7th Grade Advanced/8th Grade Regular

CURRICULUM MAP (MATH IN FOCUS, COURSE 3/ALGEBRA I)

MAJOR UNITS/TOPICS	ASSESSMENTS/PROJECTS
Unit 1: Scientific Notation • Understanding Scientific Notation • Adding and Subtracting in Scientific Notation	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.
Unit 2: Algebraic Linear Equations • Solving Linear Equations with One Variable • Identifying the Number of Solutions to a Linear Equation • Understanding Linear Equations with Two Variables • Solving for a Variable in a Two-Variable Linear Equation	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

Unit 3: Lines and Linear Equations	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.
- Finding and Interpreting Slopes of Lines - Understanding Slope-Intercept Form - Writing Linear Equations - Sketching Graphs of Linear Equations - Real-World Problems Involving Linear Equations	

MAJOR UNITS/TOPICS	ASSESSMENTS/PROJECTS
Unit 4: Systems of Linear Equations - Introduction to System of Linear Equations - Solving Systems of Linear Equations by Graphing - Solving Systems of Linear Equations Using Algebraic Methods - Real-World Problems: Systems of Linear Equations - Inconsistent and Dependent Systems of Linear Equations	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

Unit 5: Functions ● Understanding Relations and Functions ● Representing Functions ● Understanding Linear and Nonlinear Functions ● Comparing Two Functions	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.
Unit 6: Geometry ● The Pythagorean Theorem ● The Distance Formula ● Understanding the Pythagorean Theorem and Solids ● Identifying Volumes of Composite Solids	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.
Unit 7: Geometric Transformations ● Translations ● Reflections ● Rotations ● Dilations ● Comparing Transformations	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

Unit 8: Congruence and Similarity
   ● Congruent Figures
   ● Similar Figures
   ● Relating Congruent and Similar Figures to Geometric Transformations
	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

MAJOR UNITS/TOPICS	ASSESSMENTS/PROJECTS

Unit 9: Probability and Statistics
   ● Scatter Plots
   ● Line of Best Fit
   ● Two-way Tables
   ● Compound Events
   ● Independent and Dependent Events
	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

Unit 10: Exponent Properties ● Exponential Notation ● Product and Quotient of Powers ● The Power of a Power ● The Power of a Product and Power of a Quotient ● Zero and Negative Exponents	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.
Unit 11: Polynomials and Factoring ● Adding and Subtracting Polynomials ● Multiplying and Factoring Polynomials ● Multiplying Binomials ● Multiplying Special Cases ● **Factoring Trinomials x^2+ bx + c** ● **Factoring Trinomials ax^2+bx +c** ● Factoring Special Cases ● Factoring by Grouping	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.

Unit 12: Quadratic Functions
    ●   Exploring Quadratic Graphs
    ● Quadratic Functions
    ● Solving Quadratic Equations
    ● Factoring to Solve Quadratic Equations
    ● Completing the Square
    ● Using the Quadratic Formula
	In class assignments, homework, tests/quizzes, projects, will be designed to fit each class setting.