

# 7<sup>th</sup> Grade Math

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

### Rational Numbers (18 days)

- Solve problems using addition, subtraction, multiplication and division of rational numbers
- Describe relationships between sets of rational numbers
- Calculate sales tax and income tax for earned wages
- Create an asset and liabilities record and a net worth statement

### Proportional Relationships (17 days)

- Represent constant rates of change given table, graph and algebraic representations
- Solve problems involving ratios, rates and percent
- Calculate unit rates from rates
- Determine constant of proportionality
- Convert between measurement systems using proportions and unit rates
- Identify components of a personal budget, including income, college savings, retirement and emergencies.
- Graph solutions of equations/inequalities on number lines.

CBA 1

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

### Proportionality and Percent (14 days)

- Add, subtract, multiply and divide rational numbers
- Calculate simple interest
- Solve problems involving ratios, rates and percent.
- Analyze and compare sales, rebates and coupons.

### Proportionality and Geometry (10 days)

- Solve problems involving similar shape and scale drawings.
- Describe critical attributes of similarity.

### Proportionality and Probability (15 days)

- Solve problems using predictions from simple experiments
- Determine experimental and theoretical probability using data and sample spaces
- Represent sample spaces using lists and tree diagrams
- Make predictions and determine solutions using experimental data for simple and compound events
- Make predictions and determine solutions using theoretical probability for simple and compound events
- Find probability of a simple event and its complement

CBA 2

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

### Multiple Relationships of Linear Relationships (9 days)

- Represent constant rates of change given table, graph, algebraic representation
- Represent linear relationships using verbal description, table, graph and equations
- Determine the constant of proportionality from math and real-world problems

### Equations and Inequalities (15 days)

- Model and solve one-variable two-step equations and inequalities
- Write one-variable two-step equations and inequalities to represent problems
- Represent solutions on number lines
- Given an equation or inequality, write a real-world problem
- Determine if a given value makes an equation true.

### Develop Geometry through Algebra (23 days)

- Determine the area of composite figures without circles
- Write and solve equations using geometry concepts
- Solve problems involving surface area (lateral and total) using a shape's net.
- Solve problems involving volume

CBA 3

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

### Develop Geometry through Algebra (5 days)

- Circumference and area of circles
- Sum of angles in a triangle and angle relationships
- Relationship between volume of a prism and pyramid with the same base. (Rectangle and Triangle)
- Describe pi
- Determine area of composite figures with circles

### Statistics (10 days)

- Measures of Central Tendency
- Box plots including shape, symmetry, and spread
- Interquartile Range
- Comparison/Analysis of 2 box plots
- Dot plots including shape, symmetry, center and spread
- Comparison of dot plots
- Bar graphs
- Circle graphs
- Random sampling including populations, informal and comparative inferences

Pre-STAAR Benchmark April 17

### STAAR Review (13 days)

- Review targeted TEKS from assessed curriculum.
- Utilize data from benchmark to identify weaknesses
- Close gaps

STAAR EXAM on May 14

### Abbreviated Bridge to 8<sup>th</sup> grade

- Targeted teaching to prepare students for 8<sup>th</sup> grade