Fifth 6 Weeks | **Sixth Grade Honors** | **2005 - 2006**

Scope & Sequence

The TEKS Process skills (7.13 through 7.15) are integrated into all lessons

It will be impossible to "review" for TAKS due to the nature and volume of the TEKS. Teachers must spiral review on a daily basis throughout the course of the year.

Days	TAKS Objective	TEKS: Student Expectation	Instructional Considerations	Glencoe Course 2	Resources: Performance Assessments	Resources: Additional Resources
8		**7.4A** generate formulas involving conversions, perimeter, area, circumference, volume, scaling **7.9A** estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes;	• Measurement conversion in the 7th grade is tested by way of application only. All conversions are embedded in the context of another problem and are part of the problem solving process for other objectives. All conversion problems should be within an appropriate mathematical context and should also relate to every day experiences. • Students should be proficient in the use of a customary and metric ruler and should be able to identify and correctly use both rulers on the mathematics chart.	7-5 2-8		
7	3	**7.6A** use angle measurements to classify pairs of angles as complementary or supplementary **7.6B** use properties to classify triangles and quadrilaterals; **7.6D** use critical attributes to define similarity **Note – Two Days are for TAKS Release**	• Daily warm-ups should provide for spiral review • Students have measured angles with protractors in 6th grade and classified angles as acute, obtuse, and right. They must be able to classify angle pairs based on measurements (given or with protractor overlaid on the angle). • Students are expected to use vocabulary such as degree, adjacent, complementary, supplementary, and angle pairs. • Students might measure angles in quadrilateral shapes in tangrams, pattern blocks, or on a geoboard, and determine those pairs that are supplementary. • Students identified polygons by number of sides throughout elementary school. Seventh grade students must classify polygons according to other attributes (angles, parallel, congruence, etc) • Students must be able to identify corresponding parts of figures, determine congruent angles in figures, classify pairs of figures as congruent, similar or neither, Identify proportional relationships of similar shapes.	9-2 9-3 9-4		

6	3 4	**7.8C** use geometric concepts and properties to solve problems <u>in fields such as art and architecture</u> **7.9A** estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes; **7.9B** connect models for volume of prisms (triangular and rectangular) and cylinders to formulas of prisms (triangular and rectangular) and cylinders; and **7.9C** estimate measurements and solve application problems involving volume of prisms (rectangular and triangular) and cylinders.	• Students learned to find the areas of triangles, rectangles, squares, trapezoids and circles in 6th grade. The focus at 7th grade is finding areas in <u>application</u>s. There are only about 3-4 application problems in any of the listed textbook sections. Supplements will be needed to match the intent of the TEKS. • Students must be able to apply geometric concepts in solving stated problems. The learning experiences must be at the application level. Low-level or skill development activities such as find the are of the 100 X 50 rectangular parking lot does not meet the expectations of this objective • A focus on irregular/composite figures and shaded regions must be present to meet the expectations of the TEKS as they are tested on the TAKS test.	9-3 1-7 10-5 10-4		
2	1 4	**7.1C** represent squares and square roots using geometric models **7.8C** use geometric concepts and properties to solve problems in fields such as art and architecture **7.9A** estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes; **7.9B** connect models for volume of prisms (triangular and rectangular) and cylinders to formulas of prisms (triangular and rectangular) and cylinders; and **7.9C** estimate measurements and solve application problems involving volume of prisms (rectangular and triangular) and cylinders.	• Daily warm-ups should provide for spiral review. • Teach this objective at the concrete, pictorial, and symbolic levels. This is the students' first experience with square roots. • Students must be able to explore properties of squares using geometric models, use technology and geometric models to estimate and determine square roots. • There are only 3 application problems for perimeter in the text. The TEKS specifies solving application problems, not just applying the "skill" to picture problems. This section must be supplemented.	7-7 10-6		

2	3	**7.6C** use properties to classify solids, including pyramids, cones, prisms, and cylinders **7.8A** Sketch a solid when given the top, side, and front views **7.8B** Make a net (2-dimensional model) of the surface area of a solid **7.8C** use geometric concepts and properties to solve problems in fields such as art and architecture **7.9A** estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes; **7.9B** connect models for volume of prisms (triangular and rectangular) and cylinders to formulas of prisms (triangular and rectangular) and cylinders; and **7.9C** estimate measurements and solve application problems involving volume of prisms (rectangular and triangular) and cylinders.	• Students in third grand and beyond have applied critical attributes to compare and determine common properties of solids. Students in 7th grade must identify properties of solids, classify according to their properties, identify geometric terms represented by common objects (top of desk as a plane) • Students should be able to identify a solid given its properties	12-2 12-3		
2			Review and Topic Test			
4	5	**7.10A** construct sample spaces for compound events (dependent and independent) **7.10B** find the probability of a compound event through experimentation **7.12A** describe a set of data using mean, median, mode, range **7.12B** choose among mean, median, mode, or range to describe a set of data, and justify the choice for a particular situation **7.13D** select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems. **7.14A** communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models; and **7.15A** make conjectures from patterns or sets of examples and nonexamples; and	• Daily warm-ups should provide for spiral review • Teach constructing sample spaces at the pictorial and symbolic levels. • Teach finding the probability of a compound event at the concrete and symbolic levels. Students must be able to determine the approximate probability of a compound event through experimentation, and compare theoretical and experimental probabilities. • Topics to include: measure of central tendency, including justifying why a particular measure was selected to represent the data, constructing sample spaces for compound events	3-4 4-8 13-1 13-2 13-3 13-4	A Tendency to Calculate 7.12A Water, Water Everywhere 7.8c	
3		TAKS Review				