

Lesson Title: “Space: Exploration in New Media”

Your name: Rachel Vredenburg

Number of Students: 20

Grade Level: 1st

Length of each class period: 40 minutes, 2 days

LESSON Rationale

This lesson focuses on exploration of outer space in connection to Mae Jimeson the first black woman astronaut. To begin, students will watch and discuss the video read aloud of *Mae Jimeson* by Mary Nhin, illustrated by Yuliia Zolotova. They will note her historical importance and discuss her lifelong dream to be an astronaut as well as expand this thinking to other dreams that students might have. Next, students will look at the mural created at the request of NASA, by artistic duo, Geraluz and WERC. “This inaugural mural of the NASA Art Program envisions a cosmic future through children’s dreams, intertwining their aspirations with a universe of infinite possibilities” (Geraluz, 2024). By looking at this monumental testament to curiosity and inspiration, students will understand that inspiration and dreams have self-fulfilling power. This will lead to them designing their own space scene.

This art lesson is intrinsically tied to science as students will use a mixed puffy-paint compound to add texture to their painted backgrounds. Then, they will be able to add their own colors and design their own planet within their own galaxies. This combination of science, art, and imagination will inspire students to be creative and invest in themselves both in the art room and in achieving their own individual dreams. By practicing patience, listening, and practice, students will develop skills that are applicable to other areas of their lives.

PROCESS

Painting, Puffy Paint low relief

Artists:

Geraluz: Gera Lozano was born in the Amazon jungle of Peru but eventually moved to the the “jungle” of Newark, NJ and currently works out of Brooklyn, NY (Geraluz, 2018). “Lozano received her BFA from William Paterson University, and her MFA from the San Francisco Art Institute.” Her work is “Focused on reawakening notions of femininity and indigeneity via mixed-media modes” (Geraluz, 2018). Pictured in the righthand side of the photo.

WERC Alvarez: “Alvarez is based in Brooklyn. Werc’s practice exists at the intersection of public art, cultural identity, and environmental consciousness. Werc investigates public art as a place for spiritual practice, bringing into play conceptual mythical figures and reimagining our connection to nature and ancestral knowledge. Revealing the place in between worlds, Werc draws from

Mesoamerican wisdom that empowers our connections to the transcendental aspects of our existence, exploring themes of resilience, migration, and interconnectedness” (WERC GALLERIES, 2025). Pictured on the left.



“The New York-based artist team Geraluz, left, and WERC, right, pose in front of their mural “To the Moon, and Back” with their son Amaru, 5” (Luabeya, 2025).

Luke Jerram: Barry Arts Museum featured artist during Marsfest.

BIG IDEA(s): Inspiration

LEARNER OBJECTIVES:

Students will experiment with materials
Students will understand spatial relationships based on size

Students will be able to recognize and describe different characteristics of space

Students will be able to identify Mae Jemison as the first Black female astronaut.

Students will be able to blend paints with a paper towel

Students will be able to color in neatly.

Students will be able to cut neatly.

Students will be able to use liquid glue correctly.

3 National Standards for Visual Arts (VAS) (list numbers and full description for each standard) [National Visual Arts Standards At-A-Glance • National Art Education Association \(arteducators.org\)](https://www.arteducators.org/)

VA:Cr2.1.1a: Explore uses of materials and tools to create works of art or design.

V A:Cr2.2.1a: Demonstrate safe and proper procedures for using materials, tools, and equipment while making art.

V A:Re8.1.1a: Interpret art by categorizing subject matter and identifying the characteristics of form

3 VA State Standards of Learning (SOL) in the arts: [Visual Arts | Virginia Department of Education](#)

1.1 The student will apply creative thinking to artmaking. a) Experiment with materials.

1.12 The student will identify and use the following in works of art: a) Color—primary, secondary c) Shape—geometric, organic. d) Texture—visual, tactile. e) Pattern—alternating, repeating.

1.13 The student will identify and apply spatial relationships for composition. a) Arrange shapes in space within the picture plane. b) Identify and use figure-ground relationships. c) Identify and use size relationships.

