

## ARTS IMPACT LESSON PLAN

### Theater and Math Infused Lesson

#### *Body and Shapes*

Authors: Chya Thompson and Kenan Joyce with Rachel Atkins      Grade Level: Pre-kindergarten

#### Enduring Understanding

Body poses/gestures can be used to represent geometric shapes.

#### Lesson Description (Use for family communication and displaying student art)

*Students identify specific geometric shapes: circle, square, triangle, rectangle, star. They use their whole bodies to create each shape.*

### Learning Targets and Assessment Criteria

**Target:** Identifies different geometric shapes.

**Criteria:** Names the following shapes: circle, square, triangle, rectangle, star.

**Target:** Thinks creatively.

**Criteria:** Demonstrates at least two ways to represent a geometric shape with a body statue.

**Target:** Makes a specific physical choice to convey a geometric shape.

**Criteria:** Uses gestures and/or body poses to represent a circle, square, triangle, rectangle, and a star.

#### Vocabulary

##### Arts Infused:

Shape

##### Math:

Circle

Geometric

Rectangle

Square

Star

Triangle

##### Arts:

Body pose

General Space

Gesture

Self-space

Statue

#### Materials

##### **Museum Artworks or Performance**

##### **Seattle, WA**

Seattle Children's Theater

##### **Tacoma, WA**

Broadway Center for the

Performing Arts

Children's Museum of Tacoma

##### **Materials**

Video: Shape Song 2

<https://www.youtube.com/watch?v=WTeqUejf3D0>; Chart or images of the shapes; Placemats; Class Assessment Worksheet

#### Learning Standards

##### **WA Arts State Grade Level Expectations**

*For the full description of each WA State Arts Grade Level Expectation, see:*

<http://www.k12.wa.us/Arts/Standards>

1.2.1 Skills: Movement

1.2.8 Skills: Acting

2.1.1 Creative Process

4.2.1 Connection between Theater and Math

##### **Early Learning Guidelines (Pre-K – Grade 3)**

*For a full description of Washington State Early Learning and Child Development Guidelines see:*

<http://www.del.wa.gov/development/guidelines/>

(Age 4-5) 6. Learning about my world: Math: Match and sort simple shapes (circles, squares, triangles).

Arts: Performs simple elements of drama; participate in dramatic play activities.

##### **Common Core State Standards (CCSS) in Math**

<http://www.k12.wa.us/CoreStandards/Mathematics/default.aspx>

K.G.2 Correctly names shapes regardless of their orientations or overall size.

K.G. Identify and describe shapes (squares, triangles, circles, rectangles).


K.G. Analyze, compare, create, and compose shapes.

##### **CCSS Mathematical Practices**

2. Reason abstractly and quantitatively.

4. Model with mathematics.

### ICON KEY:

 = Indicates note or reminder for teacher

 = Embedded assessment points in the lesson


### Pre-Teach

Introduce shapes and the shape song (Shapes Song 2)


<https://www.youtube.com/watch?v=WTeqUejf3D0>

### Lesson Steps Outline


**1.** Introduce the concept of geometric shapes. Prompt students to name specific geometric shapes: circle, square, triangle, rectangle, star. Remind students of the shape song and what shapes they saw in the video.

 Criteria-based teacher checklist: Names the following shapes: circle, square, triangle, rectangle, star.


**2.** Brainstorm with children how to make shapes with their bodies. Prompt children with examples and encourage them to use the 21<sup>st</sup> Century Skill of Creative Thinking to think of other ways they can make the same shape.

 Criteria-based teacher checklist: Demonstrates at least two ways to represent a geometric shape with a body statue.

**3.** Lead the “shape” exercise using the five shapes (circle, square, triangle, rectangle, star). Guide students in using their whole bodies – arms, legs, head, and spine to make shape statues.

 Criteria-based teacher checklist: Uses gestures and/or body poses to communicate a circle, square, triangle, rectangle, and a star.

**4.** Continue “shape” exercise but instead of prompting children of a specific shape, have them make their own decisions.

 Criteria-based teacher checklist, self and peer assessment: Uses gestures and/or body poses to communicate a circle, square, triangle, rectangle, and a star. Names the following shapes: circle, square, triangle, rectangle, star.

## LESSON STEPS

**1. Introduce the concept of geometric shapes. Prompt students to name specific geometric shapes: circle, square, triangle, rectangle, star. Remind students of the shape song and what shapes they saw in the video.**

▣ Display images of the five shapes (e.g. a poster, a chart, individual images).

