Middle School Math

6th Grade Math

RATIOS & PROPORTIONAL RELATIONSHIPS
- Understand ratio concepts and use ratio reasoning to solve problems.

THE NUMBER SYSTEM
- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- Multiply and divide multi-digit numbers and find common factors and multiples.
- Apply and extend previous understandings of numbers to the system of rational numbers.

EXPRESSIONS & EQUATIONS
- Apply and extend previous understandings of arithmetic to algebraic expressions.
- Reason about and solve one-variable equations and inequalities.
- Represent and analyze quantitative relationships between dependent and independent variables.

GEOMETRY
- Solve real-world and mathematical problems involving area, surface area, and volume.

STATISTICS & PROBABILITY
- Develop understanding of statistical variability.
- Summarize and describe distributions.

7th Grade Math

RATIOS & PROPORTIONAL RELATIONSHIPS
- Analyze proportional relationships and use them to solve real-world and mathematical problems.

THE NUMBER SYSTEM
- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

EXPRESSIONS & EQUATIONS
- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

GEOMETRY
- Draw, construct and describe geometrical figures and describe the relationships between them.
- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

STATISTICS & PROBABILITY
- Use random sampling to draw inferences about a population.
- Draw informal comparative inferences about two populations.
- Investigate chance processes and develop, use, and evaluate probability models.

8th Grade Math

THE NUMBER SYSTEM
- Know that there are numbers that are not rational and approximate them by rational numbers.

EXPRESSIONS & EQUATIONS
- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

FUNCTIONS
- Define, evaluate, and compare functions.
- Use functions to model relationships between quantities.

GEOMETRY
- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply the Pythagorean Theorem.
- Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

STATISTICS AND PROBABILITY
- Investigate patterns of association in bivariate data.

St. Mary's Catholic School prepares students to be leaders in worship, work, and the world through Roman Catholic teachings, rigorous academics, and service to others.