2018-2019 Conrady Junior High [8th Grade Honors] Curriculum Map

Module	Common Core State Standards	Mathematics Vision Project	Estimated Time
Module 1 Sequences	A.REI.3 A.SSE.1 F.BF.1 F.BF.2 F.IE.2 F.LE.1 F.LE.2 F.LE.3 F.LE.5 N.Q.2	Define quantities and interpret expressions Represent arithmetic and geometric sequences with equations, tables, graphs, and story context Constant difference and ratios Comparing rates of growth Recursive & Explicit equations	Q1 15 days 1 Quiz 1 Test Tentative dates: **September 12**
Module 2 Linear & Exponential Functions	A.CED.2 A.SSE.1 A.SSE.6 F.BF.1 F.BF.2 F.IF.3 F.IF.6 F.IF.7 F.LE.1 F.LE.2 F.LE.3 F.LE.5	Continuous linear and exponential functions Discrete and continuous functions Comparing growth of linear & exponential models Interpreting equations Calculate & Interpret average rate of change of a function in a given interval	Q1 15 days 15 Quiz 1 Test Tentative dates: **October 10**
Module 3 Features of Functions	A.CED.3 A.REI.11 F.BF.1b F.IF.1 F.IF.2 F.IF.3 F.IF.4 F.IF.5 F.IF.7	Key features of functions Using tables and graphs to interpret key features Interpret functions and their notation Combining Functions and analyzing contexts Use graphs to solve when given function notation Identify if a relation is a function Matching stories, graphs, and equations to functions	Q2 15 days 15 Quiz 1 Test Tentative dates: **October 27**
Module 4 Equations & Inequalities	8.EE.7a,b (Solve linear equations in one variable) 8.EE.C.Int.1 (Solve word problems leading to linear equations in one variable whose solutions require expanding expressions	Explain each step in solving an equation Literal equations Inequalities (reason, solve, and represent the solution) Organize data into rectangular arrays or matrices Operations on matrices	Q2 16 days 1 Quiz 1 Test

	using the distributive property and collecting like terms.		Tentative dates: **November 17**
Module 5 Systems of Equations & Inequalities	8.EE.8a, 8b-1, 8b-2, 8b-3, 8c (Pairs of simultaneous linear equations) 8.EE.C.Int.1 (Solve word problems leading to linear equations in one variable whose solutions require expanding expressions using the distributive property and collecting like terms. A.CED.2 A.CED.3 A.CED.4 A.REI.6 A.REI.12 **A.REI.S????????? (should this be a 5?)**	Constraints of systems of inequalities Writing, solving, and graphing linear equations and inequalities in two variables Solving systems using Elimination Inconsistent and Dependent Systems Solving systems using matrices	Q2/ 15 days 1 Quiz 1 Test Tentative dates **No Test 17.18**
semester one exam wednesday, december 20			
Module 6 Transformations & Symmetry	8.G.1a, 1b, 1c (Verify properties of transformations) 8.G.2 (Understand congruence using transformation) 8.G.3 (Describe effects of transformations in plane) 8.G.4 (Understand similarity using transformation) 8.G.5 (Angles, parallel lines cut by transversal) 8.EE.6-1, 6-2 (Use similar triangles to explain slope; deriving equation in y=mx +b form)	Transformations: translations, reflections, and rotations Examine slope of perpendicular lines Rigid motions Rotational symmetry and lines of symmetry with quadrilaterals Characteristics of regular polygons from symmetry using rotations and lines Making and justifying properties of quadrilaterals ***Skip MVP tasks and use G8 Academic curriculum**	Q3 17 days No Quiz 1 Test Tentative dates: February 1
Module 7 Congruence, Construction, and Proof		Using compass and straightedge to construct rhombuses, squares, parallelograms, equilateral triangles, and inscribed hexagons Transformations ASA, SAS, SSS for congruent triangles	Q3 17 days No Quiz 1 Test Tentative dates:

			February 28
Module 8 Connecting Algebra and Geometry		Find distance and determine perimeter using coordinates Proving slope criteria for parallel and perpendicular lines Using coordinates to algebraically prove geometric theorems Writing equations by comparing parallel lines Transformations Define and operating with vectors as quantities with magnitude and direction Properties of matrices; including identity and inverse properties Determinant of a matrix & relate to parallelogram Solving systems of equations using multiplicative inverse matrix using matrix multiplication to reflect and rotate vectors and images	Q4 17 days 1 Quiz 1 Test Tentative dates: March 23
Module 9 Modeling Data	8.SP.1 (Scatter plots) 8.SP.2 (Line of best fit) 8.SP.3 (Interpret slope in data representation) 8.SP.4 (Two-way tables)	Use context to describe data distribution and compare statistical representations Describe data distributions and compare two or more data sets Interpret two way frequency tables Ue context to interpret and write conditional statements using relative frequency tables Correlation coefficient Estimate correlation and line of best fit Lines of regression use residual plots to analyze the strength of a linear model for data	Q4 16 days 1 Quiz 1 Test Tentative dates: May 11
Math 2 **Module 1** Quadratic Functions		Quadratic Functions Features (max, min, domain, and range) Comparing quadratic and exponential functions	Q4 ___days ___ Quiz 1 Test Tentative dates:

Math 2 **Module 2** Structures of Expressions		Connecting transformations to quadratic functions and parabolas Vertex form of a quadratic Completing the square Factored and expanded forms of a quadratic	Q4 ___days ___ Quiz 1 Test Tentative dates:

PARCC Review Packets to include:	
Quarter	**G8 Standards Covered**
Q1	EE.7.a, EE.7.b , EE.1 , EE.2, EE.3, EE.4, EE.5, EE.6
Q2	8.F.1-2, 8.F.2, 8.F.3-2, 8.F.4, 8.NS.1, 8.NS.2, 8.EE.2, 8.G.6, 8.G.7-1, 8.G.7-2, 8.G.8
Q3	G.1 , G.2 , G.3 , G.4 , G.5 , and G.9