Lesson:  Finding Areas of Triangles, Rectangles, and Circles  Length:  50 minutes

Age or Grade Intended:  9th or 10th Grade

Academic Standards:

G.3.3:  Find and use measures of sides, perimeters, and areas of quadrilaterals.  Relate these measures to each other using formulas.

G.4.7:  Find and use measures of sides, perimeters, and areas of triangles.  Relate these measures to each other using formulas.

G.6.7:  Define, find, and use measures of circumference, arc length, and areas of circles and sectors.  Use these measures to solve problems.

Performance Objectives:

Given a previous lesson on finding the perimeter of rectangles, triangles, and circles, the students will complete review problems covering those topics with 100% accuracy.

Given examples of how to find the area of rectangles, triangles, and circles, groups of students will solve problems corresponding to a hands-on activity covering those topics with 90% accuracy.

Given examples and a hands-on group activity covering how to find the area of rectangles, triangles, and circles, the students will solve problems together over those topics with 100% accuracy.

Advanced Preparation by Teacher:

Create and make copies of handouts

Create shapes to be used for hands-on activity

Obtain enough rulers to let each group use one

Write agenda on the chalkboard
**Procedure:**

**Introduction:**

We will begin by having the students complete some bell work problems over the previous day’s lesson which was the perimeter of triangles, rectangles, and circles (Bloom’s Knowledge). After a few minutes, we will discuss the solutions to the bell work problems. Then we will simultaneously go over the agenda written on the chalkboard and distribute the handouts for the day’s lesson (Gardner’s Visual Spatial).

**Step-by-Step Plan:**

1. Using the handouts as a guide, ask for student assistance while working through examples of how to find the area of triangles, rectangles, and circles (Bloom’s Knowledge).

2. Check to see if the students have any further questions regarding the examples.

3. Divide the students into groups without allowing them to pick their own groups.

4. Give each group a set of shapes and a ruler.

5. Ask each group to compute the areas of the shapes provided (Bloom’s Application, Gardner’s Interpersonal).

6. Discuss the solutions to the hands-on activity.

7. Ask the students for their opinions about the effectiveness of the hands-on activity (Bloom’s Evaluation).

8. Check to see if the students have any further questions regarding the material.

**Closure:**

Time permitting, we will play a review basketball game. We will divide the class into two teams and alternate asking the teams a question from the day’s lesson (Bloom’s Knowledge). The team can work on the question as a group and then one person can answer (Gardner’s Interpersonal). If the answer is right, then one person from the team is chosen to shoot a basket for an extra possible point (Gardner’s Bodily Kinesthetic). After playing the game, we will have a quick general review of the day’s material and preview the next day’s topic.
Adaptations/Enrichment: (Learning Disabilities)

Agenda written on chalkboard to serve as outline

Placing the students in groups of our choosing to make sure LD students are not isolated

Hands-on activity to get students involved

Handouts to help students recognize the essential information

Self-Reflection: