SUBJECT: Math	GRADE: 6
Unit Title: 2D Geometry	**Time Frame: 4 weeks**

UNIT OVERVIEW

Students will be able to evaluate the area and perimeter of regular and irregular shapes given the dimensions and justify their results.

LRG SKILLS AND DISPOSITIONS	PA STANDARDS
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: CH 4 Open Ended "The Banquet Table" (S4B)	• CC.2.3.6.A.1 – Apply appropriate tools to solve real-world and mathematics problems involving area, surface area, and volume

COMPETENCIES	LEARNING TARGETS
I can describe, analyze, and apply geometric relationships to solve problems.	• I can find the area and perimeter of squares and rectangles. (K1MAB9G1) • I can find the area of irregular shapes (K1MAB9G5) • I can find the area and perimeter of a parallelogram. (K1MAB9G2) • I can find the area and perimeter of a triangle. (K1MAB9G3) • I can find the area and perimeter of a trapezoid. (K1MAB9G4)

SUBJECT: Math	GRADE: 6
Unit Title: 3D Geometry	**Time Frame: 3 weeks**

UNIT OVERVIEW
Students will be able to use nets, surface area, and volume to design a structure for themselves and their friends.

LRG SKILLS AND DISPOSITIONS	PA STANDARDS
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: 5-12 "Why Are There No Giants" (S4B)	• CC.2.3.6.A.1 – Apply appropriate tools to solve real-world and mathematics problems involving area, surface area, and volume
COMPETENCIES	**LEARNING TARGETS**
I can describe, analyze, and apply geometric relationships to solve problems.	• I can represent 3 dimensional figures using nets of rectangles and triangles. (K1MAB9G6) • I can find the surface area of rectangular and triangular prisms including cubes. (K1MAB9G7) • I can find the volume of a rectangular prism. (K1MAB9G8)

SUBJECT: Math	GRADE: 6
Unit Title: Statistics	**Time Frame: 4 weeks**

UNIT OVERVIEW	
Students will be able to collect data, graph and interpret it, and make predictions.	
LRG SKILLS AND DISPOSITIONS	**PA STANDARDS**
Resilience and Grit: Test Corrections on CUA (D4B) Creativity and Innovation: Cornerstone culture fair ethnicity data collection and graph creation (S3B) Critical Thinking & Problem Solving: CH 1 Open Ended "Salary Negotiation" (S4B)	● CC.2.4.6.B.1 Demonstrate an understanding of statistical variability by displaying, analyzing, and summarizing distributions.
COMPETENCIES	**LEARNING TARGETS**
I can collect, represent, analyze, and interpret data.	● I can display data on a number line, dot plot, and histograms. (K1MAB10G1) ● I can identify peak, cluster, gap, symmetry and skew of data. (K1MAB10G3) ● I can find the measures of central tendency. (K1MAB10G2) ● I can find the variability, interquartile range, and mean absolute deviation. (K1MAB10G6) ● I can describe the overall pattern/deviations in the data. (K1MAB10G4) ● I can create and analyze box-and-whisker plots. (K1MAB10G5)

SUBJECT: Math	GRADE: 6
Unit Title: Expressions and Equations	**Time Frame: 4 weeks**
UNIT OVERVIEW	
Students will be able to create expressions and equations to represent real world situations and evaluate and justify their solutions.	
LRG SKILLS AND DISPOSITIONS	**PA STANDARDS**
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: CH 6 Open Ended "T-Shirt Cost Estimates" (S4B)	● CC.2.2.6.B.1 Apply and extend previous understandings of arithmetic to algebraic expressions. ● CC.2.2.6.B.2 Understand the process of solving a one-variable equation or inequality and apply it to real-world and mathematical problems. ● CC.2.2.6.B.3 Represent and analyze quantitative relationships between dependent and independent variables.
COMPETENCIES	**LEARNING TARGETS**
I can generate equivalent expressions using operations and mathematical properties.	● I can write algebraic expressions from words. (K1MAB4G7) ● I can use the distributive property to write two equivalent expressions. (K1MAB4G5) ● I can evaluate expressions using substitution. (K1MAB4G8) ● I can apply the distributive property to find equivalent expressions. (K1MAB4G5) ● I can use Order of Operations to evaluate numerical expressions including exponents. (K1MAB4G7) ● Identify parts of expressions – sum, term, factor, quotient, coefficient, and quantity. (K1MAB4G9) ● I can combine like terms. (K1MAB4G10)

