Title: Geometric Design

Subject Area: Art/Math

Grade Level: 5th Grade

Materials:

11'X17' white paper
pencils
rulers
erasers
compasses
protractors
crayons
instruction packets

NYS Standards:

1. Students will create an geometric design according to their instruction packets

2. Students will be able to use and manipulate crayons as well as rules and compasses in a variety of ways

3. Students will be able to analyze each other's work as well as their own, and understand basic vocabulary regarding shape such as geometric, organic, positive and negative space.

4. Students will have a reinforced knowledge about how to use mathematical tools and how math and art can be intertwined.

Motivation:

Begin by telling students that today's class is going to be a little different. Tell students that today in class, we will be doing some math in art. Ask students how they think math and art can be combined, since they are two different subjects. Explain to students that shapes are an important element in creating art and also an important element in geometry (students should be studying geometry in the classroom for the duration of this lesson). Ask students how they create different shapes in their math class such as how do they make a square, circle, triangle, etc. Tell students that it's the same way artist make shapes in their artwork. Show students various geometric design images from artist (such as Kandinsky and Mondrian) and have students identify the measuring tool that created each shape and how it was done.

Procedure:

1. Have students settle in their seats..

2. Explain the motivation for the project.

3. Explain to the students that will create a geometric design using measuring tools and following the directions on their instruction packets.

4. Demonstrate to the students a basic overview each tool and how they are to be used for the project

5. Ask students in they have any questions thus far, or do not fully understand the assignment.

6. Hand out paper and rulers to students.

7. Have students follow their instruction packets: Students make 1 inch dot grid on their paper, students create 2 different size squares, 3 different size circles, 1 parallelogram, 3 specific types of triangles, and 2 free form shapes. Each packets consists of questions for the students to answer as well.

8. Once finished have students color in their shapes using crayons, using any colors they like.

9. Have students outline all shapes in black crayon.

10. Have the students analyze each other's work by comparing and contrasting the various geometric designs (how shapes were placed, how positive and negative space was utilized, how the measuring tools were utilized, etc.).

11. Before students leave the classroom, ask a few final questions for closure such as Next time you are in math class are you going to look at math differently? Are you going to make the connection of shapes in math and shapes in art? Etc.

Evaluation:

Evaluation will be based on participation with all steps of the project, effort put into the project, the completion of the drawing using the measuring tools correctly, and the ability to assess their own work as well as those of their peers.