GSC 8th Grade Math Pacing Guide (CMP 3)

					Common Core	Ala. Math Course of Study (2016)	Date Started	Date Completed
Thinking With Mathematical Models: Linear and Inverse Variation			1st Nine Weeks	29-32 days (includes assessments)				
	Investigation 2	Linear Models and Equations			8.EE.5, 8.EE.7, 8.EE.7b, 8.EE.8, 8.EE.8a, 8.EE.8c, 8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5, 8.SP.1, 8.SP.2, 8.SP.3	7,9,9b,10,10a,10c, 11,12,13,14, 15,25,26,27		
	2.2	Up and Down the Staircase: Exploring Slope						
	2.3	Tree Top Fun: Equations for Linear Functions						
	2.4	Boat Rental Business: Solving Linear Equations						
	2.5	Amusement Park or Movies: Intersecting Linear Models						
	Investigation 3	Inverse Variation			8.EE.5, 8.F.1, 8.F.3, 8.F.5, 8.SP.1	7,11,13,15,25		
	3.1	Rectangles W/ Fixed Area						
	3.2	Distance, Speed and Time						
	3.3	Planning a Field Trip: Finding Individual Cost						
	Investigation 4	Variability and Associations in Numeric Data			8.F.1, 8.F.3, 8.F.4, 8.F.5, 8.SP.1, 8.SP.2, 8.SP.3	11,13,14,15, 25,26,27		
	4.1	Vitruvian Man: Relating Body Measurements						
	4.2	Older and Faster: Negative Correlations						
	4.3	Correlations Coefficients and Outliers						
	Investigation 5	Variability and Associations in Categorical Data			8.SP.4	28		
	5.1	Wood or Steel? That's the Question						
	5.2	Politics of Girls and Boys: Analyzing Data in Two-Way Tables						
Looking for Pythagoras: The Pythagorean Theorem				39-42 days (including assessments)				
	Investigation 1	Coordinate Grids			8.G.8	23		
	1.1	Driving Around Euclid: Locating Points and Finding Distances						
	1.2	Planning Parks: Shapes on a Coordinate Grid						
	1.3	Finding Areas						
	Investigation 2	Squaring Off			8.EE.2, 8.NS.2	4,2		
	2.1	Looking for Squares						
	2.2	Square Roots						
	2.3	Using Squares to Find Lengths						
	2.4	Cube Roots						
	Investigations 3 & 5	The Pythagorean Theorem/Using the Pythagorean Theorem:Analyzing Triangles and Circles	2nd Nine Weeks		8.G.4, 8.G.6, 8.G.7, 8.G.8	19,21,22,23		
	3.1	Discovering the Pythagorean Theorem						
	3.2	A Proof of the Pythagorean Theorem						
	3.3	Finding Distances						
	3.4	Measuring the Egyptian Way: Lengths That Form a Right Triangle						
	5.1	Stopping Sneaky Sally: Finding Unknown Side Lengths						
	Investigation 4	Using the Pythagorean Theorem: Understanding Real Numbers			8.EE.2, 8.G.7, 8.NS.1, 8.NS.2	4,22,1,2		
	4.1	Analyzing the Wheel of Theodorus: Square Roots on a Number Line						
	4.2	Representing Fractions as Decimals						
	4.3	Representing Decimals as Fractions						
	4.4	Getting Real: Irrational Numbers						
Growing, Growing, Growing: Exponential Functions				s (including sments)				
	Investigation 1	Exponential Growth			8.EE.3, 8.F.1, 8.F.3, 8.F.4, 8.F.5	5,11,13,14,15		
	1.1	Making Ballots: Introducing Exponential Functions						
	1.2	Requesting a Reward: Representing Exponential Functions						
	1.3	Making a New Offer: Growth Factors						
	Investigation 4	Exponential Decay			8.F.1, 8.F.2, 8.F			

