Secondary Substitute Lesson Plan

Lesson: The Patterns of Art - Repeating Geometric Shapes

Subject: Art/Geometry/Humanities **Grades:** 6 – 12 **Date:**

Objectives:

Students will study sculptures from the Nasher collection that are constructed of repeated geometric patterns.

Students will design artwork by repeating a simple geometric shape.

Choose between a teacher-directed lesson or student-paced independent lesson.

- Teacher-led with one single monitor for the class to view simultaneously. Teacher leads discussions and the class moves through all activities together. If using this option, use the digital lesson plan to follow digital links on your class screen. Only give each student one printed activity worksheet per sculpture.
- Student-paced. Each student (or small group of students) has access to their own computer and moves through the activities at their own speed. If using this option, provide each student digital access to this lesson plan sheet.

Materials/Preparation:

1. Students need these supplies:
    - Pencil and eraser
    - Several sheets of blank paper (Optional: 1 sheet of thicker board)
    - scissors
    - Straight edge (ruler, edge of book, edge of clipboard, etc.)
    - Printed Activity Worksheet for each sculpture
2. Students need to be seated at a desk or have a clipboard or other flat surface to write on.
3. Students need one printed worksheet for each sculpture.

Instruction Outline:

Choose your sculptures from the following four options. You may complete them in any order.

Each sculpture you choose will take 10-15 minutes, which includes three stages:

1. Studying a photo of the image and hearing/reading a brief **introduction**
2. Watching a **video** about that sculpture
3. Creating an art activity using the printed **worksheet**.

TEKS:

- Middle School Art 117c: 1, 2, 4;
- High School Art 117.52c: a, b, c;

Artwork 1: *Linear Construction in Space, No. 1* by Naum Gabo

1. **Intro:** Click to view a still photo and description of *Linear Construction in Space, No. 1* on the Nasher website: https://tinyurl.com/u8xs552a

   Discuss with students: Can you define the geometry term "line"? One definition is that a line is the shortest, straightest distance between any two points. Do you think it's possible to that draw a curved shape using only using straight lines? It is! In this sculpture, artist Naum Gabo created a curved, three-dimensional shape using only straight lines. Instead of drawing, he made his straight lines with a clear monofilament. Can you see how he placed each line by making a tiny groove in the plexi-glass frame? Each line is perfectly straight, yet it creates a soft, curving empty space in the center. There are so many lines in this sculpture that they are impossible to count. How many lines do you think there are?

2. **Watch this video:** https://youtu.be/wKMCmJNQCro (3 minutes long)
   "Linear Construction in Space No. 1 by Naum Gabo: Build Your Own Tour (Nasher Sculpture Center)"

   The activity at the end of the video can be used as an optional extension exercise

3. **Print this activity sheet:**

   Middle School Activity Sheet Gabo: https://tinyurl.com/bdzk5umk

   High School Activity Sheet: https://tinyurl.com/2p3rcefu

Artwork 2: *Constructed Head No. 2, 1916 (enlargement 1975)* by Naum Gabo

1. **Intro:** Click to view a still photo and description of *Constructed Head No. 2* on the Nasher website: https://tinyurl.com/zk9sn4vb

   Discuss with students: How can you use something flat to create something three-dimensional? Look at this sculpture carefully. It is constructed almost entirely of flat sheets of steel, yet it creates a three-dimensional human form. Imagine that you could take this sculpture apart. Sketch the shapes of some of the pieces. Can you find 3 places in the sculpture where the steel sheet is no longer flat? (Hint: It's easier to find these while watching the video in the next step.)
   (Answer: The top of the person's right eye and the lower section of the person's right and left shoulders are curved rather than flat.)

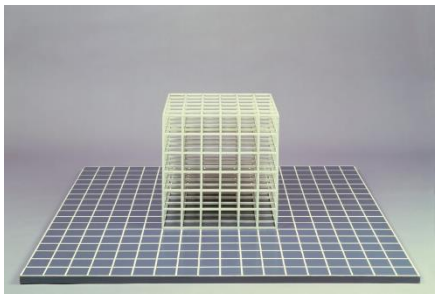
2. **Watch this video:** https://youtu.be/ZqNhdz5gfWM (2 minutes)
   "Naum Gabo Head No. 2 (Tate Liverpool)"

   This video features another sculpture Gabo constructed in the same style with different materials.

