WHAT YOU'LL NEED:
- A CALCULATOR!!!!! (TI-30 recommended)
- Pencil, eraser, lined paper

TEXTBOOK:
- We use multiple resources for the Geometry curriculum. We will not be using a textbook for this course. Questions? Struggling? Just ask!

COURSE DESCRIPTION:
Geometry is designed for students who have successfully completed the Glencoe Algebra I class. This is the next step in the Glencoe math series. Students will further develop math skills and continue integrating the areas of mathematical study. Students who study geometry gain skills in drawing, visualizing, and following mathematical algorithms. They also understand properties and mathematical relationships, as well as proofs. Learning Geometry helps you become a better THINKER!

ADDITIONAL INFORMATION:
We will be utilizing Moodle and other web-based applications throughout the school year.
If students do not have computer access at home, there are many options. Computer labs are available during certain school hours and students may use the computers in the libraries at lunch and after school in AAL. There is an additional student computer in the back of my classroom that you may use before and after school as well.

TEACHING FORMAT:
Please come to class on time; class will begin right away! We'll start with a Warm-Up, have time for questions about the previous night's homework, and then jump right in. New lesson(s) will be covered through a variety of learning strategies – including reading, small and large group discussions, cooperative learning, investigative activities, guided notes, etc. Time for practice will be given in class and a short homework assignment will be given on MOST days.

EXTRA HELP!:
- First thing; you need to let me know!
- Sign up, next to my door, for seminar.
- See me to set up a time after school ☺

Class Grade (80% of Final Grade)
Tests (70% of Class Grade) & Quizzes (25% of Class Grade)
There will be one test at the end of each chapter, although some chapters may be broken into smaller unit tests. Likewise, there will be one/two quizzes per chapter. If you are absent on the day of a test/quiz, be prepared to take it on the day you return or after school in AAL. Missing a test/quiz is a big deal, and an assigned AAL might not be convenient for you. Remember that when missing one. A retake, Form B, of any test is available to students who complete the correctives assignment and make arrangements with the teacher.
Homework (5% of Class Grade)
Students can expect homework every day! It is crucial to complete the assignment and show all steps, thoughts and ideas you used. There is a difference between "doing your homework" and "doing your homework well".
Exam (20% of Final Grade)
Both semesters will culminate with a Final Exam over all topics covered throughout the semester.

SEMESTER OVERVIEW
Units of Study: "Spatial Relations"

Similarity
Students will use Dilations (size-change transformations) to create similar figures. Then they will use proportions to solve problems involving similar figures, and compare the properties of Dilations to the properties of Isometries.

Introduction to Right-Triangle Trigonometry
Students will work with the side lengths and angle measures of right triangles to build the relationships for Sine, Cosine, and Tangent. Using these relationships, the Pythagorean Theorem, and the Geometric Mean, students will solve for missing sides and angles in right triangles.

Circles
Students will work with Central- and Inscribed Angles to discover properties of areas, arc lengths, and angle measures in circles.

Perimeter and Area
Students will analyze two- and three-dimensional figures to enhance their prior understanding of Perimeter and Area. This will involve work with compound shapes and will rely heavily on their mastery of Trigonometry to find missing measurements.

Volumes
Students will analyze three dimensional figures to enhance their prior understanding of Volumes of cylinders, cones, pyramids, prisms, and spheres. Students will also do work with two-dimensional cross sections of three-dimensional shapes. This will involve work with compound shapes and will rely heavily on their mastery of Trigonometry to find missing measurements.

Probability and Measurement
Students will represent with sample spaces, use permutations and combinations with probability, find probabilities by using length and area, and find probabilities of compound events.

CLASSROOM EXPECTATIONS:
1. **P**repared – Have materials ready every day and arrive ready to learn!
2. **R**espectful – Be polite and respect personal space and property.
3. **I**ntegrity – Always do your best… and do your OWN work!
4. **D**ependable – Get to class before the bell rings. Follow all expectations. Clean up after yourself!
5. **E**ffort – Have a positive attitude, and be willing to help others.

Show your Panther **PRIDE!**