Moon Area School District Curriculum Map

Course: Accelerated Algebra 1
Grade Level: 7
Content Area: Math
Frequency: Full-Year Course

Big Ideas

1. Properties of Real Numbers
2. Equations
3. Inequalities
4. Systems of Equations
5. Exponents
6. Quadratics
7. Polynomials and Factoring

Primary Resource(s) & Technology:
McDougal Littell Algebra 1 textbook 2004, IXL online software, Microsoft Teams, Promethean Boards, Student Laptops

Pennsylvania and/or focus standards referenced at:
www.pdesas.org
www.education.pa.gov

Big Ideas	Focus Standard(s)	Assessed Competencies (Key content and skills)	Timeline
BIG IDEAS: #1	**ELIGIBLE CONTENT:** A1.1.1.1.1	**Chapter 1: Connections to Algebra** Rules for Rational Numbers (add, subtract, multiply, divide negatives) Absolute Value 1.1: Variables in Algebra 1.2: Exponents and Powers 1.3: Order of Operations 1.4: Equations and Inequalities 1.5: Problem Solving Plan 1.7: Introduction to Functions	August - September

BIG IDEAS: #1	**ELIGIBLE CONTENT:** A1.1.1.1.1	**<u>Chapter 2: Properties of Real Numbers:</u>** 2.1: The Real Number Line Properties of Real Numbers 2.5: Multiplication of Real Numbers 2.6: The Distributive Property 2.7: Division of Real Numbers	September
BIG IDEAS: #2	**ELIGIBLE CONTENT:** A1.1.2.1.1 A1.1.2.1.2 A1.1.2.1.3	**<u>Chapter 3: Solving Linear Equations</u>** 3.1/3.2: Solving One-Step Equations 3.3: Solving Multi-Step Equations 3.4: Solving Equations with Variables on Both Sides 3.5: Linear Equations and Problem Solving 3.6: Solving Decimal Equations 3.7: Formulas and Functions 3.8: Rates, Ratios, and Percents	October
BIG IDEAS: #2	**ELIGIBLE CONTENT:** A1.2.1.1.1 A1.2.1.1.2 A1.2.1.1.3 A1.2.1.2.1 A1.2.1.2.2 A1.2.2.1.1 A1.2.2.1.2 A1.2.2.2.1	**<u>Chapter 4: Graphing Linear Equations and Functions</u>** 4.1: Coordinates and Scatter Plots 4.2: Graphing Linear Equations 4.3: Quick Graphs Using Intercepts 4.4: The Slope of a Line 4.5: Direct Variation 4.6: Quick Graphs Using Slope-Intercept Form 4.7: Solving Linear Equations Using Graphs 4.8: Functions and Relations	November

BIG IDEAS: #2	**ELIGIBLE CONTENT:** A1.2.2.1.3 A1.2.2.1.4 A1.2.3.2.3	**<u>Chapter 5: Writing Linear Equations</u>** 5.1: Writing Linear Equations in Slope-Intercept Form 5.2: Writing Linear Equations Given the Slope and a Point 5.3: Writing Linear Equations Given Two Points 5.4: Fitting a Line to Data 5.5: Point-Slope Form of a Linear Equation 5.6: The Standard Form of a Linear Equation Independent/Dependent Variables	December
BIG IDEAS: #3	**ELIGIBLE CONTENT:** A1.1.3.1.1 A1.1.3.1.2 A1.1.3.1.3	**<u>Chapter 6: Solving and Graphing Linear Inequalities</u>** 6.1: Solving One-Step Linear Inequalities 6.2: Solving Multi-Step Inequalities 6.3: Solving Compound Inequalities 6.4: Solving Absolute-Value Equations and Inequalities 6.5: Graphing Linear Inequalities in Two Variables	January
	ELIGIBLE CONTENT: A1.2.3.1.1 A1.2.3.2.2	**<u>Statistics</u>** Mean, Median, Mode, and Range Mean Absolute Deviation (M.A.D.) 6.6: Stem-and-Leaf Plots 6.7: Box-and-Whisker Plots Samples and Populations	January

BIG IDEAS: #4	**ELIGIBLE CONTENT:** A1.1.2.2.1 A1.1.2.2.2 A1.1.3.2.1 A1.1.3.2.2	**<u>Chapter 7: Systems of Linear Equations and Inequalities</u>** 7.1: Solving Linear Systems by Graphing 7.2: Solving Linear Systems by Substitution 7.3: Solving Linear Systems by Linear Combinations 7.4: Applications of Linear Systems 7.5: Special Types of Linear Systems 7.6: Solving Systems of Linear Inequalities	February
BIG IDEAS: #5	**ELIGIBLE CONTENT:** A1.1.1.3.1	**<u>Chapter 8: Exponents and Exponential Functions</u>** 8.1: Multiplication Properties of Exponents 8.2: Zero and Negative Exponents 8.3: Division Properties of Exponents 8.4: Scientific Notation	March
	ELIGIBLE CONTENT: A1.2.3.3.1 M07.D-S.3.1.1 M07.D-S.3.2.2 M07.D-S.3.2.3	**<u>Probability</u>** 2.8: Probability Tree Diagrams Counting Principal Independent and Dependent Events	March

BIG IDEAS: #6	**ELIGIBLE CONTENT:** A1.1.1.1.2	**<u>Chapter 9: Quadratic Equations and Functions</u>** 9.1: Solving Quadratic Equations by Finding Square Roots 9.2: Simplifying Radicals 9.3: Graphing Quadratic Functions 9.4: Solving Quadratic Equations by Graphing 9.5: Solving Quadratic Equations by the Quadratic Formula	March-April
	ELIGIBLE CONTENT:	**<u>PSSA Review</u>** Proportionality Percents Circles Area Formulas Composite Figures Surface Area Volume Cross Sections Angles Triangles	April

BIG IDEAS: #7	**ELIGIBLE CONTENT:** A1.1.1.5.1 A1.1.1.5.2 A1.1.1.5.3	**<u>Chapter 10: Polynomials and Factoring</u>** 10.1: Adding and Subtracting Polynomials 10.2: Multiplying Polynomials 10.3: Special Products of Polynomials 10.4: Solving Polynomials in Factored Form 10.5: Factoring $x^2 + bx + c$ 10.6: Factoring $ax^2 + bx + c$ 10.7: Factoring Special Products 10.8: Factoring Using the Distributive Property	May
		<u>Keystone Review</u>	May