3. **Print this activity sheet for all grade levels:** https://tinyurl.com/2s393dy8

   Challenge older students to add more shapes to make their sculpture more complex, resembling Naum Gabo's *Constructed Head No. 2.* They can do this using slot construction techniques, which are explained in this video: https://www.youtube.com/watch?v=PNRzaiolUp8. If available, use cardboard to create a sturdier sculpture.

Artwork 3: *Modular Cube/Base* by Sol LeWitt



1. **Intro:** Click to view a still photo and description of *Modular Cube/Base* on the Nasher website: https://tinyurl.com/yckzrjen

   Discuss with students: Artist Sol LeWitt was known for a type of art called "Conceptual Art." In many cases, LeWitt didn't actually construct or fabricate his sculptures and drawings. Instead, he invented them and wrote detailed directions on how to make them. He let other people actually create his artworks.
   What do you think about this idea? You will create conceptual art today.

2. **Watch this video:** https://youtu.be/kdK3AQR8oME (3:30 minutes)
   "Modular Cube/Base by Sol LeWitt: Build Your Own Tour (Nasher Sculpture Center)"

3. **Print the activity sheet about Conceptual Art**

   Middle School:

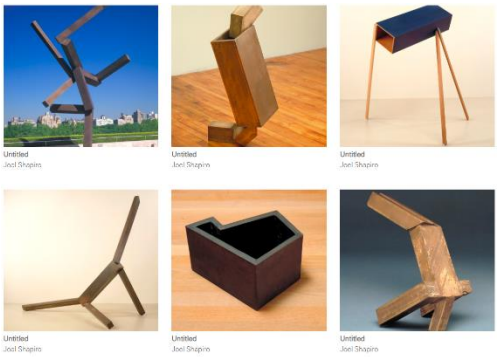
   - Watch this video describing Conceptual Art: https://youtu.be/wnpn2NmZmIY (1 minute)
     "What is Conceptual Art? (Tate Kids)"
   - Print this activity sheet: https://tinyurl.com/38nzy9ns

   High School:

   Print this worksheet https://tinyurl.com/s8y6vy3d

Extension activity: Watch this video about sculpting with metal (4 minutes)
https://youtu.be/7-kqFqCiW_g
"Materials and Process: Steel (Nasher Sculpture Center)"

Artwork 4: Untitled Sculptures by Joel Shapiro



1. **Intro:** Click to view images of several sculptures by Joel Shapiro from the Nasher Collection on the Nasher website: https://tinyurl.com/2m6yk8yn

   Discuss with students: Shapiro's playful sculptures seem to have no sense of gravity. When Shapiro has an idea for a sculpture, he first ties, nails, and glues pieces of wood together. Then he may make a larger version using a metal called bronze. Joel Shapiro's sculpture repeats simple geometric shapes and forms. What is the difference between a form and a shape? A form is a shape in 3D. For example, the square shape becomes a 3D cube form. The circle shape becomes a 3D sphere form. Look at these sculptures by Joel Shapiro from the Nasher Collection. What shapes and forms do you see? How do his shapes seem carefully balanced?

2. **Watch this video** https://youtu.be/tAzXxJOajak (3 minutes).
   "Joel Shapiro On His Seoul Exhibition (Pace Gallery)"

   Elementary: Turn off the sound and ask these questions as you watch:

   - What do these shapes remind you of?
   - Not all of the sculptures are sitting on the floor. Where else do you see them?
   - What colors does Shapiro use? What color would you use?
   - Notice the shadows made by the artworks.

   Secondary: Use the sound.

   - If older students want a deeper dive, you can also show this video: https://youtu.be/bL0ayWRJx_A (9 minutes)
     "Joel Shapiro (The Artist Profile Archive)"

3. **Print this activity sheet:** Shapiro All Grades Activity https://tinyurl.com/23tej93u