

# Classroom Activity

## Symmetry in Architecture

<b>Essential Questions</b>	What is bilateral symmetry? How can we create drawings of buildings that are symmetrical?
<b>Grades</b>	PK–3 and SDC
<b>Time</b>	One class period
<b>Art Concepts</b>	Bilateral symmetry, lines, shapes, vertical, folding, tracing, reverse, rubbing/printing, pyramid, architecture
<b>Materials</b>	White drawing paper, cardboard rectangles in two sizes (3 × 4 in. and 3 × 5 in.), black oil pastels, large round kindergarten pencils, colored oil pastels, watercolor paints, cups, water, brushes, paper towels
<b>Talking About Art</b>	<p>Teotihuacan is an ancient city in central Mexico that is renowned for its monumental pyramids, some of which are as big as the pyramids in Egypt. Let's look at photographs of buildings at Teotihuacan together. What kinds of shapes and lines do you see? What are some words you would use to describe the buildings? Do the buildings have windows? What do you think the buildings are made out of?</p> <p>The buildings at Teotihuacan are examples of <b>bilateral symmetry</b>. Have you heard the word “symmetry” before? What does it make you think of? Bilateral symmetry means that something is the same on both sides (right and left). There are many examples of bilateral symmetry in nature. Can you think of anything in nature that is symmetrical? I am thinking of a very colorful insect with wings (butterflies and/or dragonflies). If we were to draw a <b>vertical</b> (positioned up and down rather than from side to side) line down the middle of a butterfly, for example, we would see that both sides of the insect match/are symmetrical to one another.</p> <p>Look at the image of <i>Feathered Serpent Head</i> (included in the curriculum packet). Is the head symmetrical? What do you think the serpent's body might look like? What features of the serpent's head stand out to you the most? Can you find serpent heads on the Feathered Serpent Pyramid (see image in curriculum packet)? Why do you think the pyramid is decorated with serpents?</p>
<b>Making Art</b>	<p>We are going to create our own symmetrical pyramids using paper, cardboard, and oil pastels.</p> <ol style="list-style-type: none"><li>1. Fold a sheet of paper in half horizontally. Keep it folded for now.</li><li>2. Line up two cardboard rectangles on your paper:<ol style="list-style-type: none"><li>a. The wide, bottom edge of the larger rectangle (3 x 5 inches) should be lined up with the bottom edge of the paper.</li><li>b. One of the short sides of the rectangle should be lined up with the folded edge of the paper (see image A below).</li><li>c. Place the smaller rectangle (3 x 4 inches) on top of the larger rectangle. Line up one of the short sides of the rectangle with the folded edge of the paper (see image).</li></ol></li><li>3. Trace the outside edges of the cardboard rectangles on your paper with a black oil pastel, then remove the cardboard.</li></ol>

## Making Art (cont.)

- Next, we are going to draw serpents inside the black lines (see image B). You can use the serpent head we looked at earlier as inspiration or make up your own.
- When you are finished, put your oil pastel down and unfold your paper. Then, re-fold the paper so that the drawing is on the inside.
- Rub the folded paper with a pencil turned on its side like a rolling pin.
- Unfold the paper again. Did the black lines of your drawing transfer to the other side of the paper?
- Go over the transferred lines with a black oil pastel so that all the lines are equally black.
- Now you can color in your building and the serpents. Try to make them match on both sides (e.g. if your serpent's eyes are green on the left side of the drawing, they should also be green on the right side).

### Tips

Advanced students can be given a greater number of rectangles in different sizes to make the assignment more challenging. They can also practice drawing the pyramid's different levels using a ruler and/or find the total area of their pyramid using multiplication.

### Reflection

Are all or some parts of your drawing symmetrical? Can you show or explain how the individual parts are symmetrical?

### Curriculum Connections

Preschool Learning Foundations: Mathematics, Geometry  
1.1 Identify simple two-dimensional shapes, such as a circle and square. 1.2 Combine different shapes to create a picture or design.

