



Interpreting Drama

CONTENT Addressed:

Math

ARTS Addressed

Drama

Pacing

(1) 30-45 minute session

21st Century Skills

- Critical Thinking
- Creative thinking
- Informational Literacy

Materials List

- Actor's Tools
- paper, pencils
- math books
- camera

Assessment: Drama Rubric

Ask students to reflect on each group's drama definition. Did they use their Actor's Tools? Which ones? Did they use the remainder student? If so, was it reasonable? Do their bodies show the definition of division? If groups master all 3 of these, they get full points.

Lesson Sequence

Step 1: Introduce the Actor's Toolbox to students and go through each tool so that students are familiar with their use.

Step 2: Present a math problem for students that they need to solve without using their voice tools. IE: get yourselves into groups 3 within 10 seconds. If there is a remaining student(s), ask students what we could do with that remainder. Write their answers on the board.

Step 3: Present a math lesson on interpreting remainders when dividing. Look at how to do that process and then ask what is reasonable to do with the remainders? Have students solve 2 word problems as a group and 2 word problems independently. Think-pair-share their answers.

Step 4: Have students gather back together as a group. Have them repeat step 2. This time, students will receive 5 minutes in their groups. They must depict the definition of division with their bodies using the Actor's Toolbox in some way AND they must use one of the remainder students in their definition depiction. Model this for your students (ie: you stand with your arms straight. A volunteer student stands behind you with their arms in a circle above your head and a volunteer student stands in front of you with their arms in a circle by your feet - you just made the division sign with your bodies).

Step 5: Have each group present their division definitions using their Actors Tools.

Extension: Take pictures of each group and ask students to write a definition for division and remainders based on what images they see.

TEACHER NOTES



Reading the Art

CONTENT Standard:

CCSS.ELA Literacy.RL. 4.1, 4.2, 4.3, 4.6, 4.7

ARTS Standard

2.1 and 2.4

Pacing

(1) 30-45 minute session

21st Century Skills

- Critical Thinking
- Creative thinking
- Communication

Materials List

- Illustration #13 by NC Wyeth
- Robinson Crusoe Chapter 27 excerpt
- paper, pencils, tablet, etc.
- Watercolor paper and paints.

Assessment: Alternate Point of View

Robinson Crusoe is told from the point of view of Robinson himself.

Have students re-write the selection they read from the point of view of the captain and then sketch an illustration that utilizes texture, color and shading to support and convey the captain's point of view of this moment.

Lesson Sequence

Step 1: Students visually study Robinson Crusoe Illustration No. 13 by NC Wyeth using this Puzzle, Think, Explore technique. Create a categorized list of student responses.

Step 2: Ask students to now look at the colors, light and dark shading, and textures of the print and summarize this scene from the point of view of the Captain. Then, have them do the same thing from the point of view of Robinson Crusoe.

Step 3: Provide students with an excerpt from Robinson Crusoe for Chapter 27, found here. Ask them to read the selection carefully to find any comparisons between the text description and their previous ideas of the scene based on the illustration.

Step 4: Compare the textual nuances of phrasing, word choice, and voice to the use of shading, textures and color used in the illustration. Do they match? How so? How does the illustration capture the feeling of the text? Provide an opportunity for students to compare and contrast in small groups these (and other) questions of inquiry.

Step 5: Groups can present their findings to the whole class and engage in a discussion on the similarities and differences between the text and the illustration in capturing the scene.

Step 6: Have students reflect on how reading printed text and reading a visual art print are the same and different and what decoding techniques you need to use for each source.

Extension: Compare the art of NC Wyeth to that of his son, Andrew and grandson Jamie. How do each of these artists share a story? What elements are the same and different in how they share their point of view?

TEACHER NOTES



Rockwell Marketing

CONTENT Standard:

CCSS ELA Literacy.CCRA.SL
2

ARTS Standard

VA:Cr1.1.5a

Pacing

(1) 30-45 minute
session

21st Century Skills

- Critical Thinking
- Creative thinking
- Informational Literacy

Materials List

- Computer, Internet, [Glogster website](#)
- projector and screen
- blank paper, markers
- A basic design program (if doing the artwork digitally)
- Selection of Norman Rockwell work
- Background information for the teacher: [Norman Rockwell Marketing Article](#)

Assessment: Writing through Art

Students can choose a product or event they would like to advertise.

As a student design/advertising team, they can create a print ad using their new knowledge from this lesson, as well as write and share a 60 second marketing pitch for their idea. The class will be the marketing test group.

Students will be graded on a rubric for persuasiveness and use of the elements of art, as well as scores from their peers.

Lesson Sequence

Step 1: Engage students in a discussion about what makes something persuasive. Provide students with a variety of media (print, audio (radio) or video commercial) and ask them to work in teams to find commonalities (language/tone/color/font/use of space). Create a working list through a Glogster board.

Step 2: Provide students with a selection of Norman Rockwell print covers from The Saturday Evening Post, Life, and The Literary Digest. Explore the commonalities among these images. Add this to the Glogster board and add lines to observations that connect with their previous activity. Discuss these purpose of these critical links for both the author/artist and the reader/audience.

Step 3: Ask each student team to choose one Norman Rockwell print and examine it closely for one Art Element of their choice. Students will use this element to determine the artist's purpose and how the element was being used persuasively. Students will then use this information to write a 1-page article that will persuade an audience to act based on the image chosen. IE: In the Post Cover "Missing Tooth" students could write a persuasive article about the advantages of visiting the dentist. Students must use at least two items they identified in their Glogster board for persuasive writing.

