

**by Mary Erickson, Ph.D.**  
**with Arizona art teachers Nancy Feiring and Roxie May-Thayer**

*Public Art* provides activities that teachers or parents of elementary children and secondary students can use

- to prepare children to explore public art at the Tempe Center for the Arts (TCA),
- to focus their attention during a visit and
- to plan an artwork for a specific place after their visit.

[Teacher/Parent Introduction \(PDF\)](#)

## **Lessons**

[Lesson One: Art for Specific Places \(PDF\)](#)

[Lesson Two: Tempe Center for the Arts Visit \(PDF\)](#)

[Lesson Three: Modular Madness for Elementary Students \(PDF\)](#)

[Lesson Three: Space Invaders for Secondary Students \(PDF\)](#)

## **Resources**

[Public Art in Tempe PowerPoint](#)

[Public Art at the Tempe Center for the Arts PowerPoint](#)

[Exploring Public Art at the Tempe Center for the Arts \(PDF\)](#)

[Public Art Label \(PDF\)](#)

[Sample Modular Madness PowerPoint](#)

[Sample Space Invaders Sculpture PowerPoint](#)

[Exploring with Questor worksheet](#)

[Questor's Questions about Public Art](#)

## **Web resources**

[Computer and Digital Projector or SmartBoard](#)

[Public Art Self Tour](#)

[Exploring with Questor](#)

[Questor's Questions](#)

[Mary Erickson Ventures](#)

## **Credits**

Nancy Feiring is the primary author of *Modular Madness*.

Roxie May-Thayer is the primary author of *Space Invaders*.

Photos courtesy of the city of Tempe, Architekton and Mary Erickson.

## Parent/Teacher Introduction

### Themes

*Public Art at the Tempe Center for the Arts* is based on two themes.

- *Theme in Life*: We all know about places that have special meaning.
- *Theme in Art*: Public artworks can make places more special.

### Key Questions

Lessons approach the themes through two key questions.

- What does the artwork say about the place for which it was designed?
- What repetition and variation can be seen in the artwork?

### Connections

Broad themes and key questions not only give focus to specific activities but also provide connections that students can use to go beyond those activities.

The broad *theme in art* can be an entry point to explore art from many cultures and times. The broad *theme in life* connects art to widely-held human concerns.

Similarly, the *key questions* can guide inquiry into a great many artworks, not only those introduced in the lesson.

### Adaptations and Extensions

The lessons in this unit are written for both elementary and secondary students. You may choose from two different versions of lesson three. “Modular Madness” is appropriate for elementary (or older) students. “Space Invaders” is appropriate for secondary students.

Students vary greatly in maturity and prior experience. Of course, as you plan to implement specific activities, you will want to make adjustments to best suit the abilities and interests of your students.

If a trip to the TCA is not possible for your students, the “Public Art at the Tempe Center for the Arts” Power Point includes numerous photographs of each work.

### Estimated Time

Preview and Lesson One = 80-100 minutes

Lesson Two = Field Trip

Lesson Three/Modular Madness = 200-250 minutes

Lesson Three/Space Invaders = 150-200

## Lesson One: Art for Specific Places

### Objectives

1. Students explain how places can have special meaning for a community.
2. Students analyze repetition and variation in art.

### Arizona Visual Arts Standards

RELATE: Concept 3: Elements and Principles

PO 001, 102, 202 and 301: Identify visual/tactile characteristics of artworks from a diverse culture, different place or time.

RELATE: Concept 4: Meanings or Purposes

PO 102, 202 and 302: Discuss themes in artworks that illustrate common human experiences that transcend culture, time and place.

RELATE: Concept 4: Meanings or Purposes

PO 203 and 303: Use contextual information to investigate and interpret meanings and purposes in artworks from the viewpoints of the cultures in which they were made.

EVALUATE: Concept 3: Art Issues and Values

PO 103, 203 and 303: Discuss reasons why people value art (e.g., sentimental, financial, religious, political and historical).