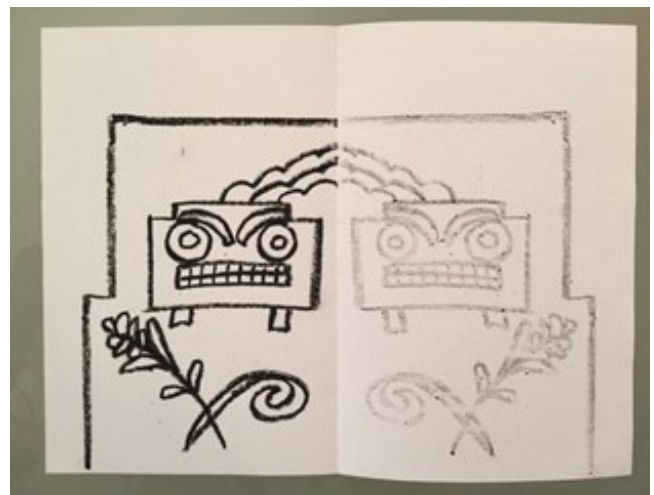
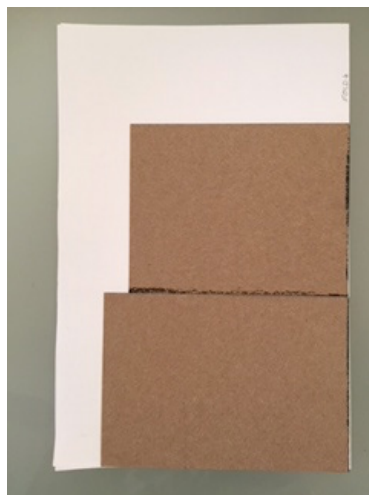
CCSS.MATH.GEOMETRY.K

K.G.1 Describe objects in the environment using names of shapes. K.G.2 Correctly name shapes regardless of their orientations or overall size.

CCSS.MATH.OPERATIONS AND ALGEBRAIC THINKING.3

3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division. By the end of Grade 3, know from memory all products of two one-digit numbers.

### Images



# Classroom Activity

## Storytelling Vessels

<b>Essential Questions</b>	How can we make clay vessels/containers that tell stories through images and colors?
<b>Grades</b>	PK–3 and SDC
<b>Time</b>	1–2 class periods
<b>Art Concepts</b>	Clay, vessel, tripod, hand-building, shapes, structure, base/foundation, storytelling
<b>Materials</b>	Red self-hardening clay, pieces of cardboard (to use as bases), tools for embossing (straws, bottle caps, plastic forks, etc.), acrylic paints, small and medium sized paintbrushes, water bowls, cups for paint
<b>Talking About Art</b>	<p>We can study clay <b>tripod</b> vessels/containers (tripods are objects that stand or rest on three legs) made by artists at Teotihuacan, an ancient city in present-day Mexico, to learn about how they were made, decorated, and used. <i>Tripod Vessel Depicting Blowgun Hunter</i> (400–650 CE), included in the curriculum packet, was made almost 2,000 years ago. Tripod vessels like this one were often given as gifts or traded with other people.</p> <p>What shape is this clay container? How many legs does it have? Look closely at the artwork painted on it. What do you see? What colors did the artist use? Can you find a human face on the vessel? Can you find the rest of the person’s body? What do you think the figure painted on the vessel is doing? What is the figure wearing and holding? Why do you think the artist painted this particular picture?</p> <p>Some people believe that the painting on <i>Tripod Vessel</i> depicts a story that was important to the people who lived in Teotihuacan because it described the creation of humankind. The story is about a huge, magical bird that lived in the sky before humans existed.</p>
<b>Making Art</b>	<p>We are going to create our own containers out of clay and decorate them with stories. What will your vessel look like? What story do you want to paint on its surface? What colors will you use? Would you like to give your vessel to someone you know as a gift? Who will you give it to?</p> <p>Begin with a slab of self-hardening clay on a piece of cardboard. There are many different ways to form a container with clay:</p> <ul style="list-style-type: none"><li>• You can push and pinch the sides up with your fingers</li><li>• You can roll your clay into a ball and push in the center</li></ul> <p>After you have created your container, you can decorate it with paint. You can also use a pencil to carve drawings into the clay.</p> <p><b>Tips for PK and Special Education Classes</b></p> <p>Students can roll clay balls to make legs or omit the legs altogether. Instead of painting, containers can be decorated by embossing with the ends of straws or markers, a dull pencil, spoons, forks, plastic lids, etc.</p>

**Making Art** (cont.)

Teachers, you can also provide students with a flat, rectangular piece of clay to decorate, then help them stand it up and connect the two short edges (scoring them first) to form a cylinder. A circular clay base can also be added by scoring. Scoring involves making crisscross marks with a toothpick or other small tool on the two pieces of clay you want to stick together, then pressing the two pieces together with your hands.

**Reflection**

Display your sculptures around the room and discuss them together. How did you build your container? How did you decorate it? What story did you represent?

**Curriculum Connections**

NCAS. Visual Arts.K-2

CR.1.K Engage in exploration and imaginative play with materials.

CR.2.2 Experiment with various materials and tools to explore personal interests in a work of art or design.

Preschool Learning Foundations: Language and Literacy

Language Use and Conventions 1.4 Use language to construct short narratives that are real or fictional.

Vocabulary 2.1 Understand and use accepted words for objects, actions, and attributes encountered frequently in both real and symbolic contexts.

