Geometry Syllabus

Dear Math: I don't want to solve your problems. I have my own problems to solve.

Welcome to the shapely sphere of Geometry!!!! The state of Minnesota requires you to pass Algebra 2 and that will be difficult without the skills that you gain in Geometry. You use a large amount of Geometry in your daily life and you are possibly unaware that you are even using it! Geometry problems are a large portion of the tests (SAT, ACT, MCAs), which are required before being admitted into a college. So, even if you aren't interested in a career in math or science, you still need to know and understand Geometric concepts. Also, while it is true that you "have to" learn Geometry, it is important to remember that it is not just Geometry that you are learning; you are learning critical thinking and logic skills. We will learn a lot this year. I have high standards for you and I want you to have high standards for yourselves.

Course Objectives:

- The student will learn to think critically and analytically.
- The student will achieve mastery in use of geometric techniques.
- The student will learn how to apply mathematics to real world applications.
- The student will gain a greater understanding of geometric concepts

Topics of Study: 1) Nets, drawings, points, lines and planes 2) Reasoning and proof 3) Parallel and perpendicular lines 4) congruent triangles 5) polygons and quadrilaterals 6) Similarity 7) Right triangles and trigonometry 8) Surface area and volume 9) Circles 10) Probability

Grading System:

Your grade will be based on the percentage of the total possible points you have earned. There are three different categories that are used when figuring your overall percentage. Total points are accumulated throughout each quarter and you start over again at the beginning of the next quarter. Your grades will be available on Powerschool.

Grade Breakdown: *Daily work* 45%, *Homework* 45%, *Assessments* 10%

Daily Work: Do Nows, Exit Slips, class participation, your notes, in-class assignments. Why is this such a large part of your grade? Because this is your effort. If you are here 3 days a week, complete your do nows/exit slips, notes, in-class assignments and do one act of engagement (ask a question, answer a question, solve a problem on the board, etc.) you WILL pass this class. It shows that you have committed to learning, even if you don't always get the correct answer. The points that you can earn from do nows/exit slips, and participation cannot be made up.

Homework: Homework will be assigned every week. It seems a small percentage, but it can significantly raise or lower your grade depending on whether you complete it. I know that you are capable of completing it.

Assessments: We will have an assessment at the end of each chapter. You must earn 60% in order to pass. Assessments will be pass or fail. A failed assessment will not negatively impact your grade; you will just receive no points for it. However, passing assessments will result in increased points and positive impact on your grade. All assessments will be based on material that was covered extensively in-class and in homework. If these are complete, passing the assessments will be easy.

Opportunities for additional points:

-Math mentorship is a great way to earn points. If you were in class and your classmate wasn't and you are able to successfully teach them the last lesson, then you will earn an additional day of points. Being able to explain to others is crucial for demonstrating understanding. It is another opportunity to demonstrate your leadership!

-If you should like to improve your grade there are project options involving cross-subject activities, such as math in art or essays about math or another talent you may have (writing, singing, etc.) Please see me for other options.

Daily Schedule: We will start each day with a do now. We will review the previous days' lesson and go over homework or in-class work from the day before. We will learn and discuss the vocabulary for the next lesson. New material will be presented (via a small group activity, interactive power point, game, whiteboards, notes, etc.) Guided practice of the new material is then done. An exit slip is completed at the end of class and turned in as you exit.

Maintaining a positive learning environment is crucial: Be respectful, communicative, and non-judgmental. Specifically I expect the following:

- Treat all people and property with respect.
- Use appropriate and respectful language at all times.
- No food allowed unless you brought enough for everyone. Water is ok.
- All electronics must be packed away and not out during class. Phones are not to be used without permission
- Be prepared for class
- Be involved with the math discussions. (Don't be passive in your learning. Participate fully in the learning experience.)