	4.1	Making Smaller Ballots: Introducing Exponential Decay			8.F.1, 8.F.2, 8.F.5	11,12,15		
	Investigation 5	Patterns With Exponents	3rd Nine Weeks	20-23 days assess	8.EE.1, 8.EE.2, 8.EE.3, 8.EE.4, 8.F.5	3,4,5,6,15		
	5.1	Looking for Patterns Among Exponents						
	5.2	Rules of Exponents						
	5.3	Extending the Rules of Exponents						
Butterflies, Pinwheels, and Wallpaper: Symmetry and Transformations				38-41 days (including assessments)				
	Investigation 1	Symmetry and Transformations			8.G.1, 8.G.1a, 8.G.1b, 8.G.1c	16,16a,16b, 16c		
	1.1	Butterfly Symmetry: Line Reflections						
	1.2	In a Spin: Rotations						
	1.3	Sliding Around: Translations						
	1.4	Properties of Transformations						
	Investigation 3	Transforming Coordinates			8.G.1, 8.G.1a, 8.G.1b, 8.G.1c, 8.G.2, 8.G.3, 8.G.5	16,16a,16b, 16c,17,18,20		
	3.1	Flipping on a Grid: Coordinate Rules for Reflections						
	3.2	Sliding on a Grid: Coordinate Rules for Translations						
	3.3	Spinning on a Grid: Coordinate Rules for Rotations						
	3.5	Parallel Lines, Transversals, and Angle Sums						
	Investigation 2	Transformations and Congruence			8.G.1, 8.G.1a, 8.G.1b, 8.G.2	16,16a,16b, 17		
	2.1	Connecting Congruent Polygons						
	2.2	Supporting the World: Congruent Triangles I						
	2.3	Minimum Measurement: Congruent Triangles II						
	Investigation 4	Dilations and Similar Figures			8.G.3, 8.G.4, 8.G.5, 8.EE.6	18,19,20,8		
	4.1	Focus on Dilations						
	4.2	Return of Super Sleuth: Similarity Transformations						
	4.3	Checking Similarity Without Transformations						
	4.4	Using Similar Triangles						
Say It With Symbols: Making Sense of Symbols: Making Sense of Symbols			4th Nine Weeks	20-23 days (including assessments)				
	Investigation 1	Making Sense of Symbols: Equivalent Expressions			8.EE.7, 8.EE.7b, 8.F.3	9,9b,13		
	1.1	Tiling Pools: Writing Equivalent Expressions						
	1.2	Thinking in Different Ways: Determining Equivalence						
	1.3	The Community Pool Problem: Interpreting Expressions						
	1.4	Diving In: Revisiting the Distributive Property						
	Investigation 2	Combining Expressions			8.EE.7, 8.EE.7b, 8.F.1, 8.F.2, 8.F.3, 8.G.9	9,9b, 11,12, 13,24		
	2.3	Making Candles: Volumes of Cylinders, Cones, and Spheres						
	2.4	Selling Ice Cream: Solving Volume Problems						
	Investigation 3	Solving Equations			8.EE.2, 8.EE.7, 8.EE.7a, 8.EE.7b, 8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c, 8.F.1	4,9,9a,9b, 10,10a,10b, 10c,11		
	3.1	Selling Greeting Cards: Solving Linear Equations						
	3.2	Comparing Costs: Solving More Linear Equations						
It's in the System: Systems of Linear Equations and Inequalities				13-16 days (including assessments)				
	Investigation 1	Linear Equations With Two Variables			8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c, 8.F.3	10,10a, 10b, 10c,13		
	1.1	Shirts and Caps: Solving Equations With Two Variables						
	1.2	Conncting $Ax + By = C$ and $y = mx + b$						
	1.3	Booster Club Members: Intersecting Lines						
	Investigation 3	Systems of Functions and Inequalities			8.EE.8a, 8.EE.8c	10a,10c		
	3.1	Comparing Security Services: Linear Inequalities						
	3.2	Solving Linear Inequalities Symbolically						
Major Cluster (Critical Focus)								
Supporting Cluster								

Additional Cluster							