# Geometry

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| Instructor | Ms. Lopez | Phone | 510-370-3334 |
| Office | Room 3/Office | E-mail | [Melisa@silveroakmontessori.org](mailto:Melisa@silveroakmontessori.org) |
| Office Hours | 4:00pm-4:30pm or upon request |  | Quarter 4 |

### Text:

McDougal Little, Geometry

### Description:

Geometry brings math to life with many real-life applications. Examples of mathematics in sports, engineering, and carpentry will be shown throughout this unit. Three key aspects of geometry that will be emphasized are measuring, reasoning, and applying geometrical ideas. As you explore the applications presented in this quarter, try to make connections between mathematics and the world around you.

### Essential Understanding:

In Geometry, the student takes a more philosophical approach to the Mathematics in which they have become familiar. Instead of manipulating values, the student questions the very foundations of Geometry and builds a repertoire of rules to further prove more complex ideas. In doing so, they realize that Mathematics is an ebb-and-flow framework of logically consistent guidelines.

### General Guidelines:

## Lessons:

Lessons will be given throughout the class depending on the math level that you are in. You will have multiple lessons a week. If you are struggling with a concept it is your responsibility to review the lesson and ask questions. **It is a requirement to come to the lesson area and take notes**. I will be checking your notebook, making sure you are taking notes for credit. If you are absent on one of the days that there is a lesson it is your responsibility to get the notes either from google classroom or a peer.

## Individual Work:

33.33% of your grade is based on completing the assignments that will be assigned to you after every lesson. All assignments will be out of 10 points and assignments will be collected every week (Fridays). Use your class time properly, if you do not understand the individual work it is a good time for you to ask help from either your peers or me. **You must show work to receive full credit.**

## Group Work:

33.33% of your grade is based on completing and participating in group work. You must communicate with your group and do the group work together. If your team completes the group work however, you did not participate you will be getting no credit for that assignment. **You will not be able to make up any group work**.

## Final/Assessments:

33.33% of your grade is based on assessments and your final**. You will be able to use a 3 X 5 index card during the assessments and final.** You must make at least 70% to ‘pass’ the assessment. If you do not pass an assessment you may choose to retake a similar assessment however, you will not be allowed to use notes. You may also do test corrections for half of the remaining of the credit missed. You will not be able to make up the final exam nor make corrections on the final exam.

## Late Policy:

You will be able to make up any work if you have an **excused absent** for full credit and will be given extra days equal to the amount of days missed. If you need an extension you must submit an extension form with your parent signature and mine **before** the day that the assignment is due. If I see that you are not using your class time properly you will not be given the extended time. If you get the extended time you will be able to receive full credit. If you turn in your assignment late without an extension you will be given a 7 out of 10 (C).

### Goals:

Triangles

Parallelograms

Reflection

### Requirements:

Group Work

### Resources:

Touring with Mr. Niemann, Ms. Sun, or myself

Khan Academy

### Course Schedule:

| Week | Guiding Question | Topic | Individual Work |
| --- | --- | --- | --- |
| April 9th-April 13th | **What types of motion in a plane maintain the congruence of a figure?** | **-7.1 Rigid Motion in a Plane**  -**7.2 Reflections** | **Vocabulary:**  -Image  -Preimage  -Transformation  -Isometry  -Reflection  -Line of reflection  **DUE: Tuesday April 10th**  **7.1 (P. 399 #’s 5-25 odds)**  **DUE: Friday April 13th at 4:30pm** |
| April 16th -April 20th |  | **-8.1 Ratio and Proportion** | **Vocabulary:**  -Ratio of a to b  -Proportion  -Extremes  -Means  **DUE: Monday April 16th**  **7.2 (P. 407 #’s 3- 21 odds)**  **8.1 (P. 461 #’s 3-23 odds)**  **DUE: Friday April 20th at 4:30 pm** |
| QUIZ | **7.1-8.1** | **Friday** | **April 20th** |
| April 23rd- April 27th | **When a figure is enlarged, what appears to be true about the corresponding lengths?** | -**8.2 Problem Solving in Geometry with Proportions**  **-8.3 Similar Polygons** | **Vocabulary:**  -Geometric Mean  -Similar Polygons  -Scale factor  **DUE: Tuesday April 24th**  **8.2 (P. 468 #’s 3-21 odds)**  **DUE: Friday April 27th at 4:30 pm** |
| April 30th -May 8th |  |  | -**8.3 (P. 475 #’s 3-23 odds)**  **DUE: Friday May 4th at 4:30pm** |
| MIDTERM I | **7.1-8.3** | **FRIDAY** | **May 4th** |
| May 7th -May 11th | **How can the properties of triangles help determine if they are similar?** | **-8.4 Similar Triangles**  -**8.5 Proving Triangles are Similar** | **Vocabulary:**  -Theorem 8.2  -Theorem 8.3  **DUE: Monday May 7th**  **8.4 (P. 483 #’s 5-25 odds)**  **8.5 (P. 492 #’s 3-17 odds skip 5)**  **DUE: Friday May 11th at 4:30 pm** |
| May 14th- May 18th |  | -**8.6 Proportions and Similar Triangles** | **Vocabulary:**  -Theorem 8.4  -Theorem 8.5  -Theorem 8.6  -Theorem 8.7  **DUE: Tuesday May 15th**  -**8.6 (P. 502 #’s 3- 23 odds)**  **DUE: Friday May 18th at 4:30pm** |
| May 21st-May 25th | **If you are given two lengths in a triangle how do you find the third side?** | -**9.2 The Pythagorean Theorem** | **Vocabulary:**  **-**Theorem 9.4  -Pythagorean Triple  **9.2 (P. 538 #’s 3-17 odds)**  **DUE: Friday June 1st at 4:30pm** |
| May 28th-June 1st |  | -**9.5 Trigonometric** | **Vocabulary:**  **-**Trigonometric ratio  -sine  -cosine  -tangent  -**9.5 (P. 562 #’s 3-33 odds)**  **DUE: Friday March 9th at 4:00pm** |
| FINAL | **8.4-9.5** | **Thursday** | **JUNE 7th** |

### Examinations:

FINAL EXAM

**THURSDAY June 7th**