

Lesson Plan: Portraits Like Pate: Art and Geometry

Collection Spotlight: James Pate, Techno-Cubism: The Art of Line Painting

Subject Area: Visual Arts, Math, SEL

Grades: K-5th

Theme: Relating shapes, lines and angles in art creations to human experiences and emotions.

Student Learning Objectives:

- 1) Students will be able to identify and describe shapes, lines and angles found in James Pate's pieces.
- 2) Students will be able to understand and discuss how art is a medium for sharing one's emotions and thoughts.
- 3) Students will be able to apply the use of mathematical concepts (i.e. shapes, angles, lines) to create artwork revealing an underlying message or emotion.

Artist Biography: James Pate is one of Dayton's most well-known and awarded living artists. In 2024, Pate had more than one dozen of his large-scale charcoal drawings on display at the Dayton Art Institute in an exhibit called *James Pate, Techno-Cubism: The Art of Line Painting*. Pate is well known for his highly detailed and visually complex pieces showing a modern and personal take on the art style, Cubism, which Pate named "Techno-Cubism." Using lines, angles and the shapes created with them is a large part of his contemporary art style similar to traditional Cubism. Pate depicts musicians, athletes and fellow artists, while also depicting important aspects of lived Black experience.

Pate's works speak to contradictions of the human condition, of the beauty found in human potential which too often collides with the harsh realities of urban life. Through his art, Pate addresses societal issues, especially the damaging effects of racism on communities, and he demonstrates the different paths people take in their lives.

Curricular Connections

Ohio's Learning Standards

Visual Arts:

VA.4.1.CO- Explore artists and works of art that impact the history and culture of Ohio.

VA.4.3CO- Demonstrate empathetic reactions in response to works of art.

Mathematics:

4. G.1- Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two dimensional figures.

4.G.2- Classify two-dimensional figures based on the presences or absences of parallel or perpendicular lines or the presences or absences of angles of a specified size.

Learning Activities Sequence

Lesson Opener (5 minutes):

After reviewing the student learning goals, move to Slide 4 in the *Portraits Like Pate: Art and Geometry* PowerPoint Presentation. Briefly introduce James Pate as a local artist who is highly awarded and created his own artistic style called “Techno-Cubism”. You may include more information about James Pate from the Artist Biography at the beginning of this lesson plan. Before moving on, ask students:

What do you think Techno-Cubism looks like?

What do you think James Pate uses to create his artworks?

Main Learning Activity (15-20 minutes):

Move to Slide 5. Give students a brief understanding of Techno-Cubism and confirm or discuss their prior knowledge regarding the art style. Explain James Pate creates portraits and define “portrait” for students.

Definition of portrait: a painting, drawing, photograph, or engraving of a person, especially one showing only the face or head and shoulders or arms.

Discuss what the students notice when looking at the artworks featured on the screen. Encourage students to use the words featured on the screen when describing the artworks (ex. lines, angles, shapes, repeating etc.).

Move to Slide 6. On this slide, guide students through a turn and talk procedure while examining one of Pate’s works on the screen called *Rookie Shaq, in Techno-Cubism*. Circulate the room to scaffold the main questions: What shapes or lines do you see? How does it make you feel? What do you wonder about the person in the portrait?

Scaffolding Discussion Questions:

What do you think about or wonder when you look at the artworks?

Why do you think James chose famous people?

What is similar about the artworks? What is different?

How did James use different colors?

Move to Slide 7 and encourage students to sit quietly for 60 seconds and study the image (called *The Olympian, Edwin C. Moses, in Techno-Cubism*) closely to continue thinking about the main idea questions: What shapes or lines do you see? How does it make you feel? What do you think or wonder?

Move to Slide 8 and encourage students to sit quietly for 60 seconds and study the image (called *The Kid Griffey, in Techno-Cubism*) closely to continue thinking about the main idea questions: What shapes or lines do you see? How does it make you feel? What do you think or wonder?

Move to Slide 9. On this slide, guide students through a turn and talk procedure while examining one of Pate’s works on the screen called *Bing’s Portrait, in Techno-Cubism*. Circulate the room to scaffold the main questions: What shapes or lines do you see? How does it make you feel? What do you wonder about the person in the portrait?

Scaffolding Discussion Questions:

What do you think about or wonder when you look at the artworks?

Why do you think James chose famous people?

What is similar about the artworks? What is different?

How did James use different colors?

Move to Slide 10. Students will now make portraits using lines, angles and shapes. Distribute one *Portraits Like Pate: Art and Geometry* worksheet, one ruler or straight edge, and a pencil to each student and direct them to write their name at the bottom of the plain side. Guide students through the instructions on Slide 10. Give students 10 to 15 minutes to create their portrait. Circulate providing support and guidance through the steps.

Lesson Closure (5 minutes):

Once students' portraits are close to being completed, move to Slide 11. Have students reflect on the activity and lead a brief discussion about how art can make people feel. Use the discussion questions:

What do you want people to think when they see your portrait?

How do you want them to feel?

How do you feel looking at your finished portrait?

Encourage students to write one to four sentences (depending on grade level expectations) on the lines on the back to show their understanding and discuss how their art can make people experience emotions as well as think deeply. Once students have completed writing their reflection thoughts, collect their portraits.

Evaluation

Students will create a portrait (self or someone in their family) using the *Portraits Like Pate: Art and Geometry* worksheet. Students will connect the given points with lines and line segments using a ruler or straight edge. Students can add shapes, color and detail to create their final portrait. Students will also write one to four sentences (depending on the grade level) describing their portrait and what emotion or message they were portraying through their artwork.

Extension evaluations: Third through fifth graders could add additional points to create more detailed portraits. Third graders can extend their mathematical learning by measuring each line with a set unit and identifying two-dimensional figures within their portrait. Fourth graders can extend their mathematical learning by identifying parallel or perpendicular lines within their portrait and the two-dimensional shapes that the parallel or perpendicular lines created. Fifth graders can extend their mathematical learning by measuring angles that they created when connecting points with lines using a protractor.

Learner Accommodations

For learning diverse students or younger students, consider dictating their explanation on the back of the worksheet. In addition, for younger students or students needing more support, encourage them to create a portrait using 10-15 points.

Model of Art Making Activity

Multimodal PowerPoint presentation created with many grade levels and proficiency levels in mind.

Differentiated worksheets for portraits based on grade level bands.

Built-in scaffolding and inquiry questions to support all learners.

Extension Activities

Students can extend their thinking by giving their portrait a title based on the message or emotion revealed in the artwork.

Students can extend their work by creating another piece of artwork, or a series of works, using the same art style but for a different subject or for a different message (ex. A landscape, a special item, a specific emotion etc.).

Materials & Resources

Computer or Laptop

Screen/Projector

Pencils

Black Markers or Felt Pen

Coloring materials (colored pencils, crayons, markers etc.)

Portraits Like Pate worksheet for specific grade level band

References

“James Pate, Techno-Cubism: The Art of Line Painting.” *Dayton Art Institute*,

<https://www.daytonartinstitute.org/exhibits/james-pate-techno-cubism/>. Accessed 21 Feb. 2024.

James Pate: The Ice Cube of Contemporary Art – National Underground Railroad Freedom Center.

<https://freedomcenter.org/voice/james-pate-the-ice-cube-of-contemporary-art/>. Accessed 22 Feb. 2024.

Ohio Department of Education. (2022). Ohio’s Learning Standards. Columbus: Ohio Department of Education.

<https://education.ohio.gov/Topics/Learning-in-Ohio/OLS-Graphic-Sections/Learning-Standards>.

Accessed 22 Feb. 2024.