

Welcome to 8th Grade Math

Mrs. Smith

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What to bring to class each day

- Composition Notebook
- Paper (in binder/folder)
- Plastic Review Folder
- Pencil

You may also bring your own pens, highlighters, scissors, and glue if you have them.



Optional Item: TI-30XII calculator will be used in 8th grade math (appx. \$10)

My Special Classroom Rules



Everyone must treat others with respect and kindness. We are all in this together and no one is better than anyone else. Consequences for foul behavior vary based on the severity of the actions



Everyone must bring all belongings with them to class. You will not be allowed to return to your locker to get things during class. Forgetting items results in a strike.



Everyone must give their all to reach their goals. High standards will be set for you and it is important that you work hard everyday to get where you want to be.



Everyone must ask questions if they need any help on work or instructions. It is my job to help you and I can't do that unless you let me know you need help.



Everyone must complete their assignments and turn them in ON TIME. Failure to have your work complete by the time it is to be turned in will result in partial or no credit.



How Do I Earn Good Grades?

Your grade will be determined by the work you do in class and at home. Grades will be made up of homework, classwork, quizzes, and tests.

Grade Categories



Classwork (20%) Quizzes (25%) Tests (30%)
Homework (25%)

Classwork consists of many things we do in class like warm ups, group work, and some assignments that are due within a class period. Only warm-ups can be corrected and full credit will be recieved.

Quizzes come in many different forms. Quizzes are assignments where you cannot get help from other students or the teacher. Weekly Spiral Reviews count as quizzes. Notes are often allowed on quizzes. Quizzes can be corrected, following the correction template, to raise your grade by 1/2 the points missed.

Tests are always announced ahead of time and come at the end of a topic of study. No notes will be used on tests. Tests will have a calculator and No Calculator portion. Tests cover material that has already been covered at some point in the class. Tests cannot be corrected.

Homework is work that you are assigned in class and bring back the next day. Homework can be corrected following the corrections template and full credit will be received.



Broad Subjects Topics Covered In This Course

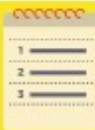
Number Sense - square and cube roots, scientific notation, exponents
Functions- linear and nonlinear functions and their rules, writing function rules
Algebra - solving equations, solving systems of equations, writing linear equations
Geometry - transformations on shapes, Pythagorean Theorem, volume of 3D solids, angle properties of parallel lines, angle properties in triangles
Probability - lines of best fit, compound probability

Spiraling Teaching Method

In order for students to learn as much as possible and retain as much as possible in 8th grade math, I will be teaching this class using a spiraling approach.

Topics will be introduced in order, however, we will not ever be "done" with a certain topic until the end of the year. Students will be constantly spiraling, or circling back, to topics covered at any time throughout the year.

Almost every topic covered in 8th grade math makes up the bulk of the coursework for 9th grade Algebra and even some Geometry. I want the students to learn and remember these skills to give them an advantage moving forward.



In what order will the topics be introduced?

- Solving Linear Equations - multi step equations solved for one variable that may have one solution, no solution or many solutions
- Functions - learning how to interpret, write, and compare functions both linear and non-linear, understand how to read a nonlinear function graph that represents a real life situation and interpret it as increasing, decreasing, etc.
- Proportional Relationships - understanding a proportion is a special type of linear function, writing equations for proportions from tables, graphs, and situations
- Linear Functions (Slope-Intercept Form) - learn that all lines can be written in the form $y = mx + b$, write lines in slope-intercept form from tables, points, graphs, and descriptions, recognize when an equation cannot be written in $y = mx + b$ form, understand that m is the slope or rate of change and b is the initial value or y -intercept
- Volume - know and understand the formulas for volume of a cone, cylinder, and sphere
- Finding Square and Cube roots - finding whole number answers to cube and square roots and estimating irrational square roots (No Calculator Skill)
- Exponents - understanding whole number exponents can be positive, negative, or zero and how to operate with them (No Calculator Skill)
- Scientific Notation - writing numbers using powers of 10 and decimals (No Calculator Skill) and Operations on numbers written in scientific notation (Calculator Allowed)
- Solving Systems of Equations - multi step equations solved for two variables that may have one solution, no solution, or many solutions
- Transformations on 2D figures - learn properties of rotations, reflections, translations, and dilations on shapes on a coordinate plane
- Angles - work with triangles to verify the angle sum theorem, exterior angle theorem, Pythagorean Theorem, and with parallel lines to learn properties of angles and their measure
- Scatterplots - construct scatterplots to represent real data, model and predict data using lines on scatterplots
- Probability - find probabilities of compound events happening using a variety of different methods

Problem Number:

Re-Worked Problem

I missed this because _____

You must rework every problem missed using this format. All corrected problems must have a number, re-work, and I missed statement.

Here's an example of what I mean. Let's pretend I missed question #4 on an assignment.

4.)	$2x + 5 = 10$	I missed #4 because the first
	$-5 = -5$	time I worked out the
	$2x = 5$	problem, I divided off the two
	$x = 2.5$	before I subtracted my 5.

What credit will I get back for doing corrections?
Homework - full credit back (can get 100)
Quizzes - half credit back (if you missed 20 points,
you get 10 back)