Nature Tessellations with Watercolor Pencil

Lesson Overview: Using and exploring watercolor pencil techniques, students will make a four piece tessellation using line, shape and pattern to create a repetitive work of art that is inspired by their surroundings.

Grade Level: 4th Grade

Subject(s): Visual Art, Math

Duration: Two 45 minute sessions (includes 15 to 20 minutes for viewing the artwork)

Learning Objectives: Students will be able to -
- Create a repeating pattern using line, shape and color.
- Use two different watercolor pencil techniques.

Questions for Viewing: First, always take a few moments to really look at the artwork.

VTS Questions
- What do you think is going on in this picture?
- What do you see that makes you say that?
- What else do you see in this picture?

Additional Questions
- Do you think this painting is a landscape? Why? Why not?
- How is this different from other landscapes?
- Where do you see a foreground, middle ground and background? (See Kevin Red Star video for reference.)
  - What is closest? What is further away?
- Do you think this painting is “realistic” or “expressionistic”? What do those words mean?
- What type of lines do you see in this painting?
- Do you see any patterns? How many times does it repeat?
- What shapes do you see?

Art Vocabulary:
- Pattern: A design in which lines, shapes, forms or colors are repeated.
- Foreground: The area of the artwork that appears nearest to the viewer.
- Middle Ground: Generally, the focus of a painting. It is the space in between the foreground and the background.
- Background: The area of the artwork that appears furthest from the viewer.
- Realism (Realistic Art): Art painted in a representational almost photographic way.
- Expressionistic or Expressionism: Art in which the image of reality is distorted in order to make it expressive of the artist’s inner feelings or ideas. https://www.tate.org.uk/art/art-terms/e/expressionism

Art/Math Vocabulary
- Tessellation: A tiling over a plane with one or more figures such that the figures fill the plane with no overlaps and no gaps.
**Procedure**

**Day 1:** Designing their tessellations

- Begin by taking a long moment to really look at the artwork, then discuss the viewing questions for Isabelle Johnson’s *Untitled* painting and discussing the viewing questions using Visual Thinking Strategies.
- Begin with one 4 ½” x 4 ½” square in which to create their design (kind of like a puzzle piece). When creating their piece for their tessellation, students will follow the instructions below.
  - Start with your 4 ½” x 4 ½” square and draw a line from corner to corner on one side. (1)
  - Cut along the line that you drew and attach it to the other side. Tape it in place. (2)
  - Draw another line from corner to corner on the top and add it to the bottom. Tape it in place. (3)
  - Trace your piece on to the 9” x 9” paper four times. (4)
- Students will then design their piece inspired by their surroundings, indoors or outdoors. It helps to design the pattern on the piece that they created before they add it onto the final paper. This way they can make changes more easily.
  - The subject matter could be their home, a family member or friend’s house, a place they have traveled to, a place they would like to travel to, an imaginary place from a book or a game, etc.
  - In each section add in your design that represents your favorite place, creating a pattern.
  - Think about the shapes and colors that you would see there.
  - The design doesn’t necessarily need to be representational.

**Day 2 - Adding color using two techniques with watercolor pencil**

- There are two great ways to use watercolor pencil.
  - The first way to use watercolor pencil is to put the color down on the paper as if you were just using a colored pencil. Then, using a small brush, put clear water over top of the color. As the water is added, the color will turn into watercolor paint. This is a great way to mix and blend colors.
  - The second way to use water colored pencils is to get the colored pencil wet before you put it on the paper. This technique is better for fine details and gives your artwork vibrant solid color.
- Students should be able to use both techniques somewhere in their designs.
- Have the students sign and title their work once they are finished.

**Materials:**

- Watercolor paper cut into 9” x 9” squares
- Cardstock or watercolor paper cut into 4 ½” x 4 ½” squares
- #2 Pencils
- Scissors
- Tape
- Paper towels
- Ruler for dividing papers
- Cups for water
- Small (#6) brushes
- 2 water buckets (1 for clean water and 1 for dirty water)
**Setting up your classroom for watercolor pencils:**

- Each student should receive a set of watercolor pencils, paper, a cup for water and a brush.
- Set up two buckets. One bucket should have clean water. The other bucket will be for students to dump out their dirty water. This works well especially if you don’t have a sink in your room.
  - When filling the water cups, they do not need to be full. Watercolor pencil takes very little water to work well. The cups should be filled just half way or slightly less.
  - *A lunch tray is really useful when handing out cups of water.
- Set paintings aside to dry flat or else the watercolor paint can potentially drip down the students’ work.

**Other Resources:**

- Watercolor Technique Demo Video https://www.youtube.com/watch?v=zsXgnfSFmeY&list=PLKPDKDB2xRuy3egIvm4Nt_13d8PUGf0fT&index=12

**National Standards:**

**Visual Arts**
- VA:Cr1.1.4a: Brainstorm multiple approaches to a creative art or design problem.
- VA:Cr2.1.4a: Explore art-making techniques and approaches.
- VA:Cr2.2.4a: When making works of art, utilize and care for materials, tools, and equipment in a manner that prevents danger to oneself and others.

**Mathematics**
- CCSS.4.MD.C.7: Recognize angle measure as additive.
- CCSS.4.G.A.3: Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
- CCSS.8.G.2: Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

**Montana Visual Arts Standards:**

- Anchor Standard #2: Organize and develop artistic ideas and work. Apply research to art-making for the purpose of communicating about constructed environments.

*Please note that this is just an example of the lesson. Students should always be encouraged to create and complete their own artwork.*
<table>
<thead>
<tr>
<th>Use of Watercolor Pencil Technique</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Watercolor Pencil Technique</td>
<td>Does not successfully use either watercolor pencil technique.</td>
<td>Uses one of the watercolor pencil techniques.</td>
<td>Uses both watercolor pencil techniques successfully.</td>
<td>Uses both watercolor pencil techniques successfully to enhance composition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elements and Principles of Art</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements and Principles of Art</td>
<td>Does not create a repeating pattern using line, shape or color.</td>
<td>Begins to show understanding of repeating pattern using line, shape and color.</td>
<td>Successfully creates a repeating pattern using line, shape and color.</td>
<td>Successfully creates a repeating pattern using line, shape and color that includes details about the place they are creating.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Craftsmanship</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craftsmanship</td>
<td>Does not demonstrate quality craftsmanship through appropriate use of and care for materials.</td>
<td>Occasionally demonstrates quality craftsmanship through appropriate use of and care for materials.</td>
<td>Demonstrates quality craftsmanship through appropriate use of and care for materials.</td>
<td>Demonstrates exceptional craftsmanship through appropriate use of and care for materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expression</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expression</td>
<td>Does not create a work of art that demonstrates unique idea or style.</td>
<td>Creates a work of art is uniquely their own idea but which ineffectively uses technique of the medium.</td>
<td>Creates a work of art is uniquely their own idea and style.</td>
<td>Creates a work of art is uniquely their own idea and style which effectively uses technique of the medium.</td>
</tr>
</tbody>
</table>