

August, 2017

Jani Nelson/ Room K 101

Math 8 Course Outline

email: jnelson@lvusd.org

web site: <http://www.mathcounts4ever.com>

LCMS phone: 889-2134

text: *California Math, Course 3*
McGraw Hill

Welcome to the 2017 - 2018 school year. I am delighted to be teaching Math 8 to your child. I have a Bachelor of Art's Degree in Mathematics from UCLA, obtained my CA Single Subject Teaching Credential in Mathematics from CSUN, and completed my Master of Science in Education Degree with a specialization in Integrating Technology in the Classroom from Walden University. I have been actively involved in our school district for over twenty five years, first as a parent, and then more recently as an educator. All three of my children attended schools in LVUSD, including Lindero, and as a parent I realize the importance of the school-home connection. I plan to keep in close touch with you via assignment feedback and through daily postings on my website. I communicate primarily via email so please be sure I have your current email address.

The key to understanding math is making sense of it. Math is truly about visualizing patterns and creating solution paths that others can see, discuss, and critique. It is important for my students to realize that math is about learning, that it takes time to learn and it is all about effort. Asking questions in math is a critical part of the learning process. Research shows that question asking is linked to high achievement. I really want my students to ask and to answer questions others pose in our classroom.

Here is a brief outline of the course, including state standards, student requirements, grading, and policies to help you in your efforts to support your child's math studies.

COURSE CONTENT: CA Common Core State Standards

<http://www.cde.ca.gov/be/st/ss/documents/ccssmathstandarداug2013.pdf>

- Ratios & Proportional Reasoning • The Number System • Expressions & Equations
- Geometry • Statistics & Probability

Math 8 will use the adopted McGraw Hill text *California Math, Course 3*, which is aligned with the rigorous Common Core State Standards (CCSS) that will be tested in the spring, 2018. I'm sure you are aware that these standards are extremely challenging for all students, so your student must be ready for a brisk pace throughout the year. THE TEXTBOOK BELONGS TO YOUR STUDENT! Last year students were quickly engaged in learning the material when they realized that they could highlight and write in their texts. They will need to bring their text to class daily. The text is divided into five units that mirror the five CCSS domains: the number system, expressions and equations, functions, geometry, and statistics and probability. Key concepts include exponent rules, square roots and irrational numbers, solving multistep equations in one variable, multiple representations of equations in two variables, solving systems of equations, understanding different types of functions, the Pythagorean Theorem and right triangle relationships, geometric transformations, triangle congruence and similarity, volume and surface area, scatter plots and data distribution measures.

The class will not only go at a demanding pace, but will also include projects that will not only consolidate key concepts, but also challenge them. It is assumed that the Math 8 student has previously mastered basic order of operations, decimal, fraction and integer skills, as well as elementary algebraic skills such as combining like terms and one-step equations. While the pace is demanding, my goal is to always provide a warm environment that will help students feel comfortable asking questions. I believe a strong confidence in their abilities will help them to succeed in high school level math.

McGraw Hill Student Portal:

The text comes with a wonderful online portal where students can find the student edition of the text, as well as a myriad of resources to help them understand the concepts. The Math Department has produced an online video taking students and you through the portal to help everyone become comfortable with how to click on and use all the incredible interactive learning apps. Three of the most effective apps are the personal tutors (short videos explaining a problem step-by-step during the lesson), eHelp (a few problems in the homework will be denoted with a red house, letting you know that you will be given the steps to work out that specific problem when you click on it), and self-check practices (questions that give immediate feedback on whether your student understands the lesson). Another wonderful help, eSolutions, is similar to HotMath.com (we are no longer subscribing to this online homework help). Students will be given the step-by-step solutions. Unlike Hotmath, I can actually give you the even solutions as well as the odds! (There may be times when I only give you the odds and use the evens as a check of your individual understanding.)