TEACHER NOTES



12-Bar Rules

CONTENT Standard:

CCSS.MATH.CONTENT.4.OA.C.5

ARTS Standard

MU.Cr1.1.4b

Pacing

(1) 30-45 minute session

21st Century Skills

- Critical Thinking
- Creative thinking
- Communication

Materials List

- [12-Bar Blues Video](#)
- [Math Patterns Tutorials](#)
- [12-bar blues worksheet](#)
- [Drag and Drop Guitar Player](#)
- Computer, Speakers, Internet and Projector
- Paper and pencils
- Musical Instruments (optional)

Assessment: Rubric

As a next step, as students to create their own mathematical patterns. Then, each student can create a new 12-bar blues composition from those patterns.

As students perform their compositions, use a rubric to assess the accuracy of their pattern rule and their musical composition in the 12-bar blues

Lesson Sequence

Step 1: Ask students to identify patterns that they see around the room. Describe the pattern and then attach a letter to each section of the pattern. For example, if the pattern in red dot, blue dot, red dot, they would attach the letters ABA.

Step 2: View the video [The 12 Bar Blues](#) from Hawkeye Herman. Discuss what kind of pattern the 12-bar blues follows (AAB) and how you could show that kind of pattern visually with materials in the room.

Step 3: Using the [math rules times table patterns](#) ask students to identify what patterns they see in each column. Then, compare the pattern from the first table with that of the second table. How are they related?

Step 4: Ask students to attach letters to each part of the pattern in their times tables, just like we did at the beginning of the lesson. These “times table patterns” will become the basis for creating their own 12-bar blues composition.

Step 5: Using [this worksheet](#), students will create a 12-bar blues composition from the pattern found in their math times table. For each letter, students will assign a chord (for example: A = I chord, B = IV chord).

Step 6: Using the chart they created for their 12-bar blues, students can play their composition using the guitar drag-and-drop player OR using a musical instrument.

TEACHER NOTES



Line Plot Dance

CONTENT Standard:

CCSS.5.MD. 2.B

ARTS Standard

DA:Cr2-5a.

Pacing

(1) 30-45 minute session

21st Century Skills

- Critical Thinking
- Creative thinking
- Collaborating

Materials List

- Several examples of mathematical line plots
- Several examples of written choreography
- Paper, pencils
- Space to move

Assessment: Create and Perform

In small groups, create a new choreographed dance based on a given line plot from the teacher. Perform for the class.

Lesson Sequence

Step 1: Provide students with several different examples of choreographic writing. In small groups, try to decipher what the symbols indicate.

Step 2: Review examples of line plots from previous classes. Compare the line plots and the choreography for similarities and differences.

Step 3: Gather students into two teams. Each team must create a line plot with as many segments as team members. Label these as fractions (ie: $1/8$, $2/8$, $3/8$, etc).

Step 4: Ask each member of the group to silently write down where they would like to stand on the line chart. Collect the numbers and place an "x" for each number marked. For instance, if 3 people wanted to stand at $1/8$, there would be 3 "x"s above that number.

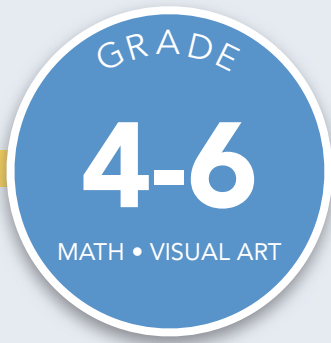
Step 5: Once the numbers have been plotted, the team must now figure out a way for there to be an equitable distribution of "x"s along the number line.

Step 6: Decide what x's will move and how they will move (curves, slide, etc). Draw this on the paper - this becomes the choreography.

Step 7: Have students line up like the original number line and move as specified in their number line drawing.

Extension: View the [Choreographer's Creative Process](#) and have a socratic discussion surrounding the intersection of math and art through physical thinking.

TEACHER NOTES



Mixed Pattern Weaving

CONTENT Standard:

CCSS.MATH.CONTENT.4.OA.C.5

ARTS Standard

VA:Cr2.1.4a.

Pacing

(1) 30-45 minute session

21st Century Skills

- Creative thinking
- Communication
- Informational Literacy

Materials List

- [Mixed Math Pattern review](#)
- [Weaving example video](#)
- Internet, speakers, screen and projector
- Varieties of yarn, scissors, paper strips
- Cardboard pieces (4"x8" is a good place to start)
- Plastic weaving needle
- [Weaving instructions](#)

Assessment: Critique

Critique each presentation on: the use of color and texture to communicate the math pattern, as well as on the creation of an accurate mixed math pattern.

Lesson Sequence

Step 1: Review the concept of mixed math patterns using the [IXL review page](#) review together as a class.

Step 2: Explore a variety of weaving patterns and textures, as seen [in this video](#). Notice the use of colors and textures (such as adding braids into the weaving) to highlight the patterns created by the woven piece.

Step 3: Discuss the patterns used in a weaving - both the actual pattern used to create the weaving and the pattern created based on color and texture choices.

Step 4: Outline a multi-pattern weaving on a piece of paper using mixed pattern number sequences. Students create a mixed pattern number sequence and then chart how they would use color and texture to create that into a weaving. For example, if the pattern was 1, 3, 7, 13 how might students create a weaving that showed that pattern using color (1 line of purple, 3 lines of pink, etc) and texture (7 lines of braided yarn, 13 lines of paper strips).

Step 5: Students create their weaving based on their outline using cardboard looms.

Step 6: Share the finished product with another student and see if the student can identify the mixed pattern, as well as how that patterns was demonstrated with color and texture.

TEACHER NOTES