

# 8<sup>th</sup> Grade Math

## Class Expectations:

- ✓ Come to class prepared and ready to learn.
- ✓ Complete assignments on time.
- ✓ Show your work.
- ✓ Follow all classroom and school rules.
- ✓ If you need help, ask.
- ✓ If you miss class, it is your responsibility to get your missing work.

## Grading Policy:

Daily Work/Quizzes – 50%

**Late Policy:** If an assignment is not turned in when it is due, 10 points will be deducted for each day it is late.

Tests – 50%

Any student scoring below a 70 on a test is allowed to make corrections. Corrections will be done during morning tutorials or activity period. Students have 5 school days after the test is returned to complete corrections and schedule a retest.

## Class Supplies:

- ✓ Folder with brads
- ✓ Composition book
- ✓ Pencils
- ✓ Expo markers (for student use)
- ✓ Markers/colored pencils
- ✓ 4-AAA batteries

## Discipline Policy:

- ✓ First Offense – Verbal Warning
- ✓ Second Offense – Contact parent/guardian and morning detention with Mrs. Patek
- ✓ Third Offense – Office Referral

Junior High classes are 45 minutes and move at a fast pace. Please be prepared to work on assignments outside of the classroom. If you need help, please come see me during morning tutorials or activity period. Videos for each lesson will be uploaded in Google Classroom, so you can utilize them on days you are absent or when you want to review a lesson we covered in class.

Mrs. Jennifer Patek

[patekj@shinerisd.net](mailto:patekj@shinerisd.net)

361-594-3131 x 812

Conference: 2:39 p.m. – 3:25 p.m.

Tutorials: 7:20 a.m.



The following math concepts will be covered throughout the school year:

- **Real Number System:** Students will evaluate and estimate square roots, classify real numbers, compare real numbers and convert between scientific and standard notation.
- **Linear Equations:** Students will model and solve equations with variables on both sides of the equal sign. Students will also write and solve equations and inequalities with variables on both sides of the equal sign that use rational coefficients and constants.
- **Linear Relationships:** Students will identify functions, find slope and rate of change, write equations in slope-intercept form, represent proportional and non-proportional linear relationships, and solve problems involving direct variation.
- **Angle Relationships:** Students will establish and use facts about angle relationships to solve problems. Angle relationships in this unit will include angles formed by parallel lines and transversals, interior angles of triangles, exterior angles of triangles, and angles in similar triangles.
- **Pythagorean Theorem:** Students will use the Pythagorean theorem to solve real-world and mathematical problems. Students will use the Pythagorean theorem converse to identify right triangles and use models to explain and illustrate the Pythagorean theorem.
- **Transformations:** Students will generalize the properties of transformations as well as algebraically represent transformations on the coordinate plane including translations, reflections, rotations about the origin, and dilations. Students will also identify scale factor and explain its effect on the perimeter and area of two-dimensional shapes.
- **Surface Area:** Students will connect their previous knowledge of surface area with the formulas for lateral and total surface area of prisms and cylinders. Students will use the formulas to find the surface area of rectangular prisms, triangular prisms, and cylinders in real-world and mathematical situations.
- **Volume:** Students will apply volume formulas to solve problems involving the volume of cylinders, cones, and spheres.
- **Scatter Plots and Data:** Students will construct and interpret scatter plots, make predictions using the trend lines of scatter plots, find mean absolute deviation, and generate random samples.
- **Financial Literacy:** Students will calculate and compare simple and compound interest, loan repayments, and different methods of payment. Students will also determine if decisions are financially responsible and estimate the cost of college.

I am looking forward to a successful year. If you have any questions, please do not hesitate to contact me via phone or email. I would be happy to meet with you during my conference time to discuss any concerns you may have.

Sincerely,

Mrs. Jennifer Patek