

Cobb County School District

8th Grade Mathematics Teaching & Learning Framework

Quarter 1		Quarter 2		Quarter 3		Quarter 4	
Unit 1 5 weeks	Unit 2 5 weeks	Unit 3 5 weeks	Unit 4 3 weeks	Unit 5 5 weeks	Unit 6 5 weeks	Unit 7 4 weeks	Unit 8 4 weeks
Transformations, Congruence and Similarity	Exponents	Geometric Applications of Exponents	Functions	Linear Functions	Linear Models & Tables	Solving Systems of Equations	Review and Extend
MGSE8.G.1 (experiment with transformations) MGSE8.G.2 (Congruence) MGSE8.G.3 (Transformations on the coordinate plane) MGSE8.G.4 (Similarity) MGSE8.G.5 (Investigating angles)	MGSE8.EE.1 (Integer exponents) MGSE8.EE.2 (Square & cube roots & equations) MGSE8.EE.3 (Estimate with scientific notation) MGSE8.EE.4 (Compute with scientific notation) MGSE8.EE.7 (Solve linear equations) MGSE8.EE.7a (Multi-step equations) MGSE8.EE.7b (Linear equations with rationals) MGSE8.NS.1 (Irrational numbers) MGSE8.NS.2 (Rational approximations)	MGSE8.G.6 (Pythagorean Theorem & it's converse) MGSE8.G.7 (Apply the Pythagorean Theorem) MGSE8.G.8 (Pythagorean Theorem & distance) MGSE8.G.9 (Volume formulas) MGSE8.EE.2 (Square & cube roots & equations)	MGSE8.F.1 (Understanding functions) MGSE8.F.2 (Comparing functions)	MGSE8.EE.5 (Graph proportional relationships-slope) MGSE8.EE.6 (Similar triangles to derive $y=mx$ & $y=mx+b$) MGSE8.F.3 (Linear & non-linear functions)	MGSE8.F.4 (Construct a function) MGSE8.F.5 (Analyze & sketch functional relationships) MGSE8.SP.1 (Scatterplots) MGSE8.SP.2 (Best fit line) MGSE8.SP.3 (Interpreting bivariate data) MGSE8.SP.4 (2-way tables)	MGSE8.EE.8 (Analyze & solve linear systems) MGSE8.EE.8a (Solutions to systems) MGSE8.EE.8b (Solve systems algebraically and graphically) MGSE8.EE.8c (Systems in context)	Review: All standards by differentiating for student needs Extend: MGSE9-12.A.CED.3 (Constraints by equations & inequalities including systems) MGSE9-12.A.CED.4 (Rearrange formulas to solve) MGSE9-12.A.REI.3 (Solve equations & inequalities with letters as coefficients)

These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units.
All units will include the Mathematical Practices and indicate skills to maintain.

NOTE: Mathematical standards are interwoven and should be addressed throughout the year in as many different units and tasks as possible in order to stress the natural connections that exist among mathematical topics.

Grades 6-8 Key: NS = The Number System, RP = Ratios and Proportional Relationships, EE = Expressions and Equations, G = Geometry, SP = Statistics and Probability.