

# Rock Art: Creating Petroglyphs

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## Grade Level

1<sup>st</sup> – 8<sup>th</sup>

## Estimated Time

1 hour 15 minutes – 1 hour 30 minutes

## Goal

Students will learn about different types of rock art and how the geology of South Carolina determines where we find both prehistoric and historic petroglyphs.

## Objectives

After completion of the activity, students will be able to:

1. *Define* and *identify* rock art.
2. *Distinguish* between different types of rock art.
3. *Observe* different types of petroglyphs and *locate* rock art in South Carolina.
4. *Understand* how South Carolina's geology dictates where we can find rock art.
5. *Describe* and *locate* the fall line in South Carolina and *explain* how it divides South Carolina between the Piedmont and Coastal Plain.
6. *Simulate* creating petroglyphs by carving symbols or images in Styrofoam or linoleum.
7. *Compare* their petroglyphs to historic and prehistoric petroglyphs.
8. *Hypothesize* the meaning behind petroglyphs and *relate* the thought process behind the creation of the students' petroglyphs compared to real petroglyphs.

## Academic Standards

### Science

- 1.E.4 The student will demonstrate an understanding of the properties and uses of Earth's natural resources.
- 3.E.4 The student will demonstrate an understanding of the composition of Earth and the processes that shape features of Earth's surface.
- 5.E.3 The student will demonstrate an understanding of how natural processes and human activities affect the features of Earth's landforms and oceans.
- 8.E.5 The student will demonstrate an understanding of the processes that alter the structure of Earth and provide resources for life on the planet.

8.E.6 The student will demonstrate an understanding of Earth’s geologic history and its diversity of life over time.

### ***Social Studies***

- 1-1.3 Identify various natural resources (e.g., water, animals, plants, minerals) around the world.
- 1-1.4 Compare the ways that people use land and natural resources in different settings around the world.
- 2-1.2 Recognize characteristics of the local region, including its geographic features and natural resources.
- 2-4.3 Recognize the cultural contributions of Native American tribal groups, African Americans, and immigrant groups.
- 3-1.1 Categorize the six landform regions of South Carolina – the Blue Ridge, the Piedmont, the Sand Hills, the Inner Coastal Plain, the Outer Coastal Plain, and the Coastal Zone – according to their climate, physical features, and natural resources.
- 3-1.2 Describe the location and characteristics of significant features of South Carolina, including landforms; river systems such as the Pee Dee River Basin, the Santee River Basin, the Edisto River Basin, and the Savannah River Basin; major cities; and climate regions.

### ***Visual Art***

- VA-1 I can use the elements and principles of art to create artwork.
- VA-2 I can use different materials, techniques, and processes to make art.
- VA-5 I can interpret and evaluate the meaning of an artwork.
- VA-6 I can identify and examine the role of visual arts through history and world cultures.
- VA-7 I can relate visual arts ideas to other arts disciplines, content areas, and careers.

### **Activity Type: In-Class**

This lesson plan is to be done as an in-class activity. The teacher will provide the required materials.

### **Materials**

- Scratch paper
- Styrofoam sheets or linoleum tiles (1 for each student)
- Wooden sticks or pencils (linoleum cutters if using linoleum tiles)
- Various colors of paint
- Paint rollers or brayers
- Colored sheets of paper for printing
- Paint trays

- Optional: Aprons for younger students to prevent them from getting paint on their clothes
- Optional: Safety gloves if using linoleum cutters.

## **Background Information**

- In archaeology, rock art is a catch-all term for any human-made markings on natural rock.
- Rock art can be divided between petroglyphs and pictographs. Pictographs are pictorial images, signs or symbols created by drawing or painting. Petroglyphs are images, signs, or symbols that are carved or inscribed on rock.
- There are many different petroglyphs that have been found in rocks across the globe. All of these are different animals, shapes, and people. Archaeologists have had to interpret what these petroglyphs mean and if they are symbols of something, stories from real life, or if they were used for practical purposes.
- Petroglyphs have been made throughout history, from prehistoric times to modern history. It is often difficult for archaeologists to accurately date petroglyphs and pictographs, especially in South Carolina.
- Researchers rely on clues present in the image or symbol itself to determine if it is historic or prehistoric. If the petroglyph or pictograph contains numbers, letters, or other historic images / symbols, then it is safe to assume it is not prehistoric in origin. However, if rock art contains unfamiliar symbols or motifs that does not mean it is necessarily prehistoric.
- Researchers must take site location, history, and rock erosion into consideration when determining age of rock art.
- South Carolina's geological history dictates where rock art can be found in the state.
- Millions of years ago sea levels were higher than they are now, with the ancient coastline running southwest to northwest through the middle of the state. Today this ancient seacoast forms a geological feature called the Atlantic fall line, which serves as the boundary between South Carolina's Piedmont and Coastal Plain.
- The fall line gets its name from the drop in elevation between the Piedmont and Coastal Plain, resulting in numerous rapids and waterfalls, and reflecting the change in elevation between the ancient inland and Atlantic Ocean.
- This geologic history makes the Piedmont and Coastal Plain topologically and geographically different from each other. In the Piedmont and Blue Ridge Mountains, rocks such as granite, schist, gneiss, diorite and quartz are plentiful and provide excellent surfaces for rock art.
- In the Coastal Plain, these rock formations are below the surface, resulting in little exposed rock and subsequently, no rock art.
- The largest concentrations of rock art in South Carolina can be found in Greenville, Pickens, Spartanburg, and Oconee counties.

