Parents/Guardians as Partners

Getting to Know You, Your Family, and Your Child:

Please take a few minutes and fill out the survey by either scanning the QR code below or by typing in the URL to an internet browser.

https://goo.gl/forms/QiEdvxtubPyD4BAc2

Teacher to Parent Communication Throughout the Year:

ClassDojo

Parents/Guardians as Partners

How to Help at Home:

The problem solving and deeper thinking approach can be frustrating at times. If your student is struggling, has questions, or seeks guidance from you at home please follow some simple tips:

1.) If math was not/is not your subject or if you consider yourself bad at it please keep those comments and thoughts to yourself. The best mindset for problem solving and deeper thinking is positive so starting out with the thought “My mom/dad is bad so I must be too” is like going into battle without a general. So begin with “Let’s work together, we can do this.”

2.) Ask questions instead of giving answers. All too often we just want the assignment over so we give them the answer and the how to solve it. However, it is better for students to come to this conclusion on their own and take that ownership for themselves. Therefore please ask some basic questions and have a discussion with your student instead.
   a. What is the problem asking or what are you trying to find?
   b. What information is given in the problem?
   c. What operations do you think you will need to use?
   d. Have you tried drawing a picture? making a table? solving numerically? or re-writing the question in your own words?
   e. What previous math knowledge do you think you can use to solve this?

   If you need more suggestions please let me know....

3.) Have them put it away, out of sight for a little while and come back to it. Research shows that spending too much time on a given problem or assignment actually blocks our brains. Therefore having them put it down, walk away, and do something else (like jump rope, bike ride, play an active game) is important. When they return they will have a fresh brain and a new perspective giving the brain a chance to try again.

8th Grade Math (Alg)

Mrs. Carol Barnes

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Voicemail and email will be checked daily M-F at 3:30pm and responses will be returned within two school days.
Students will apply basic operational skills, explore algebra fundamentals, learn geometrical foundations and engage in the role and impact math has in the community.

* We might not go in this order due to student needs and cross curricular activities *

Chapter 1- Solving Linear Equations
Chapter 2- Solving Linear Inequalities
Chapter 3- Graphing Linear Functions
Chapter 4- Writing Linear Functions
Chapter 5- Solving Systems of Linear Equations
Chapter 6- Exponential Functions and Sequences
Chapter 7- Polynomial Equations and Factoring
Chapter 8- Graphing Quadratic Functions
Chapter 9- Solving Quadratic Equations
Chapter 10- Radical Functions and Equations
Chapter 11- Data Analysis and Displays

If you are over the age of 20 you remember math classes being centered around a lecture given by the teacher (typically taking all period) and then that teacher assigning 20+ problems of plug and chug for homework. They were due the next class period and typically a quiz was given that looked similar to the homework questions. Over the years research has shown that this is not the most effective way to instruct students. This method is even more ineffective as we move more and more towards technology. Therefore you can expect my class to look something like this (modeled after the Standards for Mathematical Practice):

1. **Students will make sense of problems and persevere in solving them.** Students will be given a scenario, word problem, or sets of data and will be asked to work together to make sense of the information and answer the given question.

2. **Students will reason abstractly.** Students will be asked to apply the given scenario, solution, or set of data to their everyday life and demonstrate it through a manipulative.

3. **Students will construct viable arguments and critique the reasoning of others.** Students will be asked to make their case and prove why their solution works as well as analyze if their peer’s solutions work and argue for or against.

4. **Students will model with mathematics.** Students will be asked to draw picture representations, plot on a graph, make a table, flowchart, or use formulas to represent their solution and given problem.

5. **Students will be asked to use appropriate tools strategically.** Students will estimate, use graphing calculators, rulers, protractors, tangrams, and other “tools” in order to solve or demonstrate a solution.

6. **Students will be asked to attend to Precision.** Students that are mathematically proficient can communicate precisely to others. This goes beyond just having the right answer but instead being able to say why it is the correct answer.

7. **Students will look for and make use of structure.** Students will spend a lot of this year discussing what patterns they see and how they can use this to solve problems.

8. **Students will look for and express regularity in repeated reasoning.** Students will not only learn to use the algorithms taught during the lecture piece but also learn to notice repeated calculations and look for both general methods and short cuts to solving.

**The Math Class Design**

**Classroom Supplies:**

1 Composition Notebook

**Average Day in Math Class:**

**Warm Up:** This will consist of review concepts.

**Group Work:** Students will participate in a group work exploration either using Big Ideas explorations or using ETA Hand 2 Mind Manipulatives.

**Lesson:** Students will receive direct instruction over examples to summarize the main ideas of the lesson.

**Individual Practice:** Students will work through Try-It questions to practice on their own.

**Group Practice:** Students will practice with their peers to solidify their understanding.

**Exit Ticket:** Students will answer an exit ticket to ensure they know the material before we progress.