

## ARTS IMPACT LESSON PLAN

### Visual Arts and Mathematics Infused Lesson

#### *Geometric Cityscapes*

Authors: Sarah Lane with Carol Gould

Grade Level: 2nd

#### Enduring Understanding

Geometric shapes have specific attributes and can be partitioned and combined. Warm, cool, and neutral colors can convey a setting and/or mood.

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

Students review attributes of shapes and parts of shapes in art and in a story. They discuss shapes that are seen in their environments. Students imagine and create a cityscape composed from shapes and use warm, neutral, and cool colors in the final, colored composition.

#### Learning Targets and Assessment Criteria

**Target:** Makes geometric shapes with specific attributes and understands the division of shapes.

**Criteria:** Uses a ruler and/or template to create and divide multiple shapes.

**Target:** Identifies and uses geometric shapes to compose new and larger shapes.

**Criteria:** Uses only geometric shapes to create an image of a cityscape.

**Target:** Identifies and uses warm, cool, and neutral colors.

**Criteria:** Fills their drawn cityscape with warm, cool, and neutral colors using watercolor pencil and watercolor.

#### Vocabulary

##### Arts Infused:

Geometric Shapes:  
hexagon, pentagon,  
triangle, circle,  
quadrilateral

Horizontal  
Shapes  
Vertical

##### Math:

Fraction  
Regular  
Side

##### Arts:

Bold Colors  
Composition  
Craftsmanship  
Neutral Colors  
Primary and Secondary  
Warm and Cool Colors  
Template

#### Materials

##### Museum Artworks or Performance

Cityscapes, Wayne Thiebaud



Other artwork:

<http://poulwebb.blogspot.com/2010/11/wayne-thiebaud-cityscapes.html>

##### Materials

Storybook or video read aloud:  
*City Shapes* by Diana Murray  
*Tar Beach* by Faith Ringgold

Art materials:

Rulers  
Shape templates  
Pencils  
Color wheel  
Watercolor pencils  
Watercolors  
Small brushes  
9x12 Watercolor paper  
Sketchbooks  
Sharpies

Class assessment worksheet

#### Learning Standards

##### WA Arts Learning Standards

For the full description of each anchor standard and the grade level performance standards, see:

<https://www.k12.wa.us/student-success/resources-subject-area/arts/arts-k-12-learning-standards>

Anchor Standard 3: Refine and complete artistic work.  
Performance Standard (VA:Cr3.1.2): a. Discuss and reflect with peers about choices made in creating Artwork.

Anchor Standard 7: Perceive and analyze artistic work.  
Performance Standard (VA:Re7.1.2): a. Perceive and describe aesthetic characteristics of one's natural world and constructed environments.

Anchor Standard 8: Interpret intent and meaning in artistic work.

Performance Standard (VA:Re8.1.2): a. Interpret art by identifying the mood suggested by a work of art and describing relevant subject matter and characteristics of form.

##### Early Learning Guidelines, if applicable

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

[https://www.dcyf.wa.gov/sites/default/files/pubs/EL\\_0015.pdf](https://www.dcyf.wa.gov/sites/default/files/pubs/EL_0015.pdf)

(2<sup>nd</sup> grade) 6. Learning about my world: Math: Begin to understand how math is used in everyday life. Arts: Experiment with creating own artwork.

*continued*

## Learning Standards

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

[http://www.corestandards.org/wp-content/uploads/Math\\_Standards1.pdf](http://www.corestandards.org/wp-content/uploads/Math_Standards1.pdf)

2.G Reason with shapes and their attributes.


### CCSS Mathematical Practices

MP.4. Model with mathematics.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

### ICON KEY:

 = Indicates note or reminder for teacher

 = Embedded assessment points in the lesson

### Pre-Teach

Discuss geometric shape and their attributes prior to lesson. Read texts as models for shape and color choices.


### Lesson Steps Outline

#### Session 1

**1.** Guide review of geometric shapes and their attributes. Read *City Shapes* as an example of identifying shapes in an environment. Ask students to share out the recognized shapes and connect to shapes they see in their personal environment.

