

Welcome to Advanced 6th Grade Math!

Course Syllabus

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Welcome!

Greetings 6th grade mathematicians! Welcome to the new school year. I hope you had a wonderful summer.

This year, math class will be filled with many fun and exciting challenges and opportunities to grow. I encourage each of you to embrace challenges, share ideas, listen to peers, and take risks. Your participation and open mind will be essential to creating a productive math community. I look forward to a great year!

Course Goals

- *Students will identify patterns and relationships to transfer their prior knowledge to new and challenging problem scenarios.*
- *Students will clearly demonstrate understanding through written and verbal communication. Students will evaluate and defend claims made by themselves and others by providing evidence and making connections to prior learning.*
- *Students will investigate and draw on prior knowledge to construct new models when presented with complex problems. By doing so, students will develop greater flexibility in the application of their mathematical knowledge.*

Course Description

I teach math using a concept-based approach. With this approach, you are not expected to focus solely on methodology – “how to”. Instead, you will be prompted to give greater attention to developing understanding of the reasons that methodologies are applicable. The goal of this instructional approach is to foster math literacy. Math literate students understand that all concepts presented in math are interrelated.

The course textbook is MathMatters 1 (Glencoe Mathematics). I do not teach from the textbook, but it may provide a useful reference at home. Enrichment opportunities will be available in class and online daily. Problem solving methods will be explored throughout the course and computation will be reviewed and reinforced regularly. Our units of study are: 0) classroom culture 1) data, statistics, and graphical representations, 2) two-dimensional geometry and measurement, 3) factors and multiples, 4) algebraic reasoning, 5) three-dimensional geometry and measurement, 6) proportional reasoning, 7) inequalities, functions, and linear equations 8) probability and combinatorics.

Classroom Culture

- Everyone is a mathematician.
- Mathematicians observe, question, discover, value the process, **and make mistakes.**
- A wrong answer isn't a wrong answer; it's the discovery of a process that didn't work.
- Ability increases as we apply persistent effort.
- Answers are not a product, but merely part of the process; mathematical thinking is the product.

Materials

Each day you should bring a pencil, your math binder, and your calculator to class. Show up to class each day **on time** with these materials and your completed assignment and you will be ready to go. On the supply list I have recommended the TI-30X IIS for use in class and at home to check your work or to do computation for certain specified assignments.

Assignments and Grading

Most nights, Monday through Thursday (and occasionally, but rarely, Friday), you will receive a printed learning opportunity (other classes call this homework). I do not assign problems from your Math textbook (more on this below). Most weeks, you will also receive a weekly computation assignment. It is not a weekly assignment because it is overly long. My intent is to provide ongoing practice with every type of computation, while giving you some flexibility in completing the assignment according to your own preferences, and with consideration for your other activities and responsibilities.

Help videos will be posted on the Math blog of ColbyMath.com for nearly every learning opportunity. Videos to aid with reviewing for tests will also be posted on the Math blog. Students are expected to view these videos as part of completing each learning opportunity and preparing for tests. There is also a computation page on ColbyMath.com with instructional videos for every type of computation along with practice and answer keys.

I do not assign problems from your Math textbook. For this reason, the textbooks are optional. If you elect to receive one, it should be brought home and used as an additional resource. Any time you are looking for extra practice, you may work on any odd numbered problems from the textbook. The answers to these problems are given in the back of the textbook, so you may check your work. You will never need to carry your Math textbook to school or class. You will keep it at home and return it at the end of the school year.

Your grade in 6th grade Math will be composed of $\frac{2}{3}$ tests, and $\frac{1}{3}$ learning opportunity assignments. Letter grades are determined by the grade scale shown. I do not give quizzes. Quizzes serve the purpose of providing feedback to the student and teacher, at a point in time prior to the test, to assess current understanding of the concepts being studied. Because I take the time to look closely at every one of your assignments, and provide detailed feedback to you on each one, we will both know, at **all** times, your current understanding of the concepts. The sixth-grade theme is “Becoming a Student”. It is your responsibility as a student to take advantage of the many resources I provide you to improve your understanding once we have identified a problem. This may be accomplished by paying close attention to the feedback I provide, asking questions when that feedback is in any way unclear to you, completing and submitting corrections to all missed problems on any assignment or test, making use of the instructional videos I provide, attempting extra practice from your textbook, or attending tutoring after school in the MS courtyard.

A	92.5 - 100
A-	89.5 - 92.49
B+	86.5 - 89.49
B	82.5 - 86.49
B-	79.5 - 82.49
C+	76.5 - 79.49
C	72.5 - 76.49
C-	69.5 - 72.49
D+	66.5 - 69.49
D	62.5 - 66.49
D-	59.5 - 62.49
F	0 - 59.49

Growth Mindset

I help students adopt a growth mindset. Missing a problem on any assignment or test does not mean you “don’t get it”, it just means you “don’t get it **yet**”. Two of the nine CSN core values are **responsibility** and **perseverance**. I will provide you the detailed feedback you need on every single assignment and test. You must take ownership of your learning by completing and submitting corrections for all missed problems on any assignment or test. I will accept corrections at any time during each Quarter. A small but significant increase will be applied to your original grade for properly completing corrections to all problems missed.

Please keep this syllabus at home as a reference. I am excited that the school year has begun. Our hard work will result in significant growth in your mathematical confidence and capability. I am honored to be your teacher this year!

Thank you,



Mr. Colby