Moon Area School District Curriculum Map

Course: Academic Math
Grade Level: 6th
Content Area: Math
Frequency: Full-Year Course

Big Ideas

1. Use Positive Rational Numbers
2. Integers and Rational Numbers
3. Numeric and Algebraic Expressions
4. Represent and Solve Equations and Inequalities
5. Understand and Use Ratio and Rate
6. Understand and Use Percent
7. Solve Area, Surface Area, and Volume Problems
8. Display, Describe, and Summarize Data

Essential Questions

1. How can you fluently Add, Subtract, Multiply, and Divide Decimals? How can you Multiply and Divide Fractions?
2. What are Integers and Rational Numbers and how are points graphed on a Coordinate Plane?
3. What are Expressions and how can they be written and evaluated?
4. What procedures can be used to Write and Solve Equations and Inequalities?
5. What are Rations and Rates, and how can you use Ratios and Rates to describe quantities and solve problems?
6. What is the meaning of Percent, and how can Percent be estimated and found?
7. How can the areas of certain shapes be found, what are the meanings of Surface Area and Volume, and how can Surface Area and Volume be found?
8. How can data be described by a single number, how can tables and graphs be used to represent data and answer questions?

Primary Resource(s) & Technology:
Textbook Series, IXL online software,
Microsoft Teams, Promethean Boards, Student Laptops/iPads

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

Big Ideas/ EQs	Focus Standard(s)	Assessed Competencies (Key content and skills)	Timeline
How can you fluently Add, Subtract, Multiply, and Divide Decimals? How can you Multiply and Divide Fractions?	6.NS.B.3 6.NS.B.2 6.NS.A.1	• Add, Subtract, Multiply, and Divide Whole Numbers, Decimals and Fractions • Use Models to represent situations and solve problems	August - September (Weeks or Days)
What are Integers and Rational Numbers and how are points graphed on a Coordinate Plane?	6.NS.C.5 6.NS.C.6a 6.NS.C.6c 6.NS.C.7a 6.NS.C.7b 6.NS.C.7c 6.NS.C.7d 6.NS.C.6b	• Understand Integers and represent Rational Number on the Number Line. • Understand and represent absolute values of rational numbers on the coordinate plane • Find distances on the coordinate plane. • Represent polygons on the coordinate plane.	October-November

What are Expressions and how can they be written and evaluated?	6.EE.A.1 6.NS.B.4 6.EE.A.3 6.EE.A.2a 6.EE.A.2b 6.EE.B.6	• Understand and represent exponents. • Find GCF and LCM • Write and evaluate numerical expressions • Write algebraic expressions • Evaluate algebraic expressions • Generate equivalent expressions • Simplify Algebraic Expressions	December-January
What procedures can be used to Write and Solve Equations and Inequalities?	6.EE.B.5 6.EE.A.4 6.EE.B.7 6.EE.B.6 6.EE.B.8 6.EE.C.9	• Understand equations and solutions • Apply properties of equality • Write and solve addition and subtraction equations • Write and solve multiplication and division equations • Write and solve equations with rational numbers • Understand and write inequalities • Solve inequalities • Understand dependent and independent variables • Use patters to write and solve equations. • Relate tables, graphs, and equations.	February-March
What are Rations and Rates, and how can you use Ratios and Rates to descri	6.RP.A.1 6.RP.A.3 6.RP.A.3a 6.RP.A.2 6.RP.A.3b 6.RP.A.3d	• Understand ratios • Generate equivalent ratios • Compare ratios • Represent and graph ratios • Understand rates and unit rates • Compare unit rates • Solve unit rate problems	April

be quantities and solve problems?			
What is the meaning of Percent, and how can Percent be estimated and found?	6.RP.A.3c 6.RP.A.1	• Understand percent • Relate fractions decimals and percent • Represent percent greater than 100 or less than one • Estimate to find percent • Find the percent of a number • Find the whole given the part and the percent	April
How can the areas of certain shapes be found, what are the meanings of Surface Area and Volume, and how can Surfac	6.G.A.1 6.EE.A.2c 6.G.A.3 6.NS.C.6c 6.NS.C.8 6.G.A.4 6.EE.A.2a 6.EE.B.6 6.G.A.2	• Find areas of parallelograms and rhombuses • Solve triangle area problems • Find areas of trapezoids and kites • Find areas of polygons • Represent solid figures using nets • Find surface area of prisms • Find surface areas of pyramids • Find volume of fractional edge lengths	May

e Area and Volume be found?			
How can data be described by a single number, how can tables and graphs be used to represent data and answer questions?	6.SP.A.1 6.SP.B.4 6.SP.A.3 6.SP.B.5c 6.SP.B.5a 6.SP.B.5d 6.SP.A.2 6.SP.B.5b 6.SP.B.5	• Recognize statistical questions • Summarize data using mean median mode and range • Display data in box plots • Display data in frequency tables and histograms • Summarize data using measures of variability • Choose appropriate statistical measures • Summarize data distributions.	May-June