



Sixth Grade Math Syllabus

Team Katahdin ~ Pelletier ~2020-21 ~ Qtr 3

Each trimester students will complete a wide array of mathematics units. Each unit explains the mathematical principles and reasoning which is covered in the student textbook. Students will be using a variety of resources to meet the daily learning targets including: Prentice Hall (Primary Text), Connected Mathematics, Ready Common Core, Khan Academy, DREAMBOX, etc. We will start the year by pre-testing standards to be taught and will culminate with a post test of standards at the end of each unit.

Common Core Standards:

Quarter 3 Focus:

Expressions and Equations (6.EE.5 6.EE.6, 6.EE.7, 6.EE.8, 6.EE.9)

- 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.

Positive and Negative numbers(6.NS.5, 6.NS.6,6.NS.7, 6.NS.8)

- Explain how positive and negative numbers are used together to describe quantities having opposite directions or values
- Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
- Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line.
- Recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
- Recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
- Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

Ratios and Proportional Relationships (6.RP .1, 6.RP .2, 6.RP .3) COMPLETED

6.RP.1 Use ratio language to describe a ratio relationship between two quantities. Understand ratio concepts and use ratio reasoning to solve problems.

6.RP.2 Use rate language in the context of a ratio relationship. Find the unit rate.

6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems

a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables. Plot the pairs of values on the coordinate plane.

Use tables to compare ratios.

b. Solve unit rate problems including those involving unit pricing and constant speed. Find a percent of a quantity as a rate per 100.

c. Solve problems involving finding the whole, given a part and the percent. d. Use ratio reasoning to convert measurement units. Manipulate and transform units appropriately when multiplying or dividing quantities.

• Unit 2 • The Number System (6.NS.1, 6.NS.2, 6.NS.3, 6.NS.4) COMPLETED

◦ Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

◦ Multiply and divide multi-digit numbers and find common factors and multiples.

◦ Apply and extend previous understandings of numbers to the system of rational numbers.

Geometry(6.G.1, 6.G.2, 6.G.3, 6.G.4) COMING SOON ~ Quarter 4

◦Solve real-world and mathematical problems involving area, surface area, and volume.

Statistics and Probability (Integrated)(6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5) COMING SOON ~ Quarter 4

- Develop understanding of statistical variability.
- Summarize and describe distributions.Summarize and describe distributions.

Mathematical Practices

- 1. Make sense of problems and persevere in solving them.**
- 2. Reason abstractly and quantitatively.**
- 3. Construct viable arguments and 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.**

Class Structure and Grading

Class work/Homework 40%

Assessment 30%

Khan Academy/DreamBox 30%

Work Expectations:

It is exceptionally important that students use their daily class-time wisely. They should come to class with all necessary materials. Students are expected to turn work in on the day it is due. If a student can not meet a due date, the student should talk to the teacher before the work is due. Late work will only be accepted until the next color day(Ex: Assignment given out on Monday/ Due on Thursday- Will be accepted the following Monday(with the best score being an 80) If not passed in on Monday this will result in a grade of “50”/NC(it will be coded with an (!) in Powerschool . If a student misses school he or she should seek out the missed work as soon as they return to school and talk to the teacher about when the missed work will be due. Students will have assigned classwork/ homework from the teacher and will also have Khan Academy & Dreambox expectations/goals which are to be completed weekly. If Remote Learning occurs- all assignment/and grading expectations continue as set up in class.