8th Grade Math

1st Nine Weeks

Number and Operations (18 days)

- Order a set of real numbers
- Calculate and compare simple and compound interest.
- Describe relationship between sets of real numbers
- Convert between standard and scientific notation
- Approximate the value of an irrational number

Algebraic Equations (10 days)

- Model equations with algebra tiles.
- Solve equations and inequalities with variables on both sides
- Write one-variable equations or inequalities with variables on both sides
- Write a corresponding real-world problem when given an equation or inequality

Proportional and Direct Variation (5 days)

- Represent linear proportional situations with tables, graphs and equations
- Solve problems involving direct variation

CBA 1

2nd Nine Weeks

Slope (8 days)

- Use similar right triangles to develop an understanding of slope
- Slope formula
- Use data from a table or graph to determine slope/rate of change
- Graph proportional relationships using unit rate as slope

Non-Proportional relationships (19 days)

- Identify functions using ordered pairs, tables, mappings and graphs
- Write an equation to model a linear relationship using verbal description, table and graph
- Use data from a table or graph to determine slope/rate of change and y intercept
- Distinguish between proportional and non-proportional situations
- Represent linear non-proportional situations with tables, graphs and equations.
- Identify and verify solutions to systems of equations graphically.

Two dimensional figures (15 days)

- Use the Pythagorean theorem to solve problems
- Determine distance on coordinate plane
- Angles created when 2 parallel lines are cut by transversal
- Ratio of corresponding sides of similar shapes are proportional
- Model the effect on linear and area measurements

CBA 2

3rd Nine Weeks

Transformations (8 days)

- Scale factors applied to figures, use an algebraic expression
- Translations, reflections and rotations
- Attributes of a shape and its dilation
- Properties of orientation and congruence of rotation, reflection, translation and dilation
- Differentiate between which transformations preserve congruence and which do not.

Measurement (10 days)

- Volume of cylinder
- Volume of prism
- Volume of cone
- Volume of sphere
- Surface Area of prisms and cylinders

Data Analysis (12 days)

- Compare data that do form a linear relationship with those that don't.
- Construct a scatterplot and classify data as linear, non-linear and no association
- Determine mean absolute deviation
- Use a trend line to approximate relationship in a scatterplot

Personal Financial Literacy (10 days)

- Solve real-world problems comparing interest rate and loan length
- Explain how small amounts of money invested regularly grow over time
- Estimate the cost of a 2-year and 4-year college education and devise a periodic savings plan

Pre-STAAR BENCHMARK is Feb. 20

4th Nine Weeks

STAAR Review (15 days)

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

STAAR EXAM is April 10

Bridge to Algebra 1

- Targeted teaching to prepare students for Algebra 1
- Review Solving Equations and Inequalities by hand with variables on both sides
- Continue practicing distributive property when solving equations
- Review graphing lines by hand from form y=mx and y= mx+b
- Graph inequalities by hand from form y>mx and y> mx+b