MATERIALS:

- single subject notebook (**total of 4:** 1 for each quarter)
- loose-leaf paper
- calculator
- 3-5 sharpened pencils
- green pen
- 2-3 thin dry erase markers
- highlighter
- ruler

HOMEWORK: Homework is designed to provide each student with appropriate independent practice. The extent to which each student utilizes the opportunity to practice challenging skills will be reflected in the student's assessment scores. Homework will be assigned and graded as well as considered as part of the Work Habits grade. Students are responsible for completing all homework accurately. Checking odd problems in the back of the textbook and online with e-solutions, if additional help is necessary, is part of the homework requirement and assures accurate practice. Organized math homework packets will be turned in for grading each Friday. Students will receive a cover sheet page every Thursday so they can organize the packet properly before coming to school on Friday. The cover sheet also serves as a communication tool between your student, you, and me. I include important dates and reminders for projects and upcoming tests. Because late homework loses its relevance, students will receive full credit on the Friday the packet is due, 80% credit if turned in Monday, half credit during the following week, and no credit thereafter. No homework will be accepted after the following week unless there is a proper excuse signed by a parent.

PROJECTS and UNIT PERFORMANCE TASKS:

As we embrace the demanding Common Core standards during the year, students will be asked to do more critical thinking and analysis than ever before. They will not only be required to learn

key concepts, but also recognize what concepts are needed to solve complex, multistep problems, use several concepts jointly to create a logical solution process, and then explain their solution verbally and in writing. Further, they must be able to adjust or adapt their solution (model) to changing circumstances individually and collaboratively.

The Common Core identifies eight key practices (abilities) that students must develop to be successful problem solvers in the 21st century

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments & critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

To help students develop these skills, Math 8 will include projects that will motivate them to think creatively, independently and collaboratively, to persevere if their first attempt is not successful, and to provide their solution rationale. Students will present their projects to their classmates and be prepared to answer their questions.

SPIRAL NOTEBOOKS: All students are required to keep organized, neat notes in the spiral notebook provided to them in class. The spiral notebook is a wonderful source of key concepts and examples. If kept properly, the spiral notebook will provide your student with an excellent studying tool for quizzes and tests. Students will need a total of four (4) spiral notebooks for this school year, one for each quarter. I suggest getting all four now and keeping the extra three spiral notebooks in a safe place until the start of each quarter. Whenever absent, a student should plan to obtain any missed notes from a classmate.

TEST PERFECTIONS: Each student is encouraged to complete a "Test Perfection" assignment after every major test, if the score was less than 90%. Test Perfections are a part of the Assessment Category in our Math 8 class and will add $\frac{1}{2}$ of a point back to their test grade for all problems reworked correctly and completely. I believe this assignment is crucial to the student's mastery of the concepts reflected on each test. I am available before and after school as well as lunchtimes to help your student get these corrections completed properly. All Test Perfections need to be signed by a parent or guardian. Students normally have up to two weeks from the date that the test has been returned to hand in the signed corrections along with the **original test**.

Mastery of Skills (MOS): Mastery of Skills are short quizzes intended to help students achieve complete mastery of important algebra related skills. Based on the same concept from elementary school such as learning the multiplication tables, student may retake any MOS two additional times during the semester in order to achieve mastery. Some examples of "MOS" topics include operations with polynomials, exponent rules, fraction operations, and solving quadratics. The MOS's are given throughout the year and students can keep track of their progress by viewing this portion of the grade online.

COURSE GRADING: Your child's grade is available online by clicking a link on my website's homepage to Aeries or by going directly to Aeries, our district grading system. If you already created an account from last year, continue to use the same password. There is a link to click if you forgot your password. If you are new to our school or did not set up an account last year, please contact Mrs. Julie Mohr in our counseling office at jmohr@lvusd.org. She will be glad to assist you in establishing an account to view all your child's grades. Your student will visit my site as part of a homework assignment in the next few days. You will also receive that information at Back to School Night. Students' grades are updated frequently, usually every other week.

Academic grade: The course academic grade will be based on demonstrated achievement on a variety of assessments including daily assignments, tests, quizzes, student notebook, and projects.

