mathematical problem.

Geometry

7.G.A.1: Draw, construct and describe geometrical figures.

7.G.A.2: Draw freehand, geometric shapes with certain conditions.

7.G.A.3: Describe 2-dimensional shapes that result from slicing 3-dimensional solids.

7.G.B.4: Know the formulas for area and circumference of a circle and use them to solve problems.

7.G.B.5: Use facts about supplementary, complementary, vertical and adjacent angles in multi-step problems.

7.G.B.6: Solve real and mathematical problems involving area, surface area, perimeter and volume of 2 and 3 dimensional figures.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning.

Class Structure and Grading:

Assignments 50%
Projects/Tests/Quizzes 50%

Work Expectations:
Students are expected to turn work in on the day it is due. If a student can not meet a due date, the student should talk to the teacher before the work is due. Unexcused, late work will result in parent contact. If a student misses school he or she should seek out the missed work as soon as they return to school and talk to the teacher about when the missed work will be due.