SIOP Lesson Plan

Date: Mar 2009   Grade/Class/Subject: <u>ESL: HS and Gateway</u>

Unit/Theme: <u>Geometry</u>   Standards: <u>GED</u>

Content Objective(s):

TSWBAT :
1. analyze properties and determine attributes of two- and three-dimensional objects;
2. explore relationships of congruence and similarity among classes of two- and three-dimensional geometric objects, make and test conjectures about them, and solve problems involving them;
3. establish the validity of geometric conjectures using deduction, prove theorems;
4 use algebraic relationships to determine lengths and angle measures through proportion

Language Objective(s):

 TSWBAT: describe the characteristics of different kinds of two-dimensional geometric shapes

Key Vocabulary	Supplementary Materials
1. triangle (right, equilateral, isosceles, scalene), quadrilateral, trapezoid, parallelogram, rectangle, rhombus, square, pentagon, hexagon, octagon, 2. angle (acute, obtuse), proportion, congruence, similar, area, perimeter 3. Formula for Area: A=sxs (square), A=lxw (rectangle), A=bxh (parallelogram), A=1/2 x bh (triangle), A=3.14 x r x r (circle). Formula for Perimeter: P= 4 x side (square), P= 2 x l + 2 x w, P= s1 + s2 + s3 (square). Formula for Circumference of a circle= 3.14 x d (circle) 4. Pythagorean Relationship= a2 + b2 = c2, (a and be are legs and c the hypotenuse of a right angle)	Longman Math (Pearson, 2005). Twister Board (shower curtain and markers. Shoe box with card board figures.

SIOP Features

Preparation	Scaffolding	Grouping Options
☒ Adaptation of Content	☒ Modeling	☒ Whole class
☒ Links to Background	☒ Guided practice	☒ Small groups
☒ Links to Past Learning	☒ Independent practice	☒ Partners
☒ Strategies incorporated	☒ Comprehensible input	☒ Independent
Integration of Processes	**Application**	**Assessment**
☒ Reading	☒ Hands-on	☒ Individual
☒ Writing	☒ Meaningful	☒ Group
☒ Speaking	☒ Linked to objectives	☒ Written
☒ Listening	☒ Promotes engagement	☒ Oral

Lesson Sequence

BUILDING BACKGROUND

 Some of the shapes that dominate our world are squares, rectangles, triangles, circles, cubes, rectangular solids, and cylinders. To get your mind accustomed to thinking geometrically, take a visual tour of your classroom to see where these shapes are.
a.Square: student should explain how the square he found has four sides with the same length, every angle in a square is a right angle, or 90 degrees.