- *Today we will be making geometric shapes: circles, squares, triangles, rectangles, and stars.*
- *A circle is round with no sides, a square has four equal sides, a triangle has three sides, a rectangle has two short sides and two long sides. Can anyone describe a star?*
- *I'll point to the images of each of the five shapes. Tell me the name of the shape that you see.*

☑ Criteria-based teacher checklist: Names the following shapes: circle, square, triangle, rectangle, star.

**2. Brainstorm with children how to make shapes with their bodies. Prompt children with examples and encourage them to use the 21<sup>st</sup> Century Skill of Creative Thinking to think of other ways they can make the same shape.**

▣ This step is to be done in a group in self-space with teacher guidance.

- *I'll make a circle with my legs. How can you make a circle in a different way?*
- *When you think of more than one way to make a shape, that's the 21<sup>st</sup> Century Skill of Creative Thinking! Will you repeat those words with me? CRE-A-TIVE THINK-ING. Let's tap the words into our shoulders while we say them again. CRE-A-TIVE THINK-ING. Let's tap another way. We'll tap while crisscrossing. Tap your right shoulder with your left hand and tap your left shoulder with your right hand. CRE-A-TIVE THINK-ING.*
- *Let's use our creative thinking. How else can you make the circle shape? What other parts of your body can you use to make this shape?*

▣ Repeat with square, triangle, rectangle, and star.

☑ Criteria-based teacher checklist: Demonstrates at least two ways to represent a geometric shape with a body statue.

**3. Lead the "shape" exercise using the five shapes (circle, square, triangle, rectangle, star). Guide students in using their whole bodies – arms, legs, head, and spine to make shape statues.**

▣ Children will be given placemats to remind them of self-space. Students will stand in empty space spread out through the room and make shapes in self-space (staying on mats).

- *Use your whole body to make a circle.*
- *Use your whole body to make a square.*
- *Use your whole body to make a triangle.*
- *Use your whole body to make a rectangle.*
- *Use your whole body to make a star.*

☑ Criteria-based teacher checklist: Uses gestures and/or body poses to communicate a circle, square, triangle, rectangle, and a star.

**4. Continue “shape” exercise but instead of prompting children of a specific shape, have them make their own decisions.**

- *This time, each of you will get to make your own shape. Decide what shape you want to make with your body.*
- *Now show me your shape. You will each get a turn to show your shape and tell us what shape you decided to make.*

▣ For round 2: Children will make another shape and children will guess what shape the child made.

▣ For a younger group, create a transition to help children get to next step. For example, bring children together and explain step 4. Then have children go back to their mats to make their shapes in self-space or have step 4 on DAY 2.

☑ Criteria-based teacher checklist, self and peer assessment: Uses gestures and/or body poses to communicate a circle, square, triangle, rectangle, and a star. Names the following shapes: circle, square, triangle, rectangle, star.

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**Extension:**

Teach *Geometric Shape Tableaux* by Sheryl Pernu and Brandi Stratton, MCFHC.

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Pre-kindergarten: *Body and Shapes*

**CLASS ASSESSMENT WORKSHEET**

Disciplines	MATH	THEATER	THEATER/MATH					Total 7
Concept	Geometric Shapes	Creative Thinking	Geometric Shape Statues					
Criteria	Names the following shapes: circle, square, triangle, rectangle, star.	Demonstrates at least two ways to represent a geometric shape with a body statue.	Uses gestures and/or body poses to represent:					
Student Name			circle	square	triangle	rectangle	star	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
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18.								
19.								
20.								
21.								
22.								
23.								
24.								
25.								
26.								
27.								
28.								
29.								
30.								
Total								
Percentage								

*What was effective in the lesson? Why?*

*What do I want to consider for the next time I teach this lesson?*

*What were the strongest connections between theater and math?*

Teacher: \_\_\_\_\_

Date: \_\_\_\_\_

**ARTS AND MATH LESSON: *Body and Shapes***

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Dear Family:

Today your child participated in an **Arts and Math** lesson. We talked about geometric shapes.

- We identified circles, squares, triangles, rectangles, and stars.
- We created statues with our bodies to represent each shape.
- We used our Creative Thinking to create more than one way to make each shape.

At home, you could find objects in your house that are geometric shapes and then make statues with your bodies to represent the shapes.

**Enduring Understanding**

Body poses/gestures can be used to represent geometric shapes.