



OAK LAWN-HOMETOWN MIDDLE SCHOOL

School District 123



8th Grade Math Syllabus

Mrs. Strayer, Mrs. Loch, Mrs. Miller, Mrs. Owens
2022-2023

1. **District 123 Vision:** *A dynamic and supportive environment that ignites lifelong learners who embrace diversity and contribute positively to our community and global society.*

2. **District 123 Mission:** *Preparing today's learner for tomorrow's world*

3. Course Description

CMP3 is a coherent problem-centered curriculum that promotes an inquiry-based teaching-learning classroom environment. CMP3 students are developing mathematical habits of mind: solving problems, reflecting on solution methods, examining why the methods work, comparing methods, generalizing methods, and relating methods to those used in previous situations.

4. Learning Outcomes or Big Ideas

By the end of this course, students will be able to..

- Solve linear equations and analyze linear functions. (8.EE.5, 8.EE.7, 8.F.1, 8.F.2, 8.F.3, 8.F.4)
- Understand and apply the Pythagorean Theorem. (8.EE.2, 8.G.6, 8.G.7, 8.G.8, 8.NS.1, 8.NS.2)
- Create and apply expressions and equations to problem situations. (8.EE.7a, 8.EE.7b., 8.F.5)
- Reason with congruence and similarity and perform transformations. (8.EE.6, 8.G.1, 8.G.2, 8.G.3, 8.G.4, 8.G.5)
- Analyze and solve systems of simultaneous linear equations and inequalities. (8.EE.8)
- Work with integer exponents and exponential functions. (8.EE.1, 8.EE.3, 8.EE.4)
- Make sense of a real world scenario by transferring and applying mathematical knowledge. (MP1, MP2, MP4, MP5)

5. Daily Procedures

Each day students will follow the Connect Mathematics Project curriculum (CMP). Each 80-minute math block is a collaborative environment in which students solve real-world tasks by utilizing problem solving strategies. CMP lessons are designed around a Launch-Explore-Summarize pattern.

6. Expectations of Student

- Arrive to class on time with completed homework and the necessary materials
- Recognize that improvement comes with hard work and a growth mindset
- Take accurate notes and use those notes as a reference
- Be respectful of yourself, others, the classroom, and the school
- Follow the absent procedures:

Go to Google Classroom for daily homework assignments.

Classroom work is important. If you are absent for any reason, it is the student's responsibility to find out what he or she missed with regard to class work, daily notes, homework, and a quiz/test. All assignments from absences must be completed in a timely manner.

7. Expectations of Teacher

Teacher will:

- Establish high expectations through a rigorous curriculum and model necessary steps in solving problems
- Be available to assist students
- Maintain a positive atmosphere to ensure a safe learning environment for all students
- Provide opportunities for students to experience success
- Keep parents informed of the child's progress via Skyward

8. Assessment Criteria

Homework will be assigned almost every day. Students are expected to complete homework either on paper or in their notebook. Homework will be checked by the teacher the next day in class. It is vital for students to complete homework daily for practice. For students struggling with homework completion, before school or after school Power Hour may be recommended.

Formative assessments will occur on a daily basis in the classroom. This can be accomplished through informal observation, questioning, in-class work, quizzes and homework.

A summative assessment will be given at the conclusion of each unit of study. Each unit is broken down into Investigations, with a quiz after each investigation. Students can expect about 3 - 4 quizzes and one summative assessment with each unit.

9. Materials

- Calculator - TI-30XIIS
- 1.5" Binder
- Notebook
- Loose leaf paper, graph paper, and tracing paper
- Chromebook
- Pencil and correcting pen
- Highlighter
- Protractor

10. Instruction and Directions for Help?

8A:

- Mrs. Teresa Loch - tloch@d123.org
- Mrs. Julie Owens - jowens@d123.org

8B:

- Mrs. Tiffany Strayer - tstrayer@d123.org
- Mrs. Morgan Miller - mmiller@d123.org

District website: www.d123.org

Phone: (708) 499-6400

Parent and Student Resources

- OLHMS 8th Grade Math Site (linked on Google Classroom) - provides extra practice links, videos, and notes
- STAR Math tutoring is available Tuesday and Friday at 7:30am.
- Teachers are available every other day during student lunch to provide extra help if needed
- Skyward

11. Curriculum Map (Units of Study)

1. **Thinking with Mathematical Models** (*Linear and Nonlinear Functions*)
2. **Looking for Pythagoras** (*The Pythagorean Theorem*)
3. **Say it with Symbols** (*Making sense of symbols in algebra*)
4. **Butterflies, Pinwheels, and Wallpaper** (*Transformations and Similarity*)
5. **It's in the System** (*Systems of Equations*)
6. **Growing, Growing, Growing** (*Exponential Equations*)