### Preparation

Preview “Public Art in Tempe” PowerPoint under “Resources,” which addresses

- History inspires public art
- Nature inspires public art
- Repetition and variation

Preview “Public Art at the Tempe Center for the Arts” PowerPoint under “Resources.” Decide when and how you will use it.

- Before visiting the TCA as a preview
- After visiting the TCA as a review
- If necessary, as an alternative to a visit to the TCA

Use the link to “Public Art Self Tour” under “Resources” to locate public artworks in the neighborhood of your school. Mark the Website addresses for quick access.

### Activities

Unit Preview: Introduce the lessons of *Public Art* unit by discussing its two themes. Introduce the theme in life (we all know about places that have special meaning) by asking students to name special places in their lives or special places they know about in their country, state, city or neighborhood.

Personal Examples

- The home of a special relative
- A special place in nature (park, tree, campsite, garden, lake, creek, etc.)
- A place where you did something special (rode a bike, sang for your friends, played a game, etc.)

#### National Examples

- Gettysburg Battlefield in Pennsylvania
- Everglades in Florida
- Disneyland in California

#### Arizona Examples

- OK Corral in Tucson
- Grand Canyon
- Chase Field Ballpark

#### Tempe Examples

- Niels Petersen House
- Hayden Butte (“A” Mountain)
- Grady Gammage Auditorium

Introduce the *theme in art* (Public artworks can make places more special) by asking students to identify and describe any artwork they may have seen in a public place, for example, the huge jackrabbit sculptures in downtown Tempe, a sculpture in a neighborhood park, a mural on a city bus, a bicycle storage area or an artist-designed bus stop. Display photographs of public artworks near your school. (See “Resources” for a link to “Public Art Self Tour.”) Explain that students will be exploring public art at the Tempe Center for the Arts.

Explain that students will use two key questions in all three lessons.

- What does the artwork say about the place for which it was designed?
- What repetition and variation can I see?

Explain further that they will use the questions to explore public art first around the city of Tempe and then specifically at the Tempe Center for the Arts. They also will use the questions to design a public artwork of their own.

Guided Practice Inquiry: Show “Building on a River: Questor’s Tale” and distribute copies of “Exploring with Questor: Where the city of Tempe was Built” to help students reflect on the location of the city and why it has been a special place for hundreds of years. Questor is a bird who tells a story of Tempe. After each section, ask students to think about why people of that time thought Tempe’s location along the Salt River (Rio Salado) was a special place.

Definition: Write “Public Art” on the board and explain that public artworks are paintings, sculptures or other artworks that artists make for a particular place where people in the community can see them, usually at no cost. Explain that cities sometimes use public art to make a statement about a specific time, place or significant issue. Explain further that sometimes the city uses its own money from taxes to pay for public art. Also, many times, the city cooperates with other government agencies, organizations and businesses. Cities invite artists to send in ideas for new public artworks, usually designed for specific locations.

Guided Practice: Display and discuss the first two sections of “Public Art in Tempe” PowerPoint resource (“Special Place in History” and “Special Place in Nature”) to help students analyze how public artworks say something about history or nature.

Then show and discuss the last section of the “Public Art in Tempe” PowerPoint (“Repetition and Variation”) to help students identify lines, shapes, colors and textures that artists repeated in their artworks and to analyze variation in the ways the artists repeated those elements. Use the final artwork (“Greetings from Tempe”) to practice both analyzing repetition and variation and also to interpret the message of the artwork.

Transfer: Explain that students will see several public artworks when they visit the TCA. They will use the unit’s key questions to explore:

- What does the artwork say about the place for which it was designed?
- What repetition and variation can I see?

Optional: Display “Public Art at the Tempe Center for the Arts” PowerPoint as a pre-visit introduction.

