

UNIT: PLACE VALUE 2D MIXED MEDIA DRIP ARTWORK (Lesson 4 of 5) Grade Band: 3

Content Focus: Visual Arts & Math



LEARNING DESCRIPTION

Students will be able to read and write multi-digit whole numbers up to 10,000 using mixed media, patterns, line, and size to model different place value digits in a number. Students will demonstrate their understanding by creating a 2D line artwork with different media to represent the different place values with each media will represent a different place value.

LEARNING TARGETS

Essential Questions	"I Can" Statements
What is place value?	I can explain what place value is.
	I can tell the place value of digits in numbers up to 10,000.



How can I represent place value in expanded form?	I can write numbers in expanded form, word form, and standard form.
How can I represent place value using base ten blocks?	I can represent place value up to 10,000 using mixed media and line weight.
How can we compare numbers?	I can use warm, cool, and neutral colors to create a mixed media art piece
How can we use line weight to show different place values?	

GEORGIA STANDARDS

Curriculum Standards	Arts Standards
3.NR.1.1 Read and write multi-digit whole numbers up to 10,000 to the thousands using base-ten numerals and expanded form. 3.NR.1.2 Use place value reasoning to compare multi-digit numbers up to 10,000, using >, =, and < symbols to record the results of comparisons.	VA3.CR.2 Create works of art based on selected themes. b. Create works of art emphasizing multiple elements of art and/or principles of design. VA3.CR.3 Understand and apply media, techniques, processes, and concepts of two-dimensional art. a. Develop drawings and paintings with a variety of media (e.g. pencil, crayon, pastel, tempera, watercolor). VA3.CN.2 Integrate information from other disciplines to enhance the understanding and production of works of art. a. Apply art skills and knowledge to improve understanding in other disciplines.

SOUTH CAROLINA STANDARDS

Curriculum Standards	Arts Standards
3.NSBT.5 Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or <.	Anchor Standard 1: I can use the elements and principles of art to create artwork.
3 · · · · · · · · · · · · · · · · · · ·	Anchor Standard 2: I can use different materials, techniques, and processes to make art.
	Anchor Standard 7: I can relate visual arts ideas to other arts disciplines, content areas, and careers.



KEY VOCABULARY

VE I VC	AET VOCABULART						
Content	Vocabulary	Arts Vocabulary					
•	Place value - The value of each digit in a number based on its position Ten-thousands - The fifth position represents the number of ten-thousands	 Color Warm - Red, pink, orange, and yellow Cool - Blue, green, purple, teal Neutral colors - Gray, brown, tan, black 					
•	Thousands - The fourth position represents the number of thousands	<u>Value</u> - The lightness or darkness of a color					
•	Hundreds - The third position represents the number of hundreds	 <u>Pattern</u> - The repeated use of elements like shapes, lines, colors, textures, or forms in a consistent and organized 					
•	<u>Tens</u> - The second position represents the number of tens	manner<u>Line</u> - A path connecting two points					
•	Ones - The rightmost position (1st place) represents the number of ones	 <u>Line weight</u> - How thick or thin a line is 					
•	Expanded form - A way of writing numbers to show the value of each digit according to its place value; it breaks down a number by expressing it as the sum of each digit multiplied by its place value	 <u>Texture</u> - How something feels or looks like it feels <u>Two-dimensional</u> - Containing height and width 					
•	Standard form - The way of writing numbers using digits, without breaking them down by place value or expanding them	 <u>Three-dimensional</u> - Containing height, width, and depth 					
•	Numerical - Using digits to represent quantities, values, or amounts						
•	<u>Digits</u> - Symbols used to represent numbers in a numeral system						

MATERIALS

- Mixed media paper (thicker than computer paper)
- Colored pencil
- Thin marker
- Thick marker



- Thin paintbrush
- Thick paintbrush
- Strips of colored paper (five colors)
- Tape
- Pencils
- STEAM journals if available
- Jen Stark
- Introducing Jen Stark
- Image of a color wheel
- See, Think, Wonder artful thinking routine

INSTRUCTIONAL DESIGN

Opening/Activating Strategy

- Teacher will show students an example of a paper chain link that represents a number with four values. Each place value will be represented with a different color of paper.
 - Example: 1,427
 - One link of green paper
 - Four links of yellow paper
 - Two links of blue paper
 - Seven links of red paper
- Teacher will show students how to create a paper chain using tape and strips of colored paper.
- Project a key for which place values are represented by which color.
- Students will be put into small groups. Students will be given a number that they will represent with their chain links.
 - Each place value will be represented with its corresponding color.
- Teacher will model how to write the expanded form and word form of a number. Students will then write the expanded form and word form of their number on a note card.
- Chain links will then be displayed in the classroom.
 - During sharing time, groups will compare their chain sculptures with each other using visuals to understand greater than and less than based upon the value of digits represented.
- Students will identify the place value of another group's chain link and compare their paper chain links.
 - Students should notice the longest chain does not always represent the largest number!
 - The chain links will be hung in the classroom such as the picture below.