# Classroom Activity

## Art, Symbols, and Nature

<b>Essential Questions</b>	How can you use symbols to make connections between art and nature?
<b>Grades</b>	3–8
<b>Time</b>	1–2 class periods
<b>Art Concepts</b>	Drawing, painting, symbols, color, line, imagination, nature, environment
<b>Materials</b>	Watercolor paper, watercolor paints, pencils, black markers in varying thicknesses, cups, water, brushes, paper towels
<b>Talking About Art</b>	<p>Frequently depicted in artwork at the ancient Mexican city of Teotihuacan, the Storm God was an important deity related to rainfall and agriculture. In <i>Mural Fragment with Storm God Impersonator</i>, some of the Storm God’s personality traits are represented using <b>symbols</b>. In art, a symbol is usually a recognizable thing (such as an animal, a plant, or an object) that stands for, or represents, something else. Symbols often represent something abstract, like a force of nature or a big idea.<sup>1</sup></p> <p>What do you notice about the Storm God in this artwork? What colors were used to paint him? What is he carrying? What do you think each of these different elements might symbolize? How do the deity’s different symbolic attributes or traits relate to his name? Let’s work together to identify other elements and forces of nature. For example, I really like trees and wind. Can we list some more? (brainstorm, chart answers).</p> <p>Now, explore an element or force of nature with the person sitting next to you (you can choose something from our brainstorm if you wish). How could you use symbols to represent your chosen element or force? Think about sights, sounds, animals, plants, colors, shapes, and personal associations. For example, with “trees” I might begin with the colors green and brown, fruit, roots, and birds. “Wind” causes me to think of the color gray, scarves, and seeds being carried to new places.</p>
<b>Making Art</b>	Choose a natural feature (it can be the one you just discussed with your partner, or one from the list we created together, or a different one). Come up with a few symbols that represent how you see or experience it. Then draw the symbols in pencil on your paper. Next, trace over your drawing with a black marker. Finally, paint your drawing, choosing colors that also have symbolic importance.
	<p><b>Tips</b></p> <p>Older students can choose to create a character (like the Storm God) that embodies their chosen natural force or feature. 7th grade students can study this artwork while learning about Mesoamerican artistic achievements and agricultural systems.</p>
<b>Reflection</b>	Leave your artwork on the tables and we will have a gallery walk. Then, reflect on the art-making experience and respond to the following questions in oral form: How did you use art to communicate about nature and the environment today? How was

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<sup>1</sup> “Symbols in Art,” Smithsonian Education, <http://www.smithsonianeducation.org/idealabs/myths/symbolsinart/>.

**Reflection** (cont.) this experience different from or similar to writing and/or talking about nature? If you were to do this assignment again, what element or force of nature would you be interested in exploring?

**Curriculum  
Connections**

CCSS.ELA-LITERACY.RL.3.4-5.4

3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language. 4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). 5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.

History-Social Science Content Standards for California Public Schools

7.7 Students compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations. 7.7.4. Describe the artistic and oral traditions and architecture in the three civilizations. 7.7.5. Describe the Meso-American achievements in astronomy and mathematics, including the development of the calendar and the Meso-American knowledge of seasonal changes to the civilizations' agricultural systems.

## **Classroom Activity**

### ***El Templo Mágico (The Magical Temple)***

<b>Essential Questions</b>	What is a ritual? What kinds of rituals do you participate in? How did the Teotihuacanos create special artworks to use during rituals?
<b>Grades</b>	3–12
<b>Time</b>	One class period
<b>Art Concepts</b>	<i>Incensarios</i> , <i>adornos</i> , symbolism, ritual, pattern, balance, line, relief, symmetry, asymmetry, complementary colors, composition, deity, ceramics
<b>Materials</b>	8 ½ × 11 in. multi-colored and white cardstock paper, cardstock scrapbooking papers in assorted patterns, black markers, scissors, pencils, Elmer’s glue, glue sticks, motif templates
<b>Talking About Art</b>	<p>Ceramic <b><i>incensarios</i></b> (incense burners) were often used in religious rituals during Teotihuacan’s Classic period (200–650 C.E.). A ritual is a formal ceremony or series of acts done in a particular situation and in the same way each time.</p> <p>Incense burners typically consist of an elaborate conical lid, chimney, hourglass-shaped base, and temple-like armature. Mold-made clay <b><i>adornos</i></b> (adornments) decorate the surfaces of incense burners and represent objects such as fruits, circular ear flares, shells, butterflies, and quatrefoil flowers.</p> <p>The central figure on the <i>Incensario</i> included in the curriculum packet might represent a warrior (warriors were highly celebrated at Teotihuacan), as suggested by the butterfly nose plaque, which was a typical element of military costumes. Butterflies were important to the Teotihuacanos and could symbolize transformation, renewal, death, war, and fire.</p> <p>Describe the human figure represented at the center of the incense burner. How would you describe the shapes or objects surrounding the figure? What shapes or objects do you recognize?</p> <p>What type of ritual or ceremony do you think the incense burner was used for? How do you think it was used? How might participants in a ritual involving this incense burner have related to the figure at the center? How can the burner’s size, shape, and adornments help you to discover its function and meaning? Are there any animals in your community (like butterflies at Teotihuacan) that are symbolic? For example, dogs are often associated with loyalty.</p>
<b>Making Art</b>	<p>Think about different rituals in which you participate (family, community, religious, etc.). Respond to the following questions to prompt reflection and elicit memories: What types of rituals do you perform daily? What kinds of objects do you use while you perform or partake in these rituals? How do daily rituals differ from those performed for special occasions or ceremonies (birthdays, weddings, graduation)? How do special props, clothing, stage sets, foods, scents, or music affect the meaning, feeling, and actions of rituals?</p> <p>Merging ancient Teotihuacan iconography with contemporary paper sculpting techniques, you will create a 3D <i>incensario</i> using motifs inspired by the example in the curriculum packet.</p>