Science SOLS: Matter

1.3 The student will investigate and understand that objects are made from materials that can be described by their physical properties. Key ideas include

- a) objects are made of one or more materials with different physical properties and can be used for a variety of purposes;

Earth and Space Systems

1.6 The student will investigate and understand that there is a relationship between the sun and Earth.

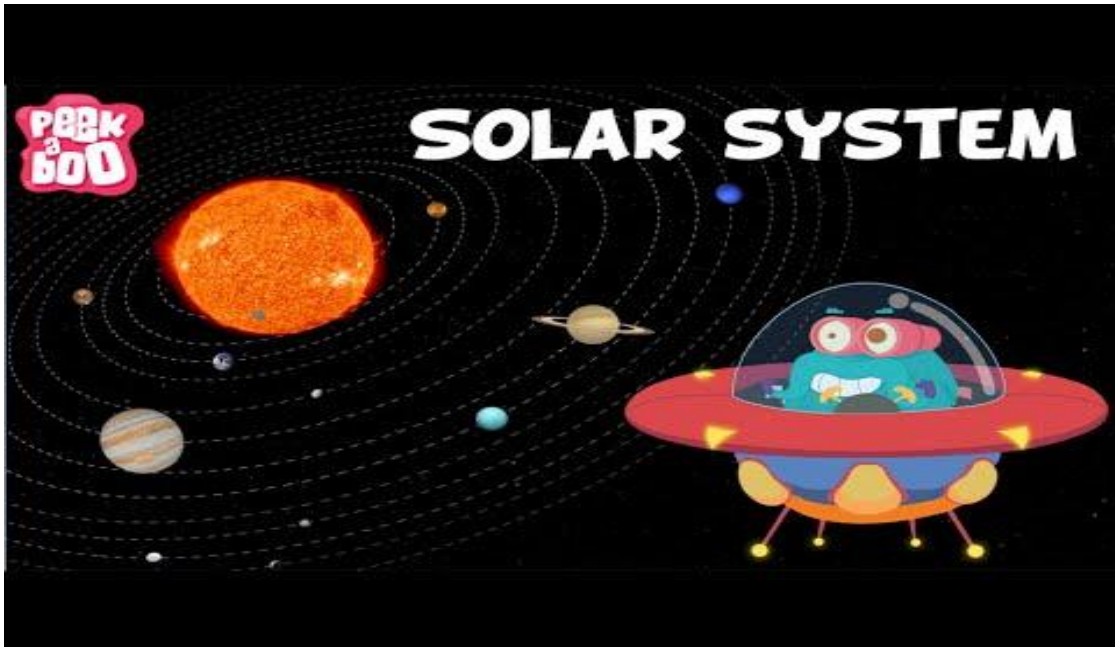
MATERIALS NEEDED FOR UNIT (*be specific*: how many of each item, what size paper, what color markers/paper, what kind of recycled materials, what size brushes, what kind of markers finepoint/broad tip, name tags, permission slips, etc.)

A. Art Supplies: 20 sheets of 9x12 painting paper per class, 20 sheets of regular sketchbook paper, 20 plastic knives and forks, 20 pencils, 8 erasers, 20 messy mats, tempera paint in 8 colors, 8 paint trays, 2 drying racks, sink, a roll of paper towels, 20 liquid glue bottles, a couple cans of shaving cream, 6 sealed containers to mix puffy paint, and 20 pairs of scissors

B. Additional Materials: (What books, images, websites, handouts, and other reference materials did you consult in planning this lesson and/or use in presenting it to your students? Include any links to museums or other resources you used. *Include a link to your presentation for introducing artists and the unit/lessons to your students.*)

Day 1: [Read Aloud Book For Kids : Mae jemison by Mary Nhin | Black History | champions book](#)

Day 2: [SOLAR SYSTEM - The Dr. Binocs Show | Best Learning Videos For Kids | Peekaboo Kidz - YouTube](#)



[Puffy Paint resource](#)

PowerPoint Presentation

VOCABULARY/DEFINITIONS:

Tactile texture

Visual texture

Outer Space: Temperate plains between the African Rainforest and African Sahara

Mae Jemison: First Black female astronaut to go into space (1992) inducted into the International Space Hall of Fame (2004)

Background: furthest space away from the viewer

Foreground: Space in front of the background

Organic shape: Those found in nature

Geometric shape, shapes we can name such as circles, squares, triangles, etc.