Work Session

- Next, lead students through the <u>See, Think, Wonder artful thinking routine</u> about Jen Stark's artwork (images below).
 - First, students will identify what they see in the image. Emphasize that they should make objective observations about the image (i.e. physical features, colors, textures, etc.).
 - Next, ask students to identify what they think about the image. Emphasize that students should be creating inferences using visual evidence from the image.
 - Finally, ask students what they wonder about the image.
- Facilitate a class-wide discussion around students' observations, inferences, and questions.
- Show students a <u>color wheel</u> and draw their attention to cool colors, warm colors, and neutral colors. Ask them to observe the kinds of colors that Jen Stark uses in her work. Does she only use one color scheme?









Drip Cascade, 2015, felt-tip pen on paper, 30 x 24 in.



- Teacher note: The purpose of introducing Jen Stark is for students to see how she creates two-dimensional pieces using pattern, line, and color. She uses warm, cool, and neutral colors with a drip pattern. Her work also catches the eye of students and serves as a great way to show how different line weights can represent different place values.
- Tell students that they will use Jen Stark's artwork as inspiration to create 2D mixed media artwork, using different thicknesses of lines and different media to represent place values.
- Review place value with students. Ask students how thicker lines and thinner lines can be used to represent the place value of digits.
- Teacher and students will work together to identify the value of a given number.
 - Draw three lines of different weight (thickness). Ask students which line would represent the hundreds place? Tens place? Ones place?
 - Students should make the connection that the line will get thicker as the place value gets larger.
 - Using markers, students will draw different thicknesses of lines in their STEAM journals in a wavy pattern to show how the lines in our 2D Mixed Media Drip Artwork will show the difference between each place value of a number.



- For example, if the number is 463, students would draw four thick wavy lines, six medium wavy lines, and three thin wavy lines.
- Then students will write the number in standard form, expanded form, and word form under their mini art piece.
- Students will be provided with mixed media paper, colored pencils, thin markers, thick markers, different sized paint brushes, and paint.
- Together the class will create a guide to what each media will represent when they get to the artmaking portion of the lesson.
 - For example: Colored pencils represent the ones place, thin markers represent tens place, thick markers represent hundreds place, paint using a thin paintbrush to represent the thousands place, and paint using a thick paintbrush to represent the ten thousands place.
- Students will then be given a number and will plan their artwork in their STEAM journals. Students should draw out a prototype of what their artwork would look like labeling the line sections with colors and mediums.
- Students will then begin by drawing the outline of their drip artwork in pencil on their paper. Students will need to fill in most of the space of the paper, remembering that the colored pencils represent the ones place, thin markers represent tens place, thick markers represent hundreds place, paint using a thin paintbrush to represent the thousands place, and paint using a thick paintbrush to represent the ten thousands place.
- Students will be able to choose the color scheme for their artwork. Remind students of the different color schemes using a <u>color wheel</u>.
- Provide students with a notecard to write their number in standard form, expanded form, and word form.

Closing/Reflection

 Students share their artwork and discuss their creation process. They will also discuss and reflect on the creation process, the place value significance of the task, their personal feelings, and what they learned from the task in their STEAM journals.

ASSESSMENTS

Formative

- Informal teacher observation and questioning throughout the lesson
- Observations of students' drawings and reflections in their STEAM journals
- Students will create a key for their drip artwork in their STEAM journals to demonstrate their knowledge and understanding of place value as represented in their artwork through line weight.

Summative



Name:		Comments:
	2D Mixed Media Drip Art Checklist	
Expectations:		
Uses line weight to represent a number within 10,000.		
Writes a number in standard form and word form.		
Understands how to visually represent place value.		

DIFFERENTIATION

Accelerated:

- Students will incorporate technology to model any "number" and its "place values" by representing the value of digits using pixel art.
- Students will cut the drip out of their paper. Then starting at the bottom, place the drips on a butcher paper, overlapping each other, and create a collaborative artwork.



Drip Cascade, 2015, felt-tip pen on paper, 30 x 24 in.

Remedial: Students will be given three digit numbers to create drip art.



ADDITIONAL RESOURCES

- Jen Stark Animation Video
- How to Create Excel Pixel Art

CREDITS

U.S. Department of Education- STEM + the Art of Integrated Learning Ideas contributed by: SAIL Grant Teacher Leaders, Shannon Green, Katy Betts

*This integrated lesson provides differentiated ideas and activities for educators that are aligned to a sampling of standards. Standards referenced at the time of publishing may differ based on each state's adoption of new standards.

Revised and copyright: June 2025 @ ArtsNOW

