

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

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

#### Intro to Rational Numbers (15 days)

- Order a set of rational numbers (fractions/decimals)
- Generate equivalent forms of fractions, decimals and percents
- Recognize that division is equivalent to fraction notation  $a/b = a \div b$
- Classify whole numbers, integers, and rational numbers using visuals
- Identify a number, its opposite and its absolute value
- Locate, compare and order integers/rational numbers on a number line
- Represent ratios and percents with models, fractions and decimals
- Represent benchmark fractions using 10 by 10, strip diagrams, number lines and numbers
- Use equivalent fractions, decimals and percents to show equal parts of the same whole

#### Rational number operations (17 days)

- Multiply and divide positive rational numbers fluently
- Recognize that dividing by a number and multiplying by reciprocal are identical operations.
- Determine whether a quantity decreases or increases when multiplied by fraction
- Compare features and costs of checking account, debit card
- Distinguish between credit and debit cards

CBA 1

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

#### Operations with Integers (12 days)

- Add, subtract, multiply and divide integers fluently
- Represent integer operations with concrete models and standard algorithms

#### Equivalent expressions and graphing (9 days)

- Generate equivalent numerical expressions using GEMDAS including prime factorization.
- Generate equivalent expressions using properties such as inverse, identity, commutative and associative.
- Graph points in all four quadrants

#### Ratios, Rates, Proportions (13 days)

- Solve prediction and comparison using ratios and rates.
- Solve problems where you find the whole given a part and percent.
- Solve problems where you find the percent given the whole and the part.
- Solve problems where you find the part given the whole and percent.
- Use ratios to define two quantities describing the same attribute
- Use rates to compare by division two quantities having different attributes.
- Use scale factors, tables, graphs and proportions to represent math and real world problems.

CBA 2

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

#### Expressions, equations and inequalities with one variable (19 days)

- Generate equivalent expressions using the distributive property
- Model and solve one-variable one-step equations
- Write one-variable, one-step equations and inequalities to represent constraints or conditions
- Represent solutions of equations and inequalities on number lines
- Write a real-world problem given an equation or inequality
- Describe the difference between an equation and an expression
- Determine if two expressions are equivalent using models.
- Determine if a value makes an equation or inequality true

#### Multiple Representations (8 days)

- Represent a situation using verbal description, table, graph and equation in form  $y = kx$  or  $y = x + b$
- Identify independent and dependent quantities
- Write an equation from a table with the notion of independent and dependent quantities.
- Compare two rules verbally, numerically, graphically and symbolically
- Identify the difference between an additive and multiplicative relationship

#### Geometry and Measurement (17 days)

- Conversions within a measurement system
- Area of rectangles, parallelograms, trapezoids, triangles, Volume of prisms
- PFL-positive credit history, credit report information and retention length

CBA 3

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

#### Geometry and Measurement (7 days) continued

- Write equations that represent problems related to area of rectangles, parallelograms, trapezoids, triangles and volume of prisms
- Model area formulas by decomposing and rearranging parts of these shapes
- Model and solve equations and inequalities that represent problems including geometric concepts
- Sum of angles in triangle, relationship between lengths of sides and measures of angles in a triangle and determine when 3 lengths form a triangle

#### Data Analysis (12 days)

- Measures of Central Tendency including mean, median, mode and range.
- Measures of Spread- range and IQR
- Data collection-dot plot, box plot
- Data Collection-dot plot, box plot, stem and leaf plot, histogram, percent bar graph
- Compare shape, center and spread of data

Pre-STAAR Benchmark is April 10

#### STAAR BLITZ (13 days)

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

STAAR EXAM is May 14

#### Bridge to 7<sup>th</sup> grade (9 days)

- Classification Real Numbers
- Integer Operations
- Fraction, Decimal, Percent Conversions