MOTIVATING STUDENTS: PERSONAL and SOCIAL RELEVANCE

Students will be inspired by the achievements of Mae Jemison and be inspired to create their own space scene using science, just like Mae! Students will also be inspired by the tactile nature of the project.

UNIT PROCEDURES

A. Teacher/Classroom Prep:

Teacher will prepare a PowerPoint presentation, containers of puffy paint, prepare containers of tempera, fill 6 containers with water, and place 3-4 plastic knives or forks in each water container.

B. Pre-assessment:

Students will remember some of the animals that live on the African Savanna, they will also be able to suggest simple shapes including geometric and organic shapes, to construct their animals during the demo.

Behavioral Expectations: (*What are the students expected to do as they function in the classroom*)

Students are expected to sit in their seats, listen while the teacher is talking, and participate in any class discussion.

C. Organizer:

The teacher will create brief PowerPoint to share important ideas and ask guiding questions to lead the discussion with students. The teacher will conduct different demonstrations at each stage of the projects such as painting the background and using the puffy paint, so that students may follow along and build certain skills such as tracing, painting, and texturizing.

D. Extension Activity:

Students may free draw or color the Mae Jimeson themed coloring sheet after they finish their backgrounds

UNIT SEQUENCE

3 days/classes:

Teacher Actions

DAY 1 (1:20-2:00)

1:20 Teacher will greet students and invite them to take their seats

1:20-1:30 Teacher will explain introduce the outer space mixed media project including the 4 min, Mae Jimeson read aloud. The teacher will ask introductory questions such as “why was she significant? What did she do for her job? What do you all want to be when you grow up?”

1:27-1:28: The teacher will pass out 9x12” pieces of paint paper and messy mats to each group. Teacher will remind students to write their names on the back as soon as they get their paper.

1:28-1:33 Teacher will conduct a demonstration in which students will follow along step-by-step to paint their backgrounds. Teacher will ask guiding questions like, “What color should Ms. V do first?” To emphasize participation. “Red!” Teacher will remind students to roll up long sleeves. Teacher will be sure to show blending in patches for a

Expected Learner Actions

DAY 1

1:20 Students will say hello to Mrs. V and Mrs. T

1:20-1:30 Students will pay attention to the video about Mae Jimeson and will also connect the art elements, color and texture especially, that correlate to the mixed media project. After the video, students will answer questions such as “what did you see in the video? “I saw her in space! I saw stars! I saw she was the first black woman in space!”

1:27-1:28: Students will thank the teacher for the paper and write their names on the back.

1:28-1:33 Students will pay attention and volunteer what colors Ms. V should use next when prompted. “definitely back cause it’d dark in space!”

1:33-1:35: Students will use what they learned in the demo to fill in their whole backgrounds

galaxy effect and using the HANDLE of the brush for stars. (no splatter painting).

1:33-1:35: Teacher will pass out 8 colors of tempera on paint trays. Other materials include a water cup, and 3 brushes and 4 paper towels per table.

1:35-45: Teacher will walk around and encourage students as they create their textured galaxy backgrounds. Teacher will remind students that they take the whole messy mat to the drying rack after they finish.

1:50-: Teacher will announce cleanup and ask that students use walking feet when placing their papers on the drying rack. Students will wash hands if they need to taking turns and being respectful. Teacher will remind students to

1:52-1:54: Teacher will call students to line up. Teacher will ask follow-up questions about what students learned. "who did we study today? Name something you learned about blending/ space?"

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

DAY 2

1:20: Teacher will greet students as they arrive and listen to their cool stories from over the weekend.

1:21-1:24 Teacher will briefly recap on the space lesson. Teacher will ask students refresher questions such as "who can tell me what we did last time? The teacher will show a short video specifically about outer space and planets to focus on this specific aspect of space. After the video, teacher will ask open ended questions such as "Name something you learned about planets? What colors were they? What were the atmospheres like?"