## Making Art (cont.)

### Tips for Teachers

Demonstrate a range of paper-sculpting techniques before students begin the art-making activity (paper crimping, cones, fringe, pop-out, folding, spirals, cylinders, controlled tearing, crumpling). Then, set standards for the students' paper *incensarios* and distribute materials to each table.

1. Select a warrior template and trace it with a pencil onto a solid color or patterned sheet of cardstock.
  - a. You can choose to glue the figure flat onto a white sheet of cardstock or experiment with a paper sculpting technique before gluing (e.g. fold the figure in half and create a pop-out form).
2. Select an animal figure template to add to your composition and trace it onto a piece of colored cardstock.
  - a. You can use the animal figure once if you want to place it in the center of the composition to achieve a symmetrical effect (see Sample A and Sample B below). You can also make multiple copies if you want to create an asymmetrical effect (see Sample C below).
3. Use a paper-sculpting technique to transform the animal figure/s (e.g. folding, pop out, fringe).
4. Glue the animal figures onto the warrior or onto the background paper.
5. Select at least two more colored papers for the *adornos* that will surround the warrior. For best results, choose complementary colors: red/green, yellow/purple, and blue/orange.
6. To create multiple *adornos*, fold a sheet of paper in half, then trace the shape and cut through both layers of paper.
7. Experiment with the paper-sculpting techniques that you learned at the beginning of the lesson. Be creative!
8. Arrange the *adornos* around your central figure and glue them down.

### Reflection

Participate in an in-class discussion to reflect on the art-making experience. Respond to the following prompts in oral form:

Describe your *incensario's* different elements (shapes, colors, textures, composition, *adornos*, animals) and your reasons for selecting/creating each one. What personal meanings does your *incensario* have? How would you like to display or use it at home or in the classroom? How is your *incensario* similar to the example we viewed from Teotihuacan?

### Lesson Add-On

Ask students to sit in a circle before beginning the art-making activity. Turn down the lights and play recordings of pre-Hispanic songs out loud. Ask students to imagine they are in the ancient city of Teotihuacan and to visualize what it might look like, what kinds of people might live there, and what type of ceremony could be taking place during the time the music is playing (5–10 minutes). Invite volunteers to share their impressions.

### Curriculum Connections

CCSS.VAPA.3-5

3.1.5 Identify and describe elements of art in works of art, emphasizing line, color, shape/form, texture, space, and value.

4.1.5 Describe and analyze the elements of art (e.g., color, shape/form, line, texture, space, value), emphasizing form, as they are used in works of art and found in the environment. 4.2.3 Use additive and subtractive processes in making simple sculptural forms. 4.2.8 Use complementary colors in an original composition to show contrast and emphasis. 4.3.1 Describe how art plays a role in reflecting life. 4.4.3



**Curriculum Connections**  
(cont.)

Develop and use specific criteria as individuals and in groups to assess works of art.  
5.3.1 View selected works of art from a major culture and observe changes in materials and styles over a period of time.

**Images**



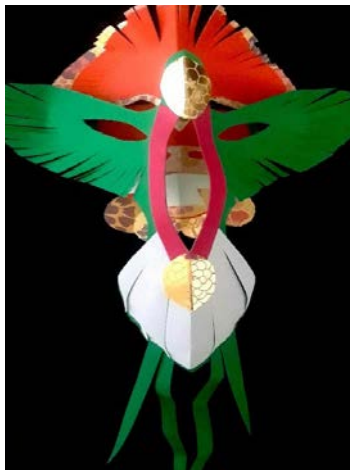
Paper-sculpting Techniques



Sample A



Sample C



Sample B