8th Grade Mathematics
Kendrick Middle School

Teacher: Mrs. Olufunke Atilola   **Email: olufunke.atilola@clayton.k12.ga.us**
Room Number: 808   **Phone Number: 770-472-8400**
Semester: Fall & Spring 2020-2021   **Tutorial Days: By Appointment**
Textbook: I-Ready   **Tutorial Hours: Tuesdays and Thursdays, 8:55-9:25am**
Textbook Price: can be accessed on rapid identity platform.   **Tutorial Location: TBA**

Department Philosophy: Believing that every student is capable of learning mathematics, opportunities are provided for all students to strive toward their maximum potential and to increase their confidence in themselves and in their own abilities. Teachers and parents work together in helping students to appreciate mathematics, to grow more proficient mathematically, and to realize that mathematical skills are stepping stones to success. Mathematics instruction must continue to grow to meet the changing demands of our society. Literacy in Mathematics requires understandings and habits of mind that enables citizens to make sense of our world, to think critically and independently, to recognize and weigh alternative explanations, and to deal reasonably with problems that involve numbers, patterns, and logical arguments.

Course Description: In Grade 8, **Curriculum Map Rationale**

Unit 1: This unit centers around geometry standards related to transformations both on and off the coordinate plane – translations, reflections, rotations, and dilations. Students develop understanding of congruence and similarity using physical models, transparencies, or geometry software, and learn to use informal arguments to establish proof of angle sum and exterior angle relationships.

Unit 2: Students explore and understand numbers that are not rational (irrational numbers) and approximate their value by using rational numbers. Students work with radicals and express very large and very small numbers using integer exponents.

Unit 3: Students extend their work with irrational numbers by applying the Pythagorean Theorem to situations involving right triangles, including finding distance, and will investigate proofs of the Pythagorean Theorem and its converse. Students solve real-world problems involving volume of cylinders, cones, and spheres.

Unit 4: Students are introduced to relations and functions. Students define, evaluate, and compare functions. Functions are described and modeled using a variety of depictions, including algebraic representation, graphic representation, numerical tables, and verbal descriptions.

Unit 5: Students further explore functions, focusing on the study of linear functions. Students develop understanding of the connections between proportional relationships, lines, and linear equations, and solve mathematical and real-life problems involving such relationships. Slope is formally introduced, and students work with equations for slope in different forms, including comparing proportional relationships depicted in different ways (graphical, tabular, algebraic, verbal).

Unit 6: Students extend the study of linear relationships by exploring models and tables to describe rate of change. The study of statistics expands to bivariate data, which can be graphed and a line of best fit determined.

Unit 7: The final unit broadens the study of linear equations to include situations involving simultaneous equations. Using graphing, substitution, and elimination, students learn to solve systems of equations algebraically, and make applications to real-world situations.

GSE Mathematics | Grade 8 | Curriculum Map GSE Grade 8 Curriculum Map

1st Semester   2nd Semester

Click on the link in the table to view a video that shows instructional strategies for teaching each standard.

Unit 1 (4 – 5 weeks) Transformations, Congruence and Similarity	Unit 2 (4 – 5 weeks) Exponents and Equations	Unit 3 (4 – 5 weeks) Geometric Applications of Exponents	Unit 4 (2 – 3 weeks) Functions	Unit 5 (3 – 4 weeks) Linear Functions	Unit 6 (5 – 6 weeks) Linear Models and Tables	Unit 7 (4 – 5 weeks) Solving Systems of Equations
MGSE8.G.1 MGSE8.G.2 MGSE8.G.3 MGSE8.G.4 MGSE8.G.5	MGSE8.EE1 MGSE8.EE.2 (evaluating) MGSE8.EE.3 MGSE8.EE.4 MGSE8.EE.7 MGSEE.7a MGSE8.EE.7b MGSE8.NS.1 MGSE8.NS.2	MGSE8.G.6 MGSE8.G.7 MGSE8.G.8 MGSE8.G.9 MGSE8.EE.2 (equations)	MGSE8.F.1 MGSE8.F.2	MGSE8.EE.5 MGSE8.EE.6 MGSE8.F.3	MGSE8.F.4 MGSE8.F.5 MGSE8.SP.1 MGSE8.SP.2 MGSE8.SP.3 MGSE8.SP.4	MGSE8.EE.8 MGSE8.EE.8a MGSE8.EE.8b MGSE8.EE.8c

* The teacher reserves the right to alter or change any part of this course syllabus to better suit the need of the students.

Weight for Course Evaluation Categories

==**Grades will be computed by the following weights:**==

Classwork---------45%
Tests/Quizzes------30%
Projects ------------15%
Homework ---------10%

Required Materials/Supplies:
- Pencils
- Composition Book
- Colored Pencils
- Loose Leaf Paper

Useful Resources
- **GIZMO: https://www.explorelearning.com/index.cfm?method=cUser.dspLoginJoin**
- **Khan Academy: http://www.khanacademy.com**
- **CK12: CK12.com**
- **iReady: Located on Clever in rapid identity platform**
- **Rapid Identity: my.clayton.k12.ga.is**
- **Ixl:- www.ixl.com (you will get your login information before the end of the first week)**

Classroom Behavior/Expectations
Rules:
1. Come prepared to class and ready to learn daily.
2. Mute mics
3. Be camera ready (no pajamas, bonnets, head scarfs)
4. No eating

Expectations:
1. Come prepared for class every day.
2. Complete and return all work in a timely manner.
3. Use the time I give you in class wisely. I will give you plenty of time in class to complete the majority of your work. If you do not use that time, you will be at a disadvantage.
4. Ask questions if you do not understand something.

Policy for Late Assignments
Late Assignments: Each student is expected to complete all assignments in the allotted time. **Late assignments will be only accepted in the event of an emergency or if a student was absent.

Policy for Make-up Work
Make-up Policy: IT IS THE STUDENT'S RESPONSIBILITY TO OBTAIN AND COMPLETE MAKE-UP WORK. If you have an excused absence, you will be allowed the same number of days as your absence in order to make up work missed. Make-up work must be done after or before school, *NOT* during valuable class time.

ALWAYS MAKE MATH MATTER!!!!!!!