### **Assessment Checklists**

1. Objective: Students explain how places can have special meaning for a community.  
\_\_\_ Student contributed to discussion of “Building on a River: Questor’s Tale” by responding to one or more questions on the “Exploring with Questor” worksheet.  
\_\_\_ Student completed the sentence: “Susan T. Gamble’s ‘Greeting from Tempe’ includes references to historical and/or natural symbols.”
2. Objective: Students analyze repetition and variation in art.  
\_\_\_ Student contributed to discussion of questions raised in the “Repetition and Variation” section of the “Public Art in Tempe” PowerPoint presentation.  
\_\_\_ Student completed the sentence: “Susan T. Gamble’s ‘Greetings from Tempe’ includes a reference to repetition and/or variation.”

### **Secondary Adaptation**

Explain to older students that “Building on a River: Questor’s Tale” gives a quick overview of Tempe delivered in a very animated tone for the benefit of more easily distracted younger students. (This explanation may be useful if students are at first distracted by the very animated delivery of the narrator on the video.)

### **Extension Activity**

Divide the class into small groups. Ask students to discuss and share their response to the following: “If you were giving advice to a city group, what things would you say are important in public artworks?” You might ask the group to develop its ideas in a poster activity. Another option is to ask students to write a short essay on the question.

### **Alternative Inquiry Activity**

Ask students individually or in groups to use “Questor’s Questions about Public Art” to explore and report on any nearby public artwork. (See “Resources” for a link to “Public Art Self Tour.”)

## Lesson Two: Tempe Center for the Arts Visit

### Objectives

1. Students analyze a public artwork's connection to place.
2. Students draw/describe repetition and variation in public art at the Tempe Center for the Arts.

### Arizona Visual Arts Standards

RELATE: Concept 3: Elements and Principles

PO 001, 102, 202 and 301: Identify visual/tactile characteristics of artworks from a diverse culture, different place or time.

RELATE: Concept 4: Meanings or Purposes

PO 102, 202 and 302: Discuss themes in artworks that illustrate common human experiences that transcend culture, time and place.

RELATE: Concept 4: Meanings or Purposes

PO 203 and 303: Use contextual information to investigate and interpret meanings and purposes in artworks from the viewpoints of the cultures in which they were made.

### Preparation

Make arrangements for field trip to the TCA

Make copies of "Exploring Public Art at the Tempe Center for the Arts" worksheet for all students.

Discuss with assigned TCA docent before the visit, if possible.

Provide the docent with a copy of "Exploring Public Art at the Tempe Center for the Arts" worksheet in advance of your trip and discuss the extent to which students might complete any or all of the worksheet at the center or whether any or all of the questions might be addressed during their tour.

### Activities

Review and Application: Distribute "Exploring Public Art at the Tempe Center of the Arts" worksheets to students and ask them to answer as many questions as they can during their tour. If writing responses on the worksheet is not practical or possible during the tour, use the worksheet to guide students in focused observation as circumstances permit. For example, you might use questions on the worksheet when students assemble or travel to the TCA or when they assemble for, or travel back, to school.

Take notes on any new information presented by the docent as well as interesting questions, observations or responses made by your students during their tour.

If the circumstances of the visit do not allow students to complete their worksheets, explain that later, in class, you will lead a discussion of discoveries they made about how the public artworks make the TCA more special and how the artists used repetition and variation.

NOTE: Each of the artists who designed public art in the TCA repeated circles in some way, though they are not so obvious in Ned Kahn's reflecting pool work. The pool bubblers randomly bubble up at different locations creating circles rippling outward. Kahn's other work in the overhead marquee at the entrance of the TCA includes more than 3,000 clear marbles illuminated by dangling mirrors hidden within the marquee. Less obvious are the circles of light sometimes visible on the ground beneath the work – depending on the time of day.

### **Assessment Checklist**

1. Objective: Students analyze a public artwork's connection to place.

Assess Sections A & B of "Public Art at the Tempe Center for the Arts Exploration" worksheet.

\_\_\_ Students identify the location of a public artwork at the TCA. (Section A)

\_\_\_ Students propose connections between the artwork and its place in history or in nature. (Section A)

\_\_\_ Students write a response to a public artwork that connects it in some way to the TCA. (Section D)

2. Objective: Students draw/describe repetition and variation in public art at the TCA.

Assess Sections C & D of "Public Art at the Tempe Center for the Arts Exploration" worksheet.

