



6th Grade Math

Instructor: Mary Beth Kester

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Course Description:

Sixth grade mathematics is about connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems. Students will complete their understanding of division of fractions and extend the notion of number to the system of rational numbers, which includes negative numbers. Students will write, interpret, and use expressions and equations, as well as develop their understanding of statistical thinking. Students will collaborate to solve known and novel problems that apply their understanding of mathematical concepts.

Course Objectives:

Upon completion of this course, students should be able to:

- Understand ratio concepts and use ratio reasoning to solve problems.
- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- Apply and extend previous understandings of numbers to the system of rational numbers.
- Apply and extend previous understandings of arithmetic to algebraic expressions.
- Reason about and solve one-variable equations and inequalities.
- Represent and analyze quantitative relationships between dependent and independent variables.
- Perseveres in problem solving.

Course Topics/Themes:

Unit 1: Statistics

Unit 2: Ratios and Unit Rates

Unit 3: Arithmetic Operations Including Dividing by a Fraction

Unit 4: Rational Numbers

Unit 5: Expressions and Equations

Unit 6: Area, Surface Area, and Volume Problems

Resources:

Google Classroom





Classroom Expectations:

All classroom rules derive from three basic principles:

1. Showing respect and working to develop an inclusive classroom environment is everyone's job. Be safe. Be kind.
2. All members of the class are responsible for maintaining it.
3. All students have the right to learn and reach their potential. Try your best at all times.

Additional Expectations:

1. It is expected that all students will be in dress code at all times during school hours.
2. English is the language of inclusion at our school. It is expected that all students will speak English in class to help us build collaborative teams.
3. Students are expected to do their own work to the best of their ability. Generative AI usage for math work is considered to be academic dishonesty. Academic honesty expectations will be strictly enforced.
4. Extra help is available by appointment. Please take advantage of this!
5. Students must come on time to class everyday with the required materials and their laptops. Headphones or earbuds, a notebook, and a writing utensil are also required. Laptops should be charged.
6. Students must leave the classroom in the same condition or better, after every class. Please respect the appearance of all desks, floors, equipment, etc.
7. Students will check Google Classroom daily and will be required to use electronic resources.
8. Use electronic devices during designated times for the sole purpose of learning course content. Cell phones should be turned to silent and kept in backpacks. They should at no point be visible or audible in class.
9. No food or drink, except water, is allowed in class.
10. We come to math class to learn math. Anything that disrupts from your learning, or the learning of another student is prohibited.

Behavior Plan:

1st Intervention: Reminder/warning from teacher.

2nd Intervention: Teacher meets with student privately for a discussion.

3rd Intervention: Detention; Dean of Students notified; Parents/Guardians notified.

A student will immediately be sent to the Dean of Students' office for blatant disrespect or behaviors that threaten the safety of any individual.

Rewards:

Positive note or phone call home from a teacher or administrator





Monthly celebration focused on character values (Aspiration, Perseverance, Integrity and Selflessness)

Nomination for End of the Year Awards

Assessment:

Progress will be monitored on an on-going basis using a variety of diagnostic, formative, and summative assessment tools. Formative assessments will occur frequently and may or may not be pre-announced. Summative assessments will be scheduled in advance. The purpose of assessment is to collect data to measure student progress in order to improve academic achievement and instructional practices. In order to achieve this, the teacher:

- Provides opportunities for students to demonstrate understanding of content and application of concepts.
- Measures and communicates the students' progress.
- Provides feedback for the growth and improvement of student learning.
- Reflects on data to guide and strengthen their instructional practices.

Assessment is categorized into two forms, both having an equally important role in measuring student progress.

Formative Assessment

- A tool used to measure student progress for the purpose of identifying specific areas for growth and measuring proficiency.
- Data collected for the purpose of guiding and adjusting instruction to meet students' needs.
- Formative assessments occur formally and informally often **throughout** the unit of study and occur **prior** to a summative assessment.
- Formative assessments include homework, exit tickets, discussions, reflections, class activities and quizzes.
- Formative assessment is mastery-based. Students who do not show mastery on a formative assessment will be required to continue working on that skill and then complete another formative assessment before continuing to the next topic.

Summative Assessment

- Summative assessments are tools used to measure students' level of achievement as measured by the specific criterion/rubrics at the **end** of a unit or taught concept.
- The summative assessment measures a student's **knowledge, skills, understanding and disposition** related to the standards being taught.
- Rubrics are provided to students and explained for performance assessments of skills.
- Summative assessments include unit tests, performance assessments and projects.

Retake Policies

- Retakes can be earned for summative assessments.





- In order to earn a retake, the student must meet with the teacher to request a retake within 3 days of receiving their graded assessment.
- The teacher will confer with the student and the student will then be expected to complete corrections to the assessment in order to earn a retake. The [corrections procedure is available here.](#)
- Students have one week to complete corrections.
- Students who successfully complete corrections will have their retake scheduled by the teacher.

Electronic Response

- Instructor reserves the right to respond to emails within 48 hours of receipt. Students should not expect an immediate response.
- However, most responses will be within 24 hours of receipt. Instructor also reserves the right to respond or not respond to emails during weekends, holiday breaks, and semester breaks.
- You should assume that emails and phone calls will NOT be returned during weekends, holiday breaks, and semester breaks.

Grade Calculation

- The APIS middle school rubric will be used to assess student summative work.
- The student's grade will be based on the best fit of their summative assessments, as well as summative measures of problem solving completed in class.

New Pacific Century Skills & Dispositions

You will receive an NPC Skills & Dispositions score in this class for four different areas throughout the year. Although the scores do not contribute to your class grade at this time, they will be reported in the report card comments. There are no "retakes" for the NPC Skills & Dispositions Grades. A full school overview of NPC Skills and Dispositions is found here: [K-12 NPC Skills Learning Target](#)

		Consistently Evidenced A+ to A	Regularly Evidenced A- to B	Occasionally Evidenced B- to C	Rarely Evidenced C- and below
Q1	Communication	I can listen to others, keeping in mind their different perspectives.			
Q2	Collaboration	I can participate in group activities, making sure all voices are heard and appreciated. I can give and receive feedback in order to improve my work and that of others.			
Q3	Critical Thinking	I can ask questions to find new information in order to solve problems.			





Q4	Citizenship	I can work effectively and meet expectations. I can organize my work habits in order to meet an assignment deadline.
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Signing the "APIS Student Handbook" form also indicates you have read this syllabus and understand the expectations and responsibilities relevant to the course.

