Vision

Austin Road Middle School will cultivate an environment for creativity, innovation and leadership where we exceed expectations every day.

ARMS MISSION 2017

Austin Road Middle School strives to develop a nurturing school community that encourages academic success for each student through a rigorous curriculum and extracurricular opportunities supported by dedicated teachers and staff. Each student will become a contributing citizen of our community and global environment.

AUSTIN ROAD MIDDLE SCHOOL

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8th Grade Mathematics

Course Syllabus

Teacher:	**Tereni Wade**
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Course Title:	**8th Grade Math**
Resources:	• www.gavirtuallearning.org/ • Triumph Learning- **ARMS scholars may order the following resource through their Math teacher at the beginning of the school year.** *Georgia Coach, GSE Edition, Mathematics Grade 8*-Cost: $15.00 (Cash or money order only) • **Henry County Schools GSE Eight Grade Mathematics Flexbook-** https://www.ck12.org/user%3Adg93yw5kys5qyw1lc0bozw5yes5rmtiuz2eudxm./book/Henry-County-Schools-GSE-Eighth-Grade-Mathematics-Flexbook/ • Digital Textbook: enVisionmath 2.0
Remind 101 Code: open your web-browser and go to the following link.	**https://www.remind.com/join/mstwade**
Google Classroom	**Go to google classroom and click the plus sign to join the class. Use the following code: h7juue9**

GSE Mathematics Grade 8 Unit Description:

- **Unit 1: Transformations, Congruence, and Similarity**-The first unit centers around geometry standards related to transformations – translations, reflections, rotations, and dilations, both on and off the coordinate plane – and the notion of congruence and similarity. Students will understand congruence and similarity using physical models, transparencies, or geometry software. Students learn to use informal arguments to establish proof of angle sum and exterior angle relationships related to parallel lines and two- dimensional polygons.
- **Unit 2: Exponents and Equations**- Students will explore and understand that there are numbers that are not rational, called irrational numbers, and will approximate their value by using rational numbers. Clear understanding of irrational numbers will be demonstrated using models, number lines, and expressions of estimates and approximations. Students will work with radicals and express very large and very small numbers using integer exponents.
- **Unit 3: Geometric Applications of Exponents-** Students will extend their work with irrational numbers by applying the Pythagorean Theorem to situations involving right triangles, including finding distance. Proof of the Pythagorean Theorem and its converse allow students to demonstrate understanding of the theorem. Real-world problems are solved involving volume of cylinders, cones, and spheres.
- **Unit 4: Functions-** The fourth unit introduces students to relations and functions, and defines a function as a relation whose every input corresponds with a single output. From this understanding, students define, evaluate, and compare functions. Functions are described and modeled using a variety of representations, including algebraically, graphically, numerically in tables, and verbally.
- **Unit 5: Linear Functions-**In unit five, functions are further explored, focusing on the study of linear functions. Students will understand 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 represented in different ways (graphically, tabular, algebraically, verbally).
- **Unit 6: Linear Models and Tables-**Students will extend the study of linear relationships by exploring models and tables. They will use functions to model relationships between quantities and describe the rate of change. The study of statistics expands from more simplistic samples and collections in sixth and seventh grade, to bivariate data, which can be graphed and a line of best fit determined.
- **Unit 7: Solving Systems of Equations**-The final unit broadens the study of linear equations to situations involving simultaneous equations. Using graphing, substitution, and elimination, students learn to solve systems of equations algebraically, and make applications to real-world situations.
  https://www.georgiastandards.org/Georgia-Standards/Documents/Grade-6-8-Mathematics-Standards.pdf

Rationale:

I believe we engage in mathematics not only for its application but also for its inherent beauty and interest. Together, we will become skilled mathematicians as well as confident problem solvers. As we study the mathematical content in this course, let's always ask questions like "Why?", "What if?", "Always?" After all, new ideas and inventions come from just such questions!

Required Materials:
Our study of mathematics will be a wonderful and exciting journey. As with any journey, it is a good idea to prepare. Here are the items I expect you to bring to class every day.

- Composition Notebook (Interactive Notebook)
- Pencils
- Colored pencils
- 1" Binder
- Sheet Protectors
- Glue sticks
- Scissors
- Scientific calculator
- Index Cards

Grading Policy:

A = 100 – 90 B = 89 – 80 C = 79 – 74 D = 73 – 70 F = below 70

Category Weights

- **Practice Work: Max 25%**
  Labs/Classwork 15%
  Homework 5%
  Notebook 5%
- **Assessment: Max 60%**
  Tests/Projects 20%
  Quizzes 20%
  CSA (Common Summative Assessments) 20%
- **Final Exam: 15%**

Henry County Schools provides high school and middle school parents and students access to grades via the Internet. Using the Internet, parents and students are able to log on to Infinite Campus to view grades. Please contact the school counselors and/or secretary to obtain your password.

Homework Policy:
Homework is designed to enable students to assess their own knowledge of a given standard. Homework helps students learn! Students are expected to return to class with completed assignments and with questions about specific problems. We use homework as a tool to help us learn.

Students must spend time outside of class completing daily homework assignments, reviewing class notes, or other assignments and projects that may be assigned. Teachers use a variety of different on-line sites such as USAtestprep, Google Classroom, Khan Academy, CK12.org, Odysseyware and to name a few. Students are required to maintain an organized Interactive Notebook in math. Students should communicate with their teacher as soon as possible if they are having trouble.

We are very excited about our new school year. Please communicate with your teacher if you have any questions or concerns.

Late Work Policy:

Assignments that are not submitted on time will receive an "M" (missing) within Infinite Campus gradebook. All scholars will be given ample opportunities to submit their work through activities to include but not limited to amnesty day(s), working lunch, before/after school tutorial, etc. All work assigned an "M" (missing) within Infinite Campus will remain as such during the term in which the scholar's assignment was due. **Upon the completion of the term, any assignment that is not submitted, as** required, will then result in the scholar receiving a grade of zero (0%) to remain permanently within **the**

gradebook. Finally, all assignments submitted after the assigned due date will not receive a late penalty and will be graded accordingly contingent upon satisfactory completion of all requirements within the assignment.

It is the student's responsibility to find out what they miss when they are absent!

Time Outside of Class:
You cannot expect to accomplish what you should from this course without spending time with math outside of class. As well as completing daily homework assignments, you need to stay organized, spend time reviewing notes and assignments, carefully reflect on problems previously missed, etc. It is my expectation that you spend approximately 30 – 45 minutes each evening (Monday through Friday) with homework and use the weekend to study, work on projects, review, get caught up, organize, etc. Please communicate with me as soon as possible if you are having trouble managing your time or if you are spending significantly more than 60 minutes an evening working on math. I truly want to help you get the most out of this course as you can.

Tutoring Availability:
The Math Lab is open to all scholars to receive tutoring on Tuesday and Wednesday mornings 7:55am-8:25am.