\_\_\_ Students analyze repetition of circles in a public artwork. (Section B)

\_\_\_ Students analyze variation of circles in a public artwork. (Section B)

\_\_\_ Students draw close ups that include a circle. (Section C)

\_\_\_ Students draw a variation of that circle. (Section C)

## Lesson Three: Modular Madness

“Modular Madness” is appropriate for elementary or older students. “Space Invaders,” another version of Lesson Three, is appropriate for secondary students.

### Objectives

1. Students repeat and arrange rectangles and or triangles (with size variations) to create and unify their sculpture-in-the-round.
2. Students collaborate to select a symbol or meaningful combination of colors to connect their sculptures with the place in which it is displayed.

### Arizona Visual Arts Standards

CREATE: Concept 3: Elements and Principles

PO 001 and 101: Identify and use elements (and principles) in his or her own artwork.

PO 201 and 301: Identify, select and use elements and principles to organize the composition in his or her own artwork.

CREATE: Concept 4: Meanings or Purposes

PO 101: Select and use subject matter and/or symbols in his or her own artwork.

PO 201 and 301: Explain purposeful use of subject matter, symbols and/or themes in his or her own artwork.

### Preparation

Preview “Sample Modular Madness” PowerPoint under “Resources.” Determine in advance what spaces are available to display student work, for example, bulletin boards in the classroom, halls or school offices; displays at off campus locations such as libraries, banks or community centers; and makeshift display areas where cardboard sculptures are glue-gunned to a larger cardboard surface and mounted on a wall. Depending on available time and circumstances, students could ask the school librarian or school office staff to assist in determining what school hallway options would be available. In a school with parent and community involvement, students could ask their parents about bank, store and community center options.

Plan to group students according to the available display spaces.

Make one copy of the “Public Art Label” for each group to be displayed with the finished work.

Use a paper cutter to precut recycled cardboard rectangles and triangles of various sizes.

You can dilute tempera paint and make it “string” for dripping on sculptures by adding 2-3 drops of liquid dishwashing soap to each paint container.

### Resources and Supplies

6-inch x 6-inch or 7-inch x 7-inch cardboard per student

assorted cardboard rectangles and triangles (cut on paper cutter)

glue

tempera paint

large size soft brushes



liquid dishwashing soap  
paper cups or other containers  
newspaper to cover painting surface  
purchased stamps w/inkpads (optional)

### **Activities**

**Review:** Return students' "Exploring Public Art at the Tempe Center for the Arts" worksheet." Share discoveries about repetition and variation of circles and about how public artworks make connections to place.

**Optional:** Display "Public Art at the Tempe Center for the Arts" PowerPoint as a review.

**Assignment:** Ask each student to create a cardboard sculpture that incorporates the repetition and variation of triangles and rectangles. Students will combine their individual sculptures (modules) to create a group display that mimics large-scale public art. This group display is designed to make the specific space special. For example, a classroom display might utilize school colors or mascot symbols unique to the school.

**Technical Demonstration:** Demonstrate various steps in the process as students proceed. Display "Sample Public Art Sculpture" PowerPoint to illustrate steps.

**In Process Feedback:** After students have finished gluing, group the sculptures according to display location. Ask students to clear a space and arrange their partially completed sculptures together to begin to think about how they might be best arranged. Use the following questions to guide the group to decide on a consistent decoration.

- Are there colors that are special or meaningful to the place the artwork will be displayed (school colors, company colors, personal favorites)?
- Are there symbols that are special or meaningful to the place the artwork will be displayed (school mascot, company logo, Native American symbol)?
- Will all the sculptures be painted the same or will some have some variations?

**Completion and Exhibition:** Ask students to work in groups to organize their painted individual sculptures into a group sculpture and to complete the "Public Art Label" to be displayed with the work.

Lead a group assessment guided by the following questions:

1. How did you use repetition and variation in your sculpture-in-the-round?
2. How does your sculpture connect with the place in which it is displayed?
3. How is your group display of sculptures similar to the public artworks seen at Tempe Center for the Arts?

