Mathematics Three-week Curriculum Template

Course or Grade Level: GEOMETRY		Calendar (Weeks 7, 8 and 9) Bundle 3		
	TAKS OBJ	**TEKS Knowledge & Skills**	**TEKS Student Expectation**	**Specification/Examples**
Content	**6 & 7**		G.4 (A) The student is expected to select an appropriate representation (concrete, pictorial, graphical, verbal, or symbolic) in order to solve problems **(Supporting Standard)**	• Interpreting real-world geometric situations in terms of graphs, tables, and literal equations • Describing real-world geometric situations that fit appropriate representations
			G.2 (B) The student is expected to make conjectures about angles, lines, polygons, circles, and three-dimensional figures and determine the validity of the conjectures , choosing from a variety of approaches such as coordinate, transformational, or axiomatic **(Readiness standard)**	• Reflections • Translations • Rotations
			G.5 (A) The student is expected to use numeric and geometric patterns to develop algebraic expressions representing geometric properties including functional relationships in writing equations or inequalities as they pertain to: **(Readiness standard)**	• Areas of circles and polygons • *Perimeters of polygons and circumferences of circles* • Finding the sum of the interior angles of polygons • Deriving volume formulas • Discovering the area formulas for a regular polygon • Discovering the relationship among the sides of 45-45-90 and 30-60-90 triangles
			G.5 (B) The student is expected to use numeric and geometric patterns to make generalizations about geometric properties, including **(Supporting Standard)**	• Properties of polygons • Ratios in similar figures and solids • Angle relationships in polygons and circles

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			G.7 (B) The student is expected to use slopes and equations of lines to investigate geometric relationships including: **(Supporting Standard)** G.9 (B) The student is expected to formulate and test conjectures about the properties and attributes of polygons and their component parts based on explorations and concrete models **(Supporting Standard)**	• Parallel lines • Perpendicular lines • Special segments of triangles and other polygons. • Apothem • Radius • Recognizing polygons (triangles to decagons) • Properties of regular polygons • Properties of quadrilaterals, triangles, and special polygons (e.g. hexagons)
	TAKS OBJ	**TEKS Knowledge & Skills**	**TEKS Student Expectation**	**Specification/Examples**
Process	**10**	***(8.14) Underlying processes and mathematical tools. The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.*** ***(8.15) Underlying processes and mathematical tools. The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models.***	**The student is expected to:** (A) identify and apply mathematics to everyday experiences and with other mathematical topics (B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; (C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, making a table, (D) select tools such as real objects, manipulatives, paper/pencil, and technology (A) communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models	

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		(8.16) Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions	(B) evaluate the effectiveness of different representations to communicate ideas (A) make conjectures from patterns or sets of examples and nonexamples; (B) validate his/her conclusions using mathematical properties and relationships.	
Language of Instruction		**Technology TEKS/Product**	**Primary Resource Reference**	**Secondary Resource Reference**
			Unit 5, 6 and 7	

Student Performance	**Formative**	**Summative**
• **Assessments** ○ **Textbook assessment** ○ **Common assessment** ○ **Benchmark** ○ **TAKS** ○ **Advanced Placement** • **Lab** • **Project** • **Essay** • **Short answer response** • **Applying mathematics**	**Quiz 5-2 (5-3 & 5-4 included)** **Quiz 6-1 (6-1 & 6-2 included)** **Quiz 6-2 (6-3 & 6-4 included)** **Quiz 7-1 (7-1 & 7-2 included)**	**Test#5** **Test#6**

Intervention	Outline specific interventions for different learning needs: • Reteach options for non-mastery • Scaffolds for ELLs • Differentiation for struggling learners Identify specific resources and teaching tools/ideas for intervention (grouping, pacing). Introduction-level standards include tier 2 interventions. Interventions for tested include both tier 2 and 3 focused small group interventions. Interventions for reviewed standards include more tier 3 focused small groups and individualized intervention.
Other Curricular Connection (ELA, Math, SS)	The TEKS social studies strand for science and technology should be the first source to connect math concepts with the history of mathematics and contributions of mathematicians.