**2.** Guide students as they examine a piece of artwork and describe geometric shapes within *Cityscapes*, by Wayne Thiebaud.

**3.** Ask students to practice drawing and dividing geometric shapes in their sketchbooks.

 Criteria-based teacher checklist: Uses a ruler and/or template to create and divide multiple shapes.

#### Session 2

**1.** Guide students in examination of another piece(s) of artwork by Wayne Thiebaud. Ask students to share out recognized shapes and how this connects to shapes in their environment.

**2.** Announce to students that the goal is to create their own imaginary city made of only geometric shapes. Students will make a sketchbook draft of their cityscape.

 Criteria-based teacher checklist: Uses only geometric shapes to create an image of a cityscape.

#### Session 3

**1.** Direct students to listen to *Tar Beach* as an example of identifying shapes, color, and mood in a text. Direct students to notice the layering and division of shapes.

**2.** Guide students to use their sketchbook cityscape draft to create their final composition on watercolor paper.

Criteria-based teacher checklist and self-assessment: Uses only geometric shapes to create an image of a cityscape.

**3.** Ask students to explain and discuss the choices they are making.

Criteria-based teacher checklist and self-assessment: Uses only geometric shapes to create an image of a cityscape.

#### **Session 4**

**1.** Ask students to describe the differences between warm, cool, and neutral colors, and the mood they can evoke in their cityscapes. Guide students to view artwork and to describe mood evoked by color. Use a color wheel as a tool.

**2.** Teach students how to use and layer watercolor pencils (brush over them lightly to activate the paint). Demonstrate and guide students to use watercolors to create a wash in the background to complete their cityscapes.

Criteria-based teacher checklist: Fills their drawn cityscape with warm, cool, and neutral colors using watercolor pencil and watercolor.

**3.** Facilitates reflection.

Criteria-based reflection: Reflects on how they used visual arts and math to create their cityscapes and what feelings their artworks evoke.

## LESSON STEPS

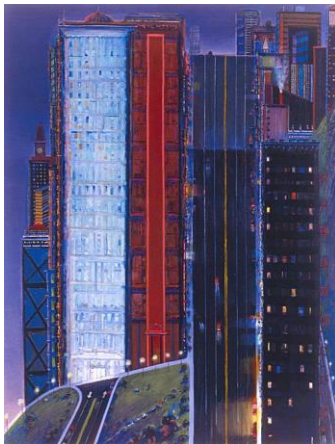
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### Session 1

**1. Guide review of geometric shapes and their attributes. Read *City Shapes* as an example of identifying shapes in an environment. Ask students to share out the recognized shapes and connect to shapes they see in their personal environment.**

- *As you listen to the story, think about what shapes you recognize.*
  - *Look around the room. What shapes do you see around you?*
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**2. Guide students as they examine a piece of artwork and describe geometric shapes within *Cityscapes*, by Wayne Thiebaud.**



- *How has the artist combined or divided geometric shapes to make his cityscape?*
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**3. Ask students to practice drawing and dividing geometric shapes in their sketchbooks.**

- *Let's practice using a ruler and the template to make and divide geometric shapes that you may use in your imaginary city.*

Criteria-based teacher checklist: Uses a ruler and/or template to create and divide multiple shapes.

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### Session 2

**1. Guide students in examination of another piece(s) of artwork by Wayne Thiebaud. Ask students to share out recognized shapes and how this connects to shapes in their environment.**

- *What shapes do you recognize in this cityscape? Where has the artist divided or added shapes to make new ones?*
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**2. Announce to students that the goal is to create their own imaginary city made of only geometric shapes. Students will make a sketchbook draft of their cityscape.**

- *What shapes could you use or divide to make your own imaginary city? What do you want included in your city? (Ex. Park, buildings, shops) What shapes will you need to draw that city?*
- *Begin sketching your ideas in your sketchbook.*
- *Put the name of your city at the bottom of your draft. (Ex. Caroltown)*

Criteria-based teacher checklist: Uses only geometric shapes to create an image of a cityscape.

