MATH 6 Course Syllabus Kerrie Barnard

First Trimester

Introduction & Representation (4 weeks) Aug-Sept

Introduction to College Preparatory Mathematics. Students will visualize information in addition to investigating perimeter and area relationships. Describing and extending patters while representing data with multiple representations and comparisons. Making sense of logic problems, looking at the characteristics of numbers, factors and factor pairs.

Assessments: chapter 1 test

Arithmetic Strategies & Area (3 weeks) Sept-Oct

Students will compose statistical graphs using dot & bar graphs, histograms & stem-and-leaf plots. Exploring area and perimeter as well as using rectangles to multiply. Introductions to common factors and the distributive property.

Assessment: chapter 2 test

Portions & Integers (3 weeks) Oct-Nov

Continue to work with integers, expressions and terms as well as investigate the process of using the order of operations (subtraction & division) with the real number system including negative numbers, absolute value and ratios. Coordinate graph length is discovered.

Assessments: Quiz, chapter 3 test and benchmark

Second Trimester

Variables & Ratios (4 weeks) Nov-Dec

Introductions to variables, writing equivalent expressions and using variables to generalize patterns. Ratios in enlarging two-dimensional shapes and other situations investigated.

Assessments: Quiz and chapter 4 test

Multiplying Fractions & Area (5 weeks) Jan - Feb

Fractions, decimals and areas are made sense of within the mathematical number sense category. Area of multiple shapes investigated by rearranging areas of those shapes such as parallelograms, triangles, and trapezoids.

Assessments: Quiz and chapter 5 test & Checkpoint/Midterm

Dividing & Building Expressions (4 weeks) Feb - March

Students solve problems involving percent's and work with fractions as division problems. Order of operations is connected to combining like terms and evaluating algebraic expressions. Area of rectangular shapes investigated as well as naming perimeters of algebra tiles.

Assessments: Quiz, chapter 6 test and benchmark

Third Trimester

Rates & Operations (3 weeks) March

Students write algebraic linear equations and inequalities and equations. Students compare rates with tables and graphs. Analyze strategies for division with fractions and decimals. Notice fraction division as ratios as well as work with mathematical properties such as inverse operations, distributive property and utilize expressions vocabulary.

Assessments: Quiz and chapter 7 test

Statistics & Multiple Equations (3 weeks) April

Comparisons of distributions and measurement precision is introduced. Students see the differences between representative and random samples of data, learn the central tendency, and analyze statistical data such mean versus median. Continue to write multiplication equations. Introduced to distance rate and time along with unit conversions.

Assessments: Quiz and chapter 8 test

Volumes & Percents (4 weeks) April - May

Percent increase, decrease and simple interest problems are introduced. Solving proportions by finding the values of the missing parts. Surface area and volume are also introduced with cross sections of shapes as well as rectangular and rectangular prisms. The use of applying ratios to shapes will lead into students' next course and proportional relationships.

Assessments: Quiz and chapter 9 test

<u>Puzzle Investigator Problem Projects (2 weeks)</u> May Students formalize concepts of functions and relations.

Assessment: Presentations. STAR review & STAR testing

<u>Math 7 Preview & Review (1 week)</u> June Connections of the Algebraic & Geometric applications to come in 7th grade.

Assessment: Math7 Readiness Test