1:25-1:26: The teacher will pass out another 9x12" paper to each student.

1:26-1:30 Teacher will conduct a demonstration in which students will follow along step-by-step to create their planets. Teacher will ask guiding questions like, "What

with warm colors and dab texture on top with a paper towel.

1:35-45: Students will continue working on painting their papers as the teacher walks around and encourages students. Students will take the whole messy mat to the drying rack after they finish. Early finishers may free draw or color the inspirational Mae Jimeson paper.

1:50-: Students use walking feet when placing their papers on the drying rack. Students will put all brushes back in the water, bring their table's trays to the counter, and wash their hands if they need to.

1:52-1:54: Students will line up. Students will answer follow up questions like "We studied Mae Jimeson! I learned that space texture is really easy to make!"

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

DAY 2

1:20: Students will say hello as they enter the classroom and find their art chairs.

1:21-1:24 Students will answer the question "who can tell me what we did last time? "We watched a video about THE first female astronaut!!" "What was her name, does anyone remember? "Mae Jimeson!" Students will pay attention to the next video about planets. After the video, teacher will ask open ended questions such as "Name something you learned in this video? "They can be really hot or cold" Are they all the same size" "NO!"

1:25-1:26: students will thank the teacher when they get their papers back.

1:26-1:30 Students will pay attention to the demo and participate in the guiding questions.

1:30-1:35: Students will thank the teacher when they receive their tools and materials and raise their hand if they need help. "Can you help me stay in the lines?" "Yes, of course, that you for asking nicely."

size should Mrs. V make the planet that is further away from us?" "SMALLER" "Should Mrs. V touch the paint?" "NO"

1:30-1:35: Teacher will call two student helpers to pass out containers of puffy paint, two more to help with messy mats, and paint brushes, and one student from each table to grab a tempera tray. Teacher will walk around and facilitate this process, admire students' work, encourage them and help students to even out the texture if needed.

1:50-: Teacher will announce cleanup and ask that students use walking feet when returning their projects to the drying rack.

1:52 Teacher will call students to line up and ask closing questions "name something you learned about planets today?" "They are HUGE" They can have different elements other than air. They can be really hot or really cold. They have a lot of colors!"

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

DAY 3

1:20: Teacher will greet students as they arrive and ask them to please find their art chairs

1:21-1:24 Teacher will recap on the space lesson. Teacher will ask students refresher questions such as "who can tell me what we did last time? The teacher will show another encompassing short video specifically about outer space and fun facts about space. After the video, teacher will ask open ended questions such as "Name something you learned in this video? What is something you learned? What are some qualities about space we talked about at the beginning of the lesson."

1:25-1:26: The teacher will pass out another 9x12" piece of paint paper to each student.

1:26-1:30 Teacher will conduct a demonstration in which students will follow along step-by-step to cut out and glue their custom plantes onto their day one projects."

1:35-45: Students will thank the teacher when they receive their tempera trays. Students will add swirls of color if desired and swirl with a plastic fork.

1:50-: students will use walking feet when returning their projects to the drying rack

1:50-1:52: students will wash hands if needed and line up when asked.

1:52 students will answer questions such as "I learned that planets might be really hot or really cold" I learned that some planets have really short years. All planets are not like Earth.

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

DAY 3

1:20: Students will say hello as they come in and take their seats.

1:21-1:24 Students will answer refresher questions such as "who can tell me what we did last time? "we painted our planets! "Name something you learned in this video? "Space has more stars than grains of sand!" What are some qualities about space we talked about at the beginning of the lesson." "Its super cold and you cant breathe in space."

1:25-1:26: Students will thank the teacher as they recieve their supplies and write their names on the back as inst.

1:26-1:30 Teacher will conduct a demonstration in which students will follow along step-by-step to cut out and glue their custom plantes onto their day one projects."

1:30-1:35: Teacher will call two student helpers to pass out paper plates, baskets of glue and scissors. Teacher will walk around and facilitate this process, admire students' work, encourage them and help students if needed. Early finishers will complete the design your own alien worksheet for fun.

1:50-: Teacher will announce cleanup and ask that students use walking feet when returning their projects to the drying rack.

