Math Pop Art

Fourth Grade + Math and Visual Arts

Adapted by Kara Moulds and Melissa Tingle

CORE SUBJECT AREA
Math

ART FORM + ELEMENTS
Visual Art

Painting

Shapes

Color

Space

MSCCR STANDARDS
4.NF.4

MATERIALS NEEDED
Tangrams, Andy Warhol powerpoint presentation, watercolors, watercolor paper, black Sharpie markers, pencils, color wheel

MSCCR CREATIVE ARTS STANDARDS
VA:Cr1.1.4 Generate and conceptualize artistic ideas and work

VA: Cr1.1.2.4 Generate and conceptualize artistic ideas and work. Collaboratively set goals and create artwork that is meaningful and has purpose to the makers.

DURATION
2 class periods

OBJECTIVES
Students will be able to know and/or do... Create an Andy Warhol inspired "Pop Art" piece to represent the multiplication of a fraction and whole number.

VOCABULARY
Pop art, warm colors, cool colors, numerator, whole number, denominator, multiply, array

RECOMMENDED RESOURCES
Andy Warhol "Pop Art" Presentation (this can be found by googling), worksheet(attached), *examples of completed student work (attached)*

LESSON SEQUENCE

1. Students will study the art elements found in Andy Warhol's artwork.
2. Then, students will use their knowledge of Warhol's "Pop Art" style and multiplying whole numbers by fractions to create a one-of-a-kind art piece.
3. Students will solve multiplication problems involving a fraction and a whole number.
4. They will choose one equation to represent their Andy Warhol inspired Pop Art.
5. Next, students will sketch their tangram animal or figure using only 7 shapes to create their picture, which represents the denominator. Using their tangram, students will create an Andy Warhol like array. The whole number represents how many square folds are on their paper. Since multiplication is a representation of repeated addition, students will use color within their animal or figure to represent their fraction repeated.
6. Students will use watercolor paint and their knowledge of contrasting colors (warm and cool colors) to paint their Pop Art-inspired art piece. The teacher may need to review these colors by looking at the color wheel.
7. Finally, students will reflect by completing the given prompts.(on worksheet)

EXTENDED LEARNING ACTIVITIES

1. Complete a reflection: (located on worksheet)

One thing I learned today….
One thing I would like to know more about after today's lesson….

2. Allow students to sketch an additional picture using their own multiplication equation.

SOURCES

Lesson Written by Kara Moulds and Melissa Tingle, 4th grade Math Teacher

TIPS + FREQUENTLY ASKED QUESTIONS

Show students several examples of tangram designs. For example, if you choose animals for everyone to do, show multiple tangram animals on google images

Andy Warhol Multiplying Fractions inspired Pop Art

Today we are going to study art elements found in Andy Warhol's artwork. We are going to impart our knowledge from Andy's "Pop Art" style and multiplying whole numbers by fractions to create an one-of-a-kind art piece.

Step #1: Solve the following using the procedures and routines we have discussed for multiplying whole numbers and fractions.

1. $2 \times \frac{3}{7} =$ _____
2. $4 \times \frac{2}{7} =$ _____
3. $3 \times \frac{6}{7} =$ _____
4. $8 \times \frac{5}{7} =$ _____
5. $4 \times \frac{5}{7} =$ _____
6. $8 \times \frac{2}{7} =$ _____
7. $6 \times \frac{4}{7} =$ _____
8. $4 \times \frac{3}{7} =$ _____

Step #2: Circle 1 of the equations above to represent in your Andy Warhol inspired Pop art.

Step #3: Sketch your tangram animal or figure of choice below. You can only use 7 shapes to create your picture. Take your time and practice!! It's okay to erase and change on your sketch.

Step #4: Using your tangram animal or figure, create an Andy Warhol like array.

For example: 6 x ¼ would need 6 square folds with ¼ represented in each square fold. Since multiplication is a representation of repeated addition we are going to use color within our animal or figure to represent our fraction repeated.

- Fold and Sketch your figure first on your watercolor paper.
- After you are done folding and sketching, use your knowledge on contrast colors (warm colors and cool colors) to paint your Pop Art inspired art piece.

Step#5: Reflection! Using complete sentences , complete the following reflection prompts.

One thing I learned today….

One thing I would like to know more about after today's lesson….