The grade percentages are as follows:

Assessments (Test & Quizzes AND Test Perfections)	45%
Project Based Learning (Projects & Unit Performance Tasks)	20%
Mastery of Skills Checks (MOS)	20%
Coursework (Homework/Classwork/Spiral Notebooks)	15%

Extra Credit: Students will be allowed a maximum of 2% of extra credit per semester. One of the primary ways to earn extra credit will be answering Smarter Balanced Assessment Consortium (SBAC) based questions available on my website. The SBAC-based questions will focus on a concept either from the current or previous lessons. Each time a student answers 50 questions correctly, he/she will receive one extra credit percentage point up to the maximum allowed. The goal is to offer an extra credit assignment that will help them keep up with the class on a regular basis, and also get them comfortable with the SBAC format. This year other options for earning extra credit will be offered, including additional activities which will be aligned with the new Common Core standards. These activities should increase familiarity with the type of questions that students will be tested on in the Next Generation Assessments. Please see my website for details on additional ways to earn extra credit. Too often, extra credit assignments are unrelated to the actual course objectives and are done in a panic at the end of the grading period.

Work Habits: The Work Habits grade will be based on completing homework and class work, and coming to class with all of the appropriate learning materials. Because of the accelerated nature of this course, good work and study habits are essential and are expected. While it is my job to teach, guide, and support all my students through these mathematical concepts, it will be my students' responsibility to complete all assignments in a timely manner and ask and get help whenever needed.

Citizenship: Each student is expected to participate in class and contribute to a positive learning environment. The citizenship grade is based on overall behavior exhibited during the entire grading period, not just the behavior during the week or two before the grading period ends. It is expected that students will be in their seats before the bell rings; bring supplies,

materials, homework, etc.; behave respectfully to everyone; follow the class and school rules and dress code, and do nothing to interfere with learning or to detract from a positive classroom environment. This behavior earns an **S**. To do less than this, earns an **N** or **U** depending on the degree of the behavior. If the **N** behavior has not risen to a satisfactory level by the quarter/semester report card period, a **U** will be given. An **O** is earned by doing more than expected, for example, making a point to courteously greet adults and peers and volunteering to help.

EXTRA HELP:

I will be available most mornings, except Tuesdays, to help students with questions. I will be available at lunch at least two days per week to help students with any math problems. I am available after school until 3:30PM by appointment only.

LEARNING KEYS:

- Student and parent: Check HW completion, accuracy, and understanding nightly. See Reminder Binder or web page for assignment.
- Ask your child to explain 1 problem and solution each day.
- Share your use of math in your job & daily life as it occurs.
- Model a positive and 'can do' attitude toward math.
- Help your child read & utilize text explanations and models at home.
- Utilize McGraw Hill e-solutions for clear explanations and solution models.
- Contact me whenever you have questions or concerns.

CONTACTING ME:

The best way to contact me is to email me at either jnelson@lvusd.org. On my main website, located at <http://www.mathcounts4ever.com>, is a link to the LVUSD site and the new Common Core State Standards in Mathematics. This main classroom website includes a brief biography about me, a brief syllabus of the class, a grade link, daily homework assignments, the Table of Contents for our spiral notebooks, and some cute math comics.

I look forward to working with you and your child toward a positive math experience. I hope to meet you in the classroom or at Back to School Night on Wednesday, September 6th.

Sincerely,

Jani Nelson
jnelson@lvusd.org

PARENT LETTER SIGNATURE SHEET

Student's name _____

Math 8 , Period _____

This sheet (front & back) must be returned signed and completed in your weekly packet due Friday, September 1st

By signing the following sheet, both you and a parent/guardian are agreeing that you:

1. have read the information found on the "Being Successful" tab on the Math Department's webpage

(Go to <http://www.linderocaynonmiddleschool.net> and click on "Academics," and then "Math Department.")

2. have read Mrs. Nelson's class letter (Go to <http://www.mathcounts4ever.com/math8.htm> and click on the Parent Letter)

Parent Signature

Student's Signature

Student's Email

Parent to Teacher Communication

As we begin the school year I'd like to know more about your child. Please help me by providing the following information and any other information you believe is relevant.

Parent name(s) _____

Phone number(s) _____

****Email(s) _____

Please write a summary of your child's experience with math.

What are your expectations for your child in math?

See back →

What are your expectations of me?

What kind of learning support are you able to provide at home? (HW supervision, tutoring, HW location, materials, listening, questioning...)

Please describe briefly how you use math in your career or home life.

Other comments: