Angela Schu

Math & Science Teacher (rm 16)
Cell: (858) 344-8480   E-mail: aschu@sandi.net
Muir website: www.sandi.net/muir
4431 Mt. Herbert Avenue   San Diego, CA   92117
Phone: (858) 268-1954 ext116   Fax: (858) 627-9289

John Muir School TK-12
Building Global Citizens

CC 8th Grade Math Syllabus

Course Description

This course will provide a foundation of abstract thought, reasoning, and inquiry as students persevere to answer the Essential Questions introduced in each section. Students will be introduced to the "Habits of Minds" that will help them internalize concepts for the greater depth of understanding leading into high school mathematics.

Objectives

Students will be able to. . .

a. Formulate and reason about expressions and equations, modeling an association in bivariate data, solving linear equations and systems of linear equations
b. Grasp the concept of a function and using functions to describe quantitative relationships
c. Analyze two and three dimensional space and figures using distance, angle, similarity and congruence
d. Understand and apply the Pythagorean Theorem

Course Overview:

Semester 1

Equations
- Write and solve multi-step equations; including :
- Rational numbers, coefficients and variable on both sides

Transformations
- Identify congruent and similar figures and translations
- Translate figures in the coordinate plane
- Explore reflections, rotations and dilations
- Find unknown measures, perimeter and area of similar figures

Angles and Triangles
- Describe and find the measures of angles formed by transversals
- Find the measures of interior and exterior angles of triangles and polygons
- Identify similar triangles and find missing measures

Graphing and Writing Linear Equations
- Graph proportional relationships
- Interpret unit rate as the slope
- Find slope by using points, tables, and similar triangles
- Identify perpendicular and parallel lines
- Find x and y-intercepts
- Write and graph equations in various forms

Systems of Linear Equations
- Write and solve systems of linear equations lgebraically, using substitution, elimination and graphing
- Write systems of equations to model and solve real-life problems, and justify solutions
- Explore special systems

Textbook: Big Ideas Math Course 3: Common Core Curriculum
   Website: https://clever.com/in/sdusd/

Semester 2

Functions
- Define relations and functions using mapping diagrams, tables, and graphs
- Write function rules as equations, tables, and graphs
- Compare linear and non-linear functions
- Sketch and analyze graphs

Real Numbers and the Pythagorean Theorem
- Find, evaluate and solve equations using square and cube roots
- Prove the Pythagorean Theorem
- Find missing side lengths of right triangles
- Develop the Distance formula

Volume and Similar Solids
- Find the volumes of cylinders, cones, and spheres
- Find and compare surface area and volume of similar solids
- Describe the process for identifying similar solids
- Use formulas to solve real-world problems

Data Analysis and Displays
- Construct and interpret scatter plots for bivariate data
- Describe patterns and find and use lines of best fit
- Use precise language to describe and analyze data displays of data

Exponents and Scientific Notations
- Write, evaluate, and simplify expressions with integer exponents
- Recognize patterns and write rules for products and quotients of powers
- Read and write scientific notation to solve real-life problems

Recommended Supplies

Having the necessary supplies is instrumental.
If you cannot provide these supplies, please let me know and I will provide them for your child.

3 ring binder (1 inch or more)
3 hole punch lined paper
3 divider tabs for math

Pencils and erasers
Independent Reading Book

Classroom Expectations	**Consequences**

Classroom Expectations
- ➢ Follow ALL directions first time asked
- ➢ Be in your seat and prepared to work
- ➢ Do NOT disrupt the learning of others
- ➢ Keep all hands, feet and confrontational comments to themselves
- ➢ Follow all district, school and classroom rules and policies
- ➢ Keep "our" classroom clean
- ➢ NO electronics allowed on during class time

Consequences
- ➢ Warning/time-out at teacher discretion
- ➢ Detention (time determined by teacher) and parent phone call
- ➢ Additional detention (time determined by teacher) and parent phone call
- ➢ Referral, parent/team conference, or parent shadow

Anything of a serious or violent nature, a zero-tolerance infraction, or any on-going or severe problem will result in immediate referral to the counselors and/or principal with possible suspension or expulsion from Muir.
Bullying will not be tolerated!! For more information about SD Unified School District policies, please visit https://www.sandiegounified.org/anti-bullying-information-parents

---

Grading Policy and Procedures

Academic Grading Scale:
A – 90 – 100%
B – 80 – 89%
C – 70 – 79%
F – below 70%

Citizenship Grading Scale
Citizenship is based on the student following Muir and class rules; arriving on time, exhibiting a willingness to learn, participating in class activities, working well with peers and demonstrating courteous and respectful behavior towards peers, teachers and the classroom.

In order to meet the A-G requirements established by the Universities of California and the CA State Universities, students must earn a "C" or better and therefore "D" will not appear in the grading scale.

Notebook Logs (3 ring binder)

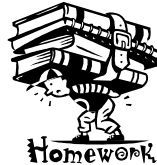**You will be required to bring your 3-ring binder, independent reading book and a pencil to class every day**. We will be adding assignments to your binder on a daily basis and failure to bring it will result in a lowering of your grade. It is VERY IMPORTANT that you update your Table of Contents as you enter the classroom. Notebook logs will be due at the end of every unit and will include all notes, class activities, and homework for the unit.

Notes/Class Activities – 30%

In class, you will be required to actively participate in the daily activity. This will include, but it not limited to notes, group and individual problems, class activities, and labs.

Homework – 10 %

Homework is a reinforcement of the days' activity. I will try to allow some class time to start homework to ensure that there are no questions. Completed homework will be stamped the day it is due.

Performance Evaluations – 60 %

There will be a test at the end of each unit and occasionally a quiz in the middle of longer sections.
We will be completing projects throughout the year to test your understanding of key concepts.
ALL homework must be completed to retake any tests or quizzes.

Late/Make Up Work Policy

NO late work will be accepted after the unit test is taken. If the notebook log is turned in on the day of the test, you will have an opportunity, after grading, to correct or redo most assignments for 75% of the original grade. All make-up work must be done at lunch or BEFORE/AFTER school and turned in before the unit test.

Absences

Being absent does **NOT** excuse you from the assignments missed. Upon returning, it is your responsibility to update your Table of Contents and complete missed assignments. These assignments must be done by the next quiz or test and included in your notebook log. Any missed quizzes or tests must be made up at lunch, before/after school, see me to make arrangements.

Help Sessions:

Everyday at lunch   -   Monday & Tuesday: After School   -   Before School by appointment
Please check front white board in the classroom for any changes.
*These sessions are for students to make-up work, tests, or redo incomplete packets…
if work is turned in on time students are allowed to redo select assignments from the previous unit up until the next unit test.

Please feel free to contact me with any concerns or question you may have regarding my class.
The best way to reach me is by the e-mail aschu@sandi.net.
I look forward to working with you to help your child have a successful year in my class.