



# Sixth Grade Math Syllabus

**Team Katahdin ~ Pelletier ~ 2019-20 ~ Trimester 1**

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, NECAP Released items, 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:

### Trimester 1 Focus:

- **Unit 1: Ratios and Proportional Relationships**  
**(6.RP .1, 6.RP .2, 6.RP .3)**

*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)**

◦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.

• **Statistics and Probability (Integrated)(6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5)**

◦Develop understanding of statistical variability.

◦Summarize and describe distributions.Summarize and describe distributions.

• **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.

• **Geometry(6.G.1, 6.G.2, 6.G.3, 6.G.4)**

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

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## 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 40%**

**Notebook/Vocabulary 10%**

**Khan Academy 10%**

### **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. Unexcused, late work will not be accepted and will result in a grade of “50”/NC(it will be code 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 expectations/goals which are to be completed weekly.