

Lesson Title: Exploring Ancient Art at Shumla Archaeological Site

Grade Level: Elementary (K-5, adjusted as needed)

Objectives:

- Students will learn about archaeology in Texas.
- Students will explore stratigraphy and understand the layering of rock art paint.
- Students will discover the symbolism behind ancient art.
- Students will discuss erosion and the use of local materials for art.

Materials Needed:


- Sticks (for mixing 'paint')
- Large bowls (one for each group)
- Salt, flour, food coloring, and water (for making paint)
- Images or descriptions of Shumla rock art (.ppt presentation or refer directly to)
- River rocks
- Brushes made with Yucca leaves (optional, possible separate activity for 3-5)

Explore the archaeological process of paint making with this hands-on activity, inspired by experimental archaeology and the study of ancient paint layers. For more background, review these resources:

[Recipe for Success: Experimental Archaeology and Paint Making](#)

[In the Lab: Determining Paint Stratigraphy - Shumla](#)

Watch this Lunch and Learn with Shumla Senior Preservation Archaeologist, Diana Radillo Rolon, Ph.D., to gain important insight into stratigraphy, paint layers, and the symbolism behind ancient paints.

 [Hearthstone Project Results 2 of 4: Proof of Composition | May 2024 Lunch & Learn](#)

Paint Recipe:

Ingredients:

- Equal parts salt, flour, and warm water (e.g., 1 cup each for a small batch; adjust amounts based on class size)
- Food coloring in red, black, yellow, or orange (*white is simply the base recipe without added color*)

Example for a Small Batch:

- 1 cup salt
- 1 cup flour
- 1 cup warm water

Instructions:

1. Setup: Arrange the activity into groups of four students per station. Provide a large bowl and stirring sticks for each group.
2. Mixing: In the bowl, students combine the salt, flour, and warm water, stirring until the mixture is smooth.
3. Coloring: Divide the mixture into smaller portions. Add food coloring to each portion to create the desired Shumla paint colors (red, black, yellow, orange, or white).

Application:

1. **Paint Layers: Students apply the paint to rocks in the order consistent with Shumla stratigraphy:**
 - Black (base layer)
 - Red
 - Yellow
 - White (top layer)
2. **Drying:** Painted rocks should be left to dry overnight to set the layers.

Introduction (15 minutes)

Simplify discussions for K-2, focus more on symbolism and erosion for grades 3-5):

1. **Hook:** Show students images of Shumla rock art, describe the site and mission. Discuss its significance and location in Texas and why the digital preservation work is important.
2. **Discussion:** Ask students what they think ancient people used to create art. Introduce the concept of using natural materials found in the environment. Groups discuss why stories are told through this artwork, and the significance.

Activity: Creating Ancient Art (30 minutes):

1. **Tool-Making:** Provide sticks, brushes or yucca brushes and explain that ancient people used similar tools. Discuss how these tools were made and their purpose.
2. **Paint-Making:** Students mix salt, flour, food coloring, and water to create paint. Discuss how ancient artists might have used similar materials.
3. **Art Creation:** Have students use their homemade tools to create rock art on rocks, paper or canvas. Encourage creativity and exploration and layer in order of Shumla murals, discuss why these large murals always followed the same pattern of color layering.

Exploration and Discussion (20 minutes):

1. **Stratigraphy:** Explain that rock art often has layers. Discuss how layers form over time and why they matter in archaeology. What is the process for studying layers of rock art paint, and how do archaeologists keep from damaging it further within this process.
2. **Color Symbolism:** Explore the meaning behind colors in ancient art. For example, red might symbolize life or energy.
3. **Erosion:** Discuss how weathering and erosion affect rock art preservation.

Reflection and Wrap-Up (15 minutes):

1. **Group Discussion:** Ask students what they learned about archaeology, stratigraphy, symbolism, and erosion.
2. **Art Gallery:** Display students' rock art and discuss their creative choices.
3. **Connection to Texas:** Highlight that Shumla is part of Texas' rich cultural heritage.

Extension Projects:

- Research other rock art sites in Texas and share findings with the class.

Extension that integrates Texas Beyond History (TBH) TEKS-based lesson plans (possible centers activities):

- 1. A Day in the Life:**
 - Explore the daily lives of ancient Texans using artifacts and archaeological evidence.
 - Discuss how their activities, tools, and environment shaped their routines.
- 2. Comparing Two Cultures: Hinds Cave and Yours:**
 - Compare the lifestyle of ancient people at Hinds Cave with students' own lives.
 - Discuss similarities and differences in food, clothing, and shelter.
- 3. Ecoregions of Texas:**
 - Explore the diverse ecosystems in Texas and their impact on human settlement.
 - Discuss how geography influenced cultural practices.
- 4. Location, Location, Location: Using a Grid to Determine Context:**
 - Teach students how archaeologists use grids to map and excavate sites.
 - Set up a mock excavation grid in the classroom and have students practice recording findings.

Integrate all four areas of learning within the lesson: listening, speaking, reading, writing.

- 1. Comprehension:**
 - Understanding text meaning, making connections, and drawing conclusions.
 - Example: “infer,” “summarize,” “analyze.”
- 2. Author’s Purpose and Craft:**
 - Recognizing why authors write and how they use literary techniques.
 - Example: “persuade,” “entertain,” “figurative language.”
- 3. Composition:**
 - Creating written pieces with clarity and organization.
 - Example: “narrative,” “expository,” “editing.”
- 4. Inquiry and Research:**
 - Investigating topics, gathering information, and citing sources.
 - Example: “research,” “cite,” “evaluate.”
- 5. Vocabulary:**
 - Understanding word meanings, origins, and context.
 - Example: “context clues,” “syllabication,” “word origin.”

Suggested books to include:

Tales of Ancient Worlds: Adventures in Archaeology

[Tales of Ancient Worlds: Adventures in Archaeology: Milosavljevich, Stefan, Neon Squid, Caldwell, Sam: 9781684492121: Amazon.com: Books](#)

Can YOU Dig It?: Archaeology Lost & Found in the Sands of Time

[Can YOU Dig It?: Archaeology Lost & Found in the Sands of Time: Baker, Amanda: 9781730788062: Amazon.com: Books](#)

Archaeologists on a Dig (Kid Scientist)

[Archaeologists on a Dig \(Kid Scientist\): Fliess, Sue, Powell, Mia: 9780807541579: Amazon.com: Books](#)

Archaeology for Kids: Uncovering the Mysteries of Our Past

[Archaeology for Kids: Uncovering the Mysteries of Our Past, 25 Activities \(13\) \(For Kids series\): Panchyk, Richard: 9781556523953: Amazon.com: Books](#)

National Geographic Readers: What Is an Archaeologist?

[Amazon.com: National Geographic Readers: What Is an Archaeologist? \(L3\): 9781426335112: Romero, Libby: Books](#)

Archaeology: Cool Women Who Dig Paperback

[Archaeology: Cool Women Who Dig: Yasuda, Anita, Chandhok, Lena: 9781619305007: Amazon.com: Books](#)