# St. Joseph School, Baltic, CT

# A summary of what is taught in Middle school Math Classes.

### Grade 5

Write and interpret numerical expressions. Analyze patterns and relationships. Understand the place value system. Perform operations with multi-digit whole numbers and with decimals to hundredths. Use equivalent fractions as a strategy to add and subtract fractions. Apply and extend previous understandings of multiplications and division to multiply and divide fractions. Convert like measurement units within a given measurement system. Represent and interpret data. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

## Grade 6

Use ratios to solve problems. Perform operations with multi-digit numbers and find common factors and multiples. Divide fractions by fractions. Extend understanding of numbers to rational number system. Perform arithmetic with algebraic expressions. Solve one-variable equations and inequalities. Analyze relationships between dependent and independent variables.

ISolve real-world and mathematical problems involving area, surface area, and volume. Develop understanding of statistical variability and summarize and describe distributions.

#### Grade 7

Use proportional relationships to solve problems. Perform operations with rational numbers. Write equivalent expressions. Use numerical and algebraic expressions, equations, and inequalities to solve problems. Draw, construct, and describe geometrical figures and describe the relationships between them. Solve problems involving angel measure, area, surface area, and volume. Make inferences about a population, compare two populations, and use probability models.

# Grade 8 B

Perform operations with rational numbers. Write equivalent expressions. Use numerical and algebraic expressions, equations, and inequalities to solve problems. Draw, construct, and describe geometrical figures and describe the relationships between them. Solve problems involving angle measure, area, surface area, and volume. Make inferences about a population, compare two populations, and use probability models. Extend understanding of numbers to the real number system. Understand the connections between proportional relationships, lines, and linear equations.

#### Grade 8 Algebra

Extend understanding of numbers to the real number system. Understand the connections between proportional relationships, lines, and linear equations. Solve linear equations and systems of linear equations. Work with radicals and integer exponents. Define, evaluate, and compare functions, and use functions to model relationships between quantities. Understand congruence and similarity. Use the Pythagorean Theorem. Solve Problems involving volumes of cylinders, cones, and spheres. Investigate patterns of association in bivariate data.