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### Session 3

#### 1. Direct students to listen to *Tar Beach* as an example of identifying shapes, color, and mood in a text.

- *What do you notice about the buildings? Are there buildings behind the buildings? (Notice the layering.)*
- *What do you notice about the colors? (Notice the cool colors with warm, bold colors standing out.)*

#### 2. Guide students to use their sketchbook cityscape draft to create their final composition on watercolor paper.

- *Now, looking at your rough draft, what would you like to keep or change in your final cityscape?*
- *Make sure to use your ruler to draw your shapes precisely.*
- *Remember that all the shapes in your city should be geometric. (Ex. Watch how I make a car using only geometric shapes.)*
- *Where are you combining or dividing shapes in your cityscape?*

Criteria-based teacher checklist and self-assessment: Uses only geometric shapes to create an image of a cityscape.

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#### 3. Ask students to explain and discuss the choices they are making.

- *What artistic choices have you made in creating your cityscapes? Why?*
- *How did you use math?*

Criteria-based teacher checklist and self-assessment: Uses only geometric shapes to create an image of a cityscape.

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### Session 4

#### 1. Ask students to describe the differences between warm, cool, and neutral colors, and the mood they can evoke in their cityscapes. Guide students to view artwork and to describe mood evoked by color.

- *Let's look at the color wheel. Warm colors are red, yellow, orange. Cool colors are blue, green, violet. Neutral colors are brown, gray, beige, and colors created with black and white.*
  - *In this artwork, how do the colors show mood/feelings?*
  - *What feeling do you want your cityscape to show?*
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**2. Teach students how to use and layer watercolor pencils (brush over them lightly to activate the paint). Demonstrate and guide students to use watercolors to create a wash in the background to complete their cityscapes.**

- *Watch as I carefully color in one of my buildings with my watercolor pencils. Now, with a little bit of water on my brush, I can turn that pencil into bright watercolor.*
- *When our cityscapes are complete, we can use a light watercolor wash to be the sky or the background color. Remember, with watercolor, use enough water that it spreads easily, but not too much that it runs off the paper.*

Criteria-based teacher checklist: Fills their drawn cityscape with warm, cool, and neutral colors using watercolor pencil and watercolor.

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**3. Facilitates reflection.**

- *Find a piece that isn't your own. Where do you see geometric shapes?*
- *Where do you see warm and cool colors?*
- *How does the ruler support you as both an art and math tool?*

Criteria-based reflection: Reflects on how they used visual arts and math to create their cityscapes and what feelings their artworks evoke.

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**ARTS IMPACT LESSON PLAN Visual Arts and Subject Infused Lesson**

2<sup>nd</sup> Grade: *Geometric Cityscapes*

**CLASS ASSESSMENT WORKSHEET**

Disciplines	<b>MATHEMATICS</b>	<b>MATHEMATICS AND VISUAL ARTS</b>	<b>VISUAL ARTS</b>	Total 3
Concept	<b>Geometric Shape</b>	<b>Composing with shapes</b>	<b>Color</b>	
Criteria	Uses a ruler and/or template to create and divide multiple shapes.	Uses mostly geometric shapes to create an image of a cityscape.	Fills their drawn cityscape with warm, cool, and neutral colors using watercolor pencil and watercolor.	
Student Name				
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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 arts discipline and subject area?*

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



ARTS AND Mathematics INFUSED LESSON: *Geometric Cityscapes*

Dear Family:

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

- We discovered that different shapes can be seen in art, and in stories, and in the world around us.
- We created cityscapes from shapes and colored our cityscapes in warm, cool, and neutral colors to evoke a mood.

At home, you could create a cityscape together with your child.

**Enduring Understanding**

Geometric shapes have specific attributes and can be partitioned and combined. Warm, cool, and neutral colors can convey a setting and/or mood.