



**Course Name: Grade 6 Honors Math**  
**School Year: 2021-2022**

### **Course Purpose and Relevance:**

The **primary content focal areas** in Grade 6 are number and operations; proportionality; expressions, equations, and relationships; and measurement and data.

The **process standards** weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

### **Overview of Student Outcomes:**

- The student uses concepts, algorithms, and properties of rational numbers to explore mathematical relationships and to describe increasingly complex situations.
- The student uses concepts of proportionality to explore, develop, and communicate mathematical relationships.
- The student uses algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other.
- The student connect verbal, numeric, graphic, and symbolic representations of relationships, including equations and inequalities.
- The student uses geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems.
- The student uses appropriate statistics representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations.

### **Differentiation of Grade 6 Honors Mathematics**

The curriculum for Grade 6 PreAP math includes all of the Grade 6 TEKS and some Grade 7 TEKS. The Grade 6 PreAP math curriculum is a compacted and accelerated curriculum, as well as the Grade 7 PreAP curriculum which includes Grade 8 TEKS.

Student expectations from Grade 7 TEKS taught in the PreAP Grade 6 curriculum include: add, subtract, multiply, and divide rational numbers fluently; apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers; represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including  $d = rt$ ; determine the constant of proportionality ( $k = y/x$ ) within mathematical and real-world problems; calculate unit rates from rates in mathematical and real-world problems; extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers; write, solve, and represent solutions to one variable, two-step equations and inequalities for mathematical and real world situations.



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**Available Support for Student Learning:**

Refer to the teacher's Course Syllabus for resources and course specific opportunities. The adopted textbook for Grade 6 Math is Houghton Mifflin Texas Go Math!. The Grade 7 Texas Go Math! textbook is also used in Grade 6 PreAP math. Student textbook and/or digital version are available through the CCISD Student Portal.

**Links to Course TEKS and RESOURCES FOR PARENTS on TEA website:**

[Texas Knowledge and Skills for Grade 6 Mathematics](#)

[Texas Knowledge and Skills for Grade 7 Mathematics](#)

[Resources for Parents](#)

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**First Grading Period**

Unit 1: Integers and Rational Numbers

Unit 2: Rational Numbers Operations with Fluency

Unit 3: Integer Operations

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**Second Grading Period**

Unit 4: Proportionality: Ratios and Rates

Unit 5: Percent

Semester Review and District Exam

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**Third Grading Period**

Unit 6: Expressions

Unit 7: Equations and Inequalities

Unit 8: Additive and Multiplicative Relationships

Unit 9: Two Variable Relationships

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**Fourth Grading Period**

Unit 10: Relationships in Geometry

Unit 11: Measurement and Data

STAAR Review and Grade 6 STAAR Test

Unit 12: Personal Financial Literacy

Unit 13: Bridge to Honors 7<sup>th</sup> grade

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