

Eighth Grade Math students at St. Patrick’s school we will be covering the area of Algebra. The mastery of all basic skills will be required in order to be successful in this course. Their will be a major review of 7th grade concepts in the first semester with some algebraic touches added for strength. Student will continue in the second semester by accomplishing the following concepts: multi-step equations, formulas, functions, compound inequalities, variations, exponential functions, hyperboles, etc. These concepts will better enable the St. Patrick’s student to be in an excellent position to bypass Algebra in high school. In addition, students will comprehend all material at the highest level and will have all basic math facts completely mastered.

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
8.1 Algebra	Students will master concepts of variables, exponents, and OoO.	Text Charts Notes	Chapter Test Quizzes Homework
8.2 Algebra	Students will begin to understand the irrational part of real numbers, while increasing knowledge of rationals a. +, -, x, dividing, and identifying	Text Notes Games	Chapter Test Quizzes Homework
8.3 Problem Solving	Students will master the mathematical properties a. Identity, distributive, associative, cumulative	Text Notes Flashcards	Chapter Test Quizzes Homework
8.4 Data Analysis And Probability	Students will master coordinate planes a. trend lines, scatter plots, prediction	Text Notes Real-life applications	Chapter Test Quizzes Homework Projects
8.5 Algebra	Students will master algebraic equations a. +, -, x, dividing, multiple variable, multi-step	Text Notes	Chapter Test Quizzes Homework
8.6 Algebra	Students will gain an understanding of formulas with multiple variables a. substituting formulas into formulas to solve for variables	Text Notes Group work Worksheets	Chapter Test Quizzes Homework

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
8.7 Data Analysis And Probability	Students will maintain knowledge of inequalities <ul style="list-style-type: none"> a. graphing b. +, -, x, dividing c. compound, absolute value, linear, systems of inequalities 	Text Graphing	Chapter Test Quizzes Homework
8.8 Problem Solving	Students will maintain & advance knowledge of ratios, rates, and proportions <ul style="list-style-type: none"> a. real-life application, percents 	Text Notes Worksheets Real-life applications (stories)	Chapter Test Quizzes Homework Projects
8.9 Data Analysis And Probability	Students will enhance their understanding of graphs and functions <ul style="list-style-type: none"> a. relation, function b. function rules c. direct variation and patterns 	Text Graphing Models Graphing games	Chapter Test Quizzes Homework Projects
8.10 Data Analysis and Probability	Students will fully develop their skills in the area of linear equations and their graphs <ul style="list-style-type: none"> a. determine slope, rate of change, point-slope, slope-intercept, graphing solutions 	Text Graphing Models Graphing games	Chapter Test Quizzes Homework
8.11 Algebra	Students will further their understanding of exponents and exponential functions <ul style="list-style-type: none"> a. properties, zero, negative b. functionality and sequence 	Text Notes OEO charts	Chapter Test Quizzes Homework
8.12 Algebra	Students will begin to understand polynomials and quadratic equations	Text Notes Math Games	Chapter Test Quizzes Homework

	<u>Standards/Goals</u>	<u>Instructional Tools</u>	<u>Assessment Tools</u>
8.13 Numbers and Operations	Students will master their basic facts and compute at 90% efficiency	Timed Tests Practice Sheets	Timed Tests
8.14 Algebra, Measurement and Geometry	Students will further knowledge of geometric shapes, angles, and measurements	Manipulatives Stained Glass Project Text	Chapter Test Quizzes Observation Homework Art projects