

## 6<sup>th</sup> Grade Math Parent Guide

### Unit 1 Concepts:

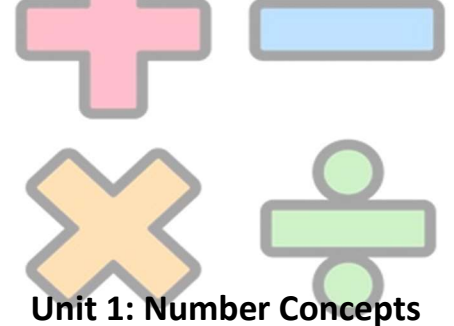
Students will broaden their understanding of numbers, number systems, and relationships between numbers. They will perform the four basic operations on whole number, fractions, and decimals.

### Learning Goals:

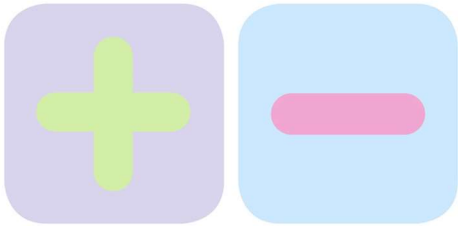
Students will be able to visualize and estimate numbers to aid in problem solving. They will order whole numbers, decimals, and fractions. Students will be able to multiply and divide positive rational numbers fluently and make connections between math concepts and when to apply these concepts in real-world examples.

**Why?** – Numbers are used in our day to day lives and students must be comfortable and flexible in their use of numbers to manage situations that arise in daily living.

### 1<sup>st</sup> Six Weeks



### 2<sup>nd</sup> Six Weeks



### Unit 2: Integers

### Unit 2 Concepts:

Students will add, subtract, multiply & divide positive and negative numbers. They will learn to graph both positive and negative numbers on a number line and on a coordinate plane.

### Learning Goals:

In this unit students will use models to represent operations with integers, add/subtract/multiply/divide integers fluently, graph points using ordered pairs of rational number and make connections between math concepts and how to apply them in real life.

**Why?** – Students will understand the use of positive and negative numbers and when they are useful such as in weight loss or gain, temperature rise and fall, and locations on the globe above or below sea level.

### Unit 3 Concepts:

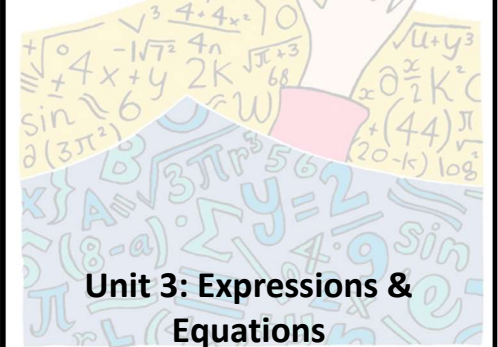
Students will use variable to write expression, equations, and inequalities. They will also solve and graph equations and inequalities on number lines.

### Learning Goals:

Students will learn to represent a situation using verbal descriptions, tables, graphs, and equations. They will generate equivalent expressions using order of operations, and properties of operations. They will make connections between math concepts and how to apply these concepts to real-world examples.

**Why?** – People use expressions and equations every day without even knowing it. Throughout this unit students will think critically to represent mathematical situations in multiple ways.

### 3<sup>rd</sup> Six Weeks



### Unit 3: Expressions & Equations

#### Unit 4/5 Concepts:

Students will explore basic banking tasks, credit, paying for college and annual salary calculations. They will work with ratios including rates and percent, and proportions.

#### Learning Goals:

Students will compare and contrast debit and credit cards, they will learn to balance a check register and describe ways of paying for college. Students will convert units within measuring systems and solve problems involving part to whole relationships.

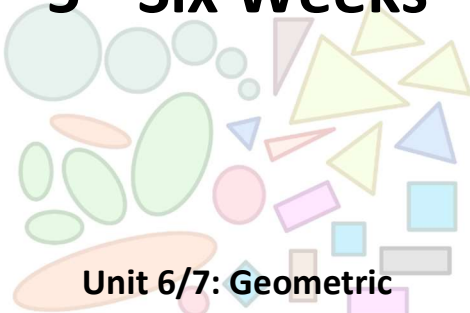
**Why?** – Financial literacy is a necessity for students to learn. Students will use equivalent forms of fractions, decimals, and percent when they are shopping, cooking baking and going out to eat. What is learned in this unit will help students succeed in their adult lives.

## 4<sup>th</sup> Six Weeks

Decimals, 0.7  
Fractions,   
Percentages %

### Unit 4/5: Financial Literacy & Ratios

## 5<sup>th</sup> Six Weeks



### Unit 6/7: Geometric Concepts & Data Analysis

#### Unit 6/7 Concepts:

In these units, students will explore properties of polygons with an emphasis on triangles and quadrilaterals. They will solve problems involving area and volume. Additionally, students will collect summarize and model real-world data using measures of central tendency and varied graphical displays.

#### Learning Goals:

Classifying triangles and quadrilaterals will be a focus of this unit. Students will learn to find missing angle measures, and the area of composite figures including those on the coordinate plane. They will identify categorical and numerical data and represent it using graphical displays noting the shape, center, and variability.

**Why?** – Geometry is one of the most visible signs of math in our daily lives. Likewise, statistics are to students regularly. In this unit students will learn to be more critical of the data presented to them.

#### Unit 8/9 Concepts:

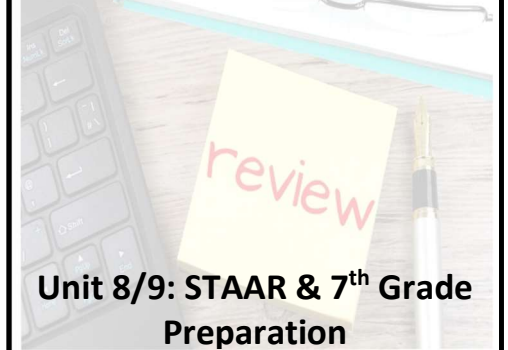
Students will review all concepts learned this year in preparation for STAAR. They will also work on projects and cumulative activities that will prepare them for math at the next level.

#### Learning Goals:

Students will master content learned this year over number concepts, integer, equations and expressions, financial literacy, ratios, Geometry, and data analysis. They will build on that knowledge to prepare for the next grade by creating projects and completing activities that encompass all these skills.

**Why?** – Students will be required to take the state assessment for math and this six weeks will help students review and prepare. At the completion of STAAR students will review foundational concepts they will need in 7<sup>th</sup> grade math classes.

## 6<sup>th</sup> Six Weeks



### Unit 8/9: STAAR & 7<sup>th</sup> Grade Preparation

**Questions?** Please contact your 6<sup>th</sup> Grade math teacher. **Additional Support:** We recommend Khan Academy and VarsityTutors.com and remember campus tutoring is also available.