	• I can write and solve equations using addition, subtraction, and multiplication. (K1MAB4G11)
I can find common factors and multiples to represent, compare, and calculate quantities using fractions.	• I can find the greatest common factor. (K1MAB2G3)
I can recognize, represent, and utilize ratios and proportional relationships to solve problems.	• I can find the percent of a number. (K1MAB3G6)
I can create and solve equations and inequalities that represent mathematical situations.	• I can write and solve equations using addition, subtraction, and multiplication to represent real-world situations. (K1MAB5G2)

SUBJECT: Math	GRADE: 6
Unit Title: Decimal Operations	**Time Frame: 3 weeks**

UNIT OVERVIEW	
Students will be able to use operations with decimals to create a budget for a real-life situation.	
LRG SKILLS AND DISPOSITIONS	**PA STANDARDS**
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: CH 3 Open Ended "Peruvian Flutes" (S4B)	● CC.2.1.6.E.4 Apply and extend previous understandings of numbers to the system of rational numbers. ● CC.2.1.6.E.2 Identify and choose appropriate processes to compute fluently with multi-digit numbers. ● CC.2.1.6.E.1 Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
COMPETENCIES	**LEARNING TARGETS**
I can estimate and calculate using decimals.	● I can multiply multi-digit numbers. (K1MAB1G1) ● I can add and subtract decimals. (K1MAB1G2) ● I can multiply decimals. (K1MAB1G3) ● I can divide decimals. (K1MAB1G4)

SUBJECT: Math	GRADE: 6
Unit Title: Rate/Ratios	**Time Frame: 4 weeks**
UNIT OVERVIEW	
Students will be able to create ratios, tables, and unit rate to make informed decisions about real world situations.	
LRG SKILLS AND DISPOSITIONS	**PA STANDARDS**
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: CH 2 Open Ended "Blueberry Blast" (S4B)	● CC.2.1.6.E.3 Develop and/or apply number theory concepts to find common factors and multiples. ● CC.2.1.6.D.1 Understand ratio concepts and use ratio reasoning to solve problems.
COMPETENCIES	**LEARNING TARGETS**
I can find common factors and multiples to represent, compare, and calculate quantities using fractions.	● I can find the least common multiple using ratio tables. (K1MAB2G1)
I can recognize, represent, and utilize ratios and proportional relationships to solve problems.	● I can find equivalent ratios using the Giant One and ratio tables. (K1MAB3G2) ● I can write ratios in all 3 forms, as a fraction, with a colon, using words.. (K1MAB3G3) ● I can solve real-world ratio problems (K1MAB3G4) ● I can find unit rate. (K1MAB3G5)

SUBJECT:Math	GRADE: 6
Unit Title: Graphing	**Time Frame: 3 weeks**

UNIT OVERVIEW
Students will be able to graph points and sets of points on a coordinate plane to represent real-world values.

LRG SKILLS AND DISPOSITIONS	PA STANDARDS
Resilience and Grit: Test Corrections on CUA (D4B) Critical Thinking & Problem Solving: 5-1 “Polygons on a Coordinate Grid- Elektro” (S4B)	● CC.2.1.6.E.4 Apply and extend previous understandings of numbers to the system of rational numbers.

COMPETENCIES	LEARNING TARGETS
I can generate equivalent expressions using operations and mathematical properties.	● I can write positive and negative numbers from real world situations. (K1MAB4G1) ● I can find the opposite of a number. (K1MAB4G2) ● I can find the absolute value. (K1MAB4G3) ● I can write absolute value statements to calculate the distance between two points on a coordinate plane. (K1MAB4G4)
I can create and solve equations and inequalities that represent mathematical situations.	● I can compare numbers using real-world situations including positive and negative numbers. (K1MAB5G1) ● I can write and solve inequalities in real world situations. (K1MAB5G3)
I can recognize, represent, and utilize ratios and proportional relationships to solve problems.	● I can find the missing values in tables. (K1MAB3H5)

I can create and interpret graphs as visual representations of the relationship between quantities.	• I can plot points in all four quadrants. (K1MAB7G1) • I can plot inequalities on a number line. (K1MAB7G2)