CONNECTED MATH SYLLABUS – Eighth Grade
Mrs. Michelle Mack

Course Description: We will be studying math from the Connected Math 3 Program, which is structured into units that take 4-6 weeks each. The units focus on problem situations that help students to learn an important set of related math ideas, and become skillful at using these ideas to solve problems. They will learn to communicate their strategies and reasoning so that their math understandings are much deeper. The problems that they will work on are more challenging and interesting than those they may have experienced in the past, and this will make math more meaningful for them…and more fun!

Curriculum: Connected Mathematics 3 Project (CMP), Prentice Hall Public.

Units/Content:  

Unit 1: Thinking With Math Models  
Linear models and equations, inverse variation models and equations, variability of numerical and categorical data

Unit 2: Looking for Pythagoras  
Use and proof of Pythagorean Theorem and converse, square roots, cube roots, irrational and real numbers, circle equation

Unit 3: Growing, Growing, Growing  
Exponential functions, representing exponential growth with tables, graphs, equations; rules for exponents, scientific notation

Unit 4: Butterflies, Pinwheels, and Wallpaper  
Symmetry and transformations; congruency and similarity; coordinate proofs

Unit 5: Say It With Symbols  
Equivalent expressions; solving linear and quadratic equations; identify and represent linear, exponential, and quadratic functions

Unit 6: It’s In the System  
Systems of linear equations and inequalities; solving these systems graphically and algebraically

Materials: Students should come to class with their math binder, grid notebook, pencil, and CMP textbook. We must be ready to begin instruction no more than 5 minutes after the bell, and therefore should have pencils sharpened, calculators retrieved, and other relevant supplies ready.

Math Binders: Students will be keeping their work organized in a 3-ring binder this year, which they are responsible for providing. They also need 5 dividers for organizing notes, problems, homework, reflections, and quizzes/tests. They are expected to retain all work for the duration of the year, as they will need it for midterm and final exams.
Absences: It is critical that students complete assignments on a timely basis. Should students be absent and miss any assignments, it is their responsibility to obtain those missing assignments from the teacher or another student in the classroom. **Students will be allowed one extra day for each day absent.**

Math Lab: Math lab is held in my classroom most days after school. Students are encouraged to attend math lab in order to complete their work, make corrections, or simply to get extra help.

In-Class Participation: All students are expected to be attentive in the classroom at all times, which means they must be prepared for the possibility of the teacher asking for some input. This can involve agreeing or disagreeing with something another student contributed, restating something another student contributed, or even adding on to another student’s ideas. **This gives all of us a chance to take part in the discussion, and is necessary for math success.**

Notes: At the beginning of the year, we will guide students regarding the quality of the notes that they should take. All information is posted on the white board or chart paper, and is also available online at my website, to make it easier for all students to make their own notes. **My website is** [www.mathmackcms.weebly.com](http://www.mathmackcms.weebly.com). Remember that notes can be used on some of the assessments, so taking good notes is a big contributor to being successful in the class.

**ASSIGNMENTS DEFINED**

Problems (in class): We do one problem each day in class together, and if students need extra time it may be completed at home. We summarize the work first thing the following day in class. The students sometimes have the option to work in groups of 2 or more. **These problems are considered practice, and they are corrected together. They are worth 1 point each day for effort, and they are a critical step in learning and mastering the standards taught.** It is necessary to complete the problems successfully in order to better understand the homework assignments.

Homework (at home): ACE problems from the book are assigned for homework, or we may use a practice worksheet. Sometimes this work is collected and graded. **It is important that students turn in their homework on the due date, so that they are achieving the most success possible in our class. Late work is accepted, and although it won’t be marked down, it will be marked “late” in MiStar. All late work must be done in Math Lab so that I am available for help.**

Reflections: We write about math at least one time for each investigation that we complete. Students are expected to write **in paragraph form with complete sentences.** The Math Reflections assignment at the end of each investigation is an example of journal writing, and additional writing assignments may be given to the students.
Quizzes and Tests: There are several types of assessments students will complete during the course of the year. Check-Ups, typically one per unit, are done individually, and students are permitted to use notes that they take in class. Partner quizzes, also typically one per unit, are done in groups of 2, and notes are NOT permitted. Unit tests are at the completion of a book, and are done individually with notes. Finally, students are given a midterm and a final exam to assess them on the concepts taught throughout the first semester and second semester, respectively. If students ever require more time to complete any assessment, they must come in after school that same day! If they don’t show up, the assessment must be graded as is.

We are really looking forward to working with all of you this year! Together we can make the experience enjoyable and productive! 😊