Geometric Shapes and Structures Lesson Plan

Content Standards

MA.2.4.5 2000 Recognize geometric shapes and structures in the environment and specify their locations.

VA.2.7.1 2008 Identify and apply elements (line, shape, form, texture, color, and space) and principles (repetition, variety, rhythm, proportion) in artwork.

Learning Objectives

- Be able to recognize geometric shapes/structures such as squares, rectangles, circles, triangles, etc. in the artwork.
- Be able to specify locations of shapes and structures in the artwork.
- Be able to identify and apply elements of art such as line, shape, and form in the artwork.
- Be able to identify and apply principles of art such as repetition, variety, and rhythm.

Description of the Core Content Lesson

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I will want the students to be able to recognize geometric shapes and structures. I will also want the students to be able to specify the location of these shapes and structures. Students will get to look at various famous paintings and identify the shapes and structures they see. Not only will the students identify these shapes and structures, they will also specify where the shapes are in the painting (example: "there is a square in the bottom left corner of the painting", or "there is a circle near the woman's hand".)

What I will teach

While we look at various famous paintings, I will point out shapes or structures, as well as answer questions such as, "does this count as a square?", or "is this a triangle or a cone?". I will be sure to be specific when saying *where* the shape is located on the painting. I will also ask students to describe *where* the shape is in relation to other things in the painting.

Steps for how I will introduce the lesson

This is a lesson that should only be done once students are already familiar with geometric shapes and structures. It's not necessarily a lesson for *learning* shapes in general, it's more of a lesson to review shapes and structures, and be able to recognize them in places they're not used to seeing them. However, my first step would be:

1. Review geometric shapes and structures.

- 2. Review descriptive words that will help students be able to specify the location of the shapes in the painting.
- 3. Lesson will take place in a computer lab, so next students will pull up an image of a famous work of art.
- 4. Students will identify geometric shapes and structures in the work of art.
- 5. Students will specify the location of these geometric shapes and structures.

Resources I will use

- Pictures of different geometric shapes
- Models of actual geometric figures such as cones, rectangular prism, and cube.
- computer

Description of the Visual Activity

For the visual activity, students will create geometric shapes and structures with pipe cleaners based off of the painting they looked at. Once they make their shapes and structures, they will identify and apply elements (line, shape, form, texture, color, and space) and principles (repetition, variety, rhythm, proportion) that were used in their three dimensional artwork.

Integration Rationale

I believe that by doing this visual activity, the math standard and visual art standard I have chosen will go together smoothly. Students will make geometric shapes and structures, and that can be anything from making two dimensional shapes such as squares and circles, to making three dimensional structures such as houses, which would include and rectangular prism and a triangular prism for the roof. Once their shapes and structures and completed, they will be able to apply the visual art standard to what they made. They can identify elements of what they made, such as the shape, texture and color of their structure. They can also identify principles that they used when making their structure, such as the proportion and any repetition in their structures.

Rubric

Assessment categories	3	2	1
Effort	Demonstrates that an appropriate amount of time has been put into the project. Student took their time and put in hard work.	Student may have rushed through the project somewhat. Could have put more work into the project.	Student put minimal time and work into the project. Project was done in a rush.
Craftsmanship	Student worked well with the materials and tried their best with the materials provided, even if they were not already familiar with	Student could have tried harder to use the materials available to them to the best of the material's potential.	Student did not make good use of the materials provided; did not try to receive help or instruction if they were not familiar with

	them.		the materials.
Creativity	Student was thoughtful and original with their creation.	Student could have produced a more original work if more thought was put into it.	Student did not demonstrate much creativity; preferred to make their work similar to others, or "the norm" as opposed to thinking about an original work to make.
Mastery of content	Through the project, student showed complete mastery of geometric shapes and structures; was able to recognize many of the shapes in the artwork, and produce other shapes in their own artwork.	Student showed some knowledge of geometric shapes and structures in their completed project, but still has not mastered knowing all the various shapes and structures.	Student did not seem to grasp the content that was supposed to be incorporated in the project. May have completed a project, but was not able to identify and geometric shapes or structures.