## **Assessment Guides**

This is a high-success rate project valuable for the learning that occurs during the process. The finished product is simply a concrete reminder of what has been learned. The students' responses during the group assessment are a more reliable indication of what they have learned than their group sculptures.

### **1. Students repeat and arrange rectangles and or triangles (with size variations) to create and unify their sculpture-in-the-round.**

#### Exceeds Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculpture is effectively unified through the repetition of a shape several times as well as variations of that shape.

#### Meets Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculpture repeats a shape several times and includes variations of that shape.

#### Approaches Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculpture repeats a shape several times.

#### Fails to Meet Expectations

Students contribute to a group discussion.

### **2. Students collaborate to select a symbol or meaningful combination of colors to connect their sculptures with the place in which it is displayed.**

#### Exceeds Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their choice of paint color or application or choice of symbols shows a clear and significant connection to the sculpture's placement in the school.

#### Meets Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their choice of paint color or application or choice of symbols shows a connection to the sculpture's placement in the school.

#### Approaches Expectations

Students contribute to a group discussion (and Public Art Label) that identifies colors in their sculpture.

#### Fails to Meet Expectations

Students contribute to a group discussion.

## Lesson Three: Space Invaders

“Space Invaders” is appropriate for secondary students. “Modular Madness,” another version of Lesson Three, is appropriate for elementary or older students.

### Objectives

1. Students use repetition and variation of elements (for example, shapes, colors, forms) to create unity and create visual interest in a group sculpture.
2. Students collaborate to design and install a sculpture for a specific location.

### Arizona Visual Arts Standards

CREATE: Creative Process

PO 102, 202 and 303: Make and explain revisions in her or her own artwork.

CREATE: Concept 3: Elements and Principles

PO 001 and 101: Identify and use elements (and principles) in his or her own artwork.

PO 201 and 301: Identify, select and use elements and principles to organize the composition in his or her own artwork.

### Preparation

Preview “Sample Space Invaders” PowerPoint under “Resources.”

Select a site in the classroom or hallway to “invade” with the group sculpture. Check with administrators and/or maintenance personnel to make sure you have approval to use a “public” space.

Determine whether students will make modules individually or in small groups. Mid-way into construction, stop and share strategies about how to integrate the various ideas in the separate modules by using repetition of a certain element or elements to create unity.

### Resources and Supplies

Newspaper

White glue

Masking tape

Clear packing tape

### Optional

Assorted color paper – construction paper, tissue paper, etc.

String

Found objects

Paint

### Activities

Review: Return students’ “Exploring Public Art at the Tempe Center for the Arts” worksheet.” Share discoveries about repetition and variation of circles and about how public artworks make connections to place.

Display “Public Art at the Tempe Center for the Arts” PowerPoint as a review of how the artists designed each of TCA public artworks to fit its specific location at the center.

Assignment: ask students to

1. construct sections or modules with rolled paper for a site-specific sculptural installation,
2. repeat elements (for example colors, shapes, and forms) to unify the sculpture and
3. use variation to create visual interest.

Technical Demonstration: Demonstrate various steps in the process as students proceed. Display “Sample Space Invaders” PowerPoint to illustrate steps.

In Process Feedback: Stop students mid-process to share their ideas and collaborate on how they can use repetition of a certain element to unify all the individual modules and how they can use variations to increase visual interest.

Completion and Exhibition:

Ask students to work in groups to organize their individual sculptures into a group sculpture. They should complete the work on site taking care to make it specifically fit that location. Ask students to complete the “Public Art Label” and display it with the work.

Lead a group assessment guided by the following questions:

1. How did you use repetition in your sculpture?
2. How did you use variation in your sculpture?
3. How did you make your sculpture fit specifically the site where it is installed?

### **Assessment Guides**

This is a high-success rate project valuable for the learning that occurs during the process. The finished product is simply a concrete reminder of what has been learned. The students’ responses during the group assessment are a more reliable indication of what they have learned than their group sculptures.