1:52 Teacher will call students to line up and ask closing questions "name something you learned about planets today?" "They are HUGE" They can have different elements other than air. They can be really hot or really cold. They have a lot of colors!"

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

1:30-1:35: Students will use walking feet when passing out the supplies. Students will raise their hands if they need help.

1:50-: Students will clean up and use walking feet when returning their finished projects to the drying rack.

1:52 Teacher will call students to line up and ask closing questions "name something you learned about Mae Jemison during this lesson? Why is she a historical figure?" "She was the first black woman to fly to space!" "I learned that some planets are HUGE and they are much bigger than the whole Earth." They can have different elements other than air. They can be really hot or really cold. They have a lot of colors!"

1:55: The homeroom teacher picks up students and the teacher says goodbye as they leave.

ADAPTATIONS AND RECOMMENDATIONS: (*Note accommodations for Students with Special Needs as well as any classroom management strategies. Provide examples in your descriptions. This is not optional.*)

Students who need extra help may raise their hand and the teacher will work one on one with them briefly. Students that have trouble tracing will be given the larger marker for better dexterity. Students who need extra time drawing may finish up on day 3.

DIFFERENTIATION STRATEGIES: (These should also be reflected in the unit sequence. When will you integrate these strategies into your planning? Be specific in your scripting/sequencing.)

- Flexible grouping
- Open-ended activities
- Exploration by interests
- Negotiated criteria
- Anchoring/Extension activities
- Independent studies
- Tiered activities/products
- Journal prompts
- Multiple levels of questions
- Scaffolding
- Choice: Learner profile, Readiness, Interest

ASSESSMENT & DOCUMENTATION OF TEACHER/STUDENT LEARNING

A. Assessment:

The teacher will make sure to observe as students paint, draw, trace, paint, cut, and glue their projects. While working with a variety of media, students' final piece will demonstrate their understanding of the project at each stage.

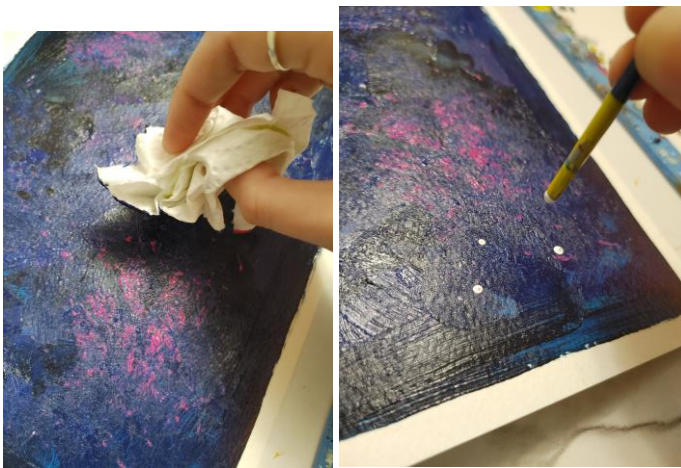
B. Documentation:

The scaffolding in this lesson will start immediately with the questions in the video such as What do you see? What colors did we use? Who did we talk about? Congratulating and encouraging student answers will help document the correct answers and enforce these ideas. By encouraging students' progress, they will be excited to continue into day 2. In day 2, students will build on this skill by creating a more detailed mixed media project with tactile and visual texture. By day 3 students will add these elements together in a culminating assessment/finished product.

PROCESS IMAGES



Step1: Gather materials including tempera, brushes, pencils, paper plates, plastic forks or knives, glue, shaving cream, flour, scissors, sketch paper, water cups, messy mats, paper towels, and construction paper.



Step 2: Using tempera and paint paper, paint the background a mix of black and 2 other colors and dab away excess paint to create texture. Add stars with the handle of paintbrush if desired.

Step 3: If you want a colored puffy paint you HAVE to mix paint or food coloring while mixing it other wise it will have to be mostly white.



Step 4: On your blank paper, trace and circle using the paper plate, then paint in the circle. It might go out of the lines.

Step 5: add more paint and swirl/ dab napkins to add texture.

Step 6: cut out planets and glue to the background

Step 7: Let dry and display!

References

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