Planned Course: Honors Geometry	Course Number: M307H	Department: Mathematics	
Unit: Area Estimated Time: 25 days	Grade Level: 9-12 Level/Track: Honors	Date Approved: 7/15/09	
PA Academic Standards	**Core Concepts (in question format)** • **Skills/Knowledge**	**Activities/Strategies/Study Skills (identify some activities as remedial or enrichment activities)**	**Assessments (include types and topics)**
ASSESSMENT ANCHORS M11.B.2.2 Use and/or develop procedures to determine or describe measures of perimeter, circumference, area, surface area, and/or volume. (May require conversions within the same system.) M11.C.1.3 Use properties of congruence, correspondence and similarity in problem-solving settings involving two- and three-dimensional Figures. M11.E.4.1 Make predictions using data displays and probability. ACADEMIC STANDARDS 2.9.11 Geometry F. Use the properties of angles, arcs, chords, tangents and secants to solve problems involving circles.	►How were the formulas for the areas of special geometric objects derived and how can you apply these formulas? • Student will be able to apply the area formulas for special quadrilaterals, regular polygons, circles and sectors. ►How do the perimeters and areas of similar figures compare? • Student will be able to describe the change in perimeter and area of similar figures.	►The student will participate in the development of the area formulas for special quadrilaterals. ►The student will analyze diagrams to determine which formulas to use to solve problems. ►The student will find the measures of central angles and arcs of circles. ►The student will find circumference and arc length. ►The student will find the perimeter and area of similar figures to recognize how the change in dimension affects the perimeter and area. ►Enrichment activity: The student will use segment and area models to find the probabilities of events.	►Graded assignments ►Classroom observation and/or participation ►Quiz ►Test