#### **1. Students use repetition and variation of elements (for example, shapes, colors, forms) to create unity and create visual interest in a group sculpture.**

##### Exceeds Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculptures are effectively unified through repetition of one or more element/s and how variations of that/those element/s create visual interest.

##### Meets Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculptures repeat one or more element/s and identifies several variations of that/those element/s.

##### Approaches Expectations

Students contribute to a group discussion (and Public Art Label) that identifies how their sculptures repeat an element several times.

##### Fails to Meet Expectations

Students contribute to a group discussion.

**2. Students collaborate to design and install a sculpture for a specific location.**

**Exceeds Expectations**

Students contribute to a group discussion (and Public Art Label) that identifies at least three choices they made that make their sculpture fit its specific location.

**Meets Expectations**

Students contribute to a group discussion (and Public Art Label) that identifies at least two choices they made that make their sculpture fit its specific location.

**Approaches Expectations**

Students contribute to a group discussion (and Public Art Label) that identifies at least one choice they made that make their sculpture fit its specific location.

**Fails to meet Expectations**

Students contribute to a group discussion.

## Exploring with Questor worksheet

### Where the city of Tempe was built

Name: \_\_\_\_\_

#### Section 1 and 2: Hohokam City and Traditional Pima (Akimel O'odham) dwellings.

What might be some reasons that the Hohokam and later Pima people settled along the Salt River?

#### Section 3: San Pablo

What might be some reasons that the people of San Pablo chose to live south of Hayden Butte ("A" Mountain) along Rio Salado (Salt River)?

#### Section 4: Agriculture around Hayden's Ferry

What might be some reasons why farmers thought that the region along the Salt River was a good place?

#### Section 5: Territorial Normal School (Later Arizona State University)

What might be some reasons college students believe that the ASU campus and downtown Tempe are special?

#### Section 6: Floods and Dams

What might be some reasons engineers who design dams and water works might think the Salt River area is especially challenging?

#### Section 7: Architecture for the Arts

What might be some reasons the many people in Tempe value buildings designed especially for the arts (dance, music, movies, plays, art exhibitions)?

## Exploring Public Art at the TCA

Name: \_\_\_\_\_

Circle one of the following public artworks you will be exploring at the TCA:

Ned Kahn  
*Sea of Waves* (entrance)

Mary Ryan & Mayme Katz  
*trueNorth*

Brower Hatcher  
*Aurora*

Ramona Saliewstewa  
*Aqua Corriente*

Ned Kahn  
*Sea of Waves* (pool)

### A. Place

Where is the artwork? How might the artwork be connected to the nature or history of this place?

### B. Repetition and Variation

Each of the public artworks includes circles. Look for them. Explain how the artist used circles in this artwork.

How are they repeated?

How do they vary?

### C. Drawings



Draw a variation of that circle. How did the artist use it in different ways?



Draw a detail the artwork that includes a circle.

### D. Connection to Place

Complete the following sentence writing about the artwork you explored.

“This public artwork makes the Tempe Center for the Arts more special because ... .”

## Questor's Questions about Public Art



### What can I See?

What repeated shapes, colors or textures can I find?  
Do the repeated shapes, colors or textures vary? How?  
What else do I see?



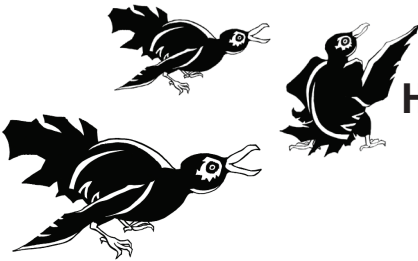
### What else can I learn?

What natural and built features are nearby?  
Who designed the public artwork?  
What other background information would I like to know about the artist?



### What does it mean?

What feeling/s or idea/s do I get from the public artwork?  
How do other people respond to the public artwork?  
Does the public artwork say anything about history?  
Does the public artwork say anything about nature?



### How does it compare?

How does the public artwork compare with other public art I have seen?



## Public Art Label

Artists' Names: \_\_\_\_\_

What is the location of the artwork?

How does the artwork make that place special?

How did you use repetition and variation?