## Vocabulary

- **Anthropology** – The study of humans, past and present. In the United States, the study of Anthropology is divided into four subfields (Sociocultural Anthropology, Biological or Physical Anthropology, Archaeology, and Linguistic Anthropology).
- **Archaeological Site** – A place where human activity occurred and material remains were deposited.
- **Archaeologist** – An Anthropologist (social scientist) who studies the material remains of past human activity.
- **Coastal Plain** – The region of South Carolina that extends south and east of the fall line to the modern Atlantic coast. This region is characteristically flat and contains little exposed rock suitable for rock art.
- **Cultural Heritage** - A tradition of intangible attributes (i.e., language, origin stories, and rites of passage), artifacts, structures, and places of importance associated with a group of people that are preserved and passed from one generation to the next; defines a group's identity.
- **Cultural Resources** - Evidence of past human activity. They include archaeological sites, historic homes, battlefields, burial grounds, shipwrecks, historic and prehistoric artifacts.
- **Culture** - A set of learned beliefs, values and behaviors or way of life shared by the members of a society.
- **Fall Line** – The geological boundary between the Piedmont and Coastal Plain. Its name refers to the drop in elevation between the two regions that results in waterfalls and rapids. The fall line marks the shape of an ancient coastline, and its unique geology is derived from ocean-deposited sand dunes that are millions of years old.
- **Historic** – The period of the past that is accounted for in the written record.
- **Petroglyph** – Any carving or inscription on rock.
- **Pictograph** – A pictorial sign or symbol created by drawing or painting without carving on any kind of surface.
- **Piedmont** – The region of South Carolina that extends north and west of the fall line to the Blue Ridge Mountains, and is characterized by rolling hills and numerous streams.
- **Prehistoric** – The period of the past that predates written records.
- **Preservation** - Protection; keeping from damage or destruction.
- **Rock Art** – A popular catch-all term used to refer to both petroglyphs and pictographs.
- **Vandalism** - Treasure hunting or nonscientific excavation; destruction or damage of property.

## Lesson

1. Show students different examples of petroglyphs and pictographs found in *Discovering South Carolina's Rock Art* (Charles, 2010) and other references. Discuss the differences between petroglyphs and pictographs. As a class, brainstorm ideas about their meanings and why they were made.
2. Show your students a map of South Carolina. Ask them where they think South Carolina's petroglyphs and pictographs are located. If a student simply gives their answer, ask them to explain their reasoning.
3. Draw a line across the map of South Carolina that roughly approximates the fall line. Ask your students if they know what this line represents. Discuss the fall line and how it divides the Piedmont from the Coastal Plain. Explain how these regions of South Carolina are geologically distinct from each other.
4. Discuss with your students how the Piedmont, as opposed to the Coastal Plain, has plenty of exposed rock suitable for rock art, and that is why we find South Carolina's rock art exclusively in this region of the state.
5. Discuss how petroglyphs are made. On what types of rocks were they created? What kinds of tools would have been used to create them? What were these tools made from?
6. Students should come up with a petroglyph design that has a personal meaning behind it. Why did they choose their specific petroglyph and how does it have meaning to them?
7. Give students a thin sheet of Styrofoam and a wooden stick or pencil. Have them sketch their petroglyph on paper before carving their design into the Styrofoam. For older classes, linoleum tiles may be used in place of Styrofoam. Linoleum cutters will be required to carve into the tiles. These tools are sharp, and it is important to demonstrate how to safely handle these tools before distributing them. Gloves may be used to mitigate potential cuts, but always have a first aid kit on hand in case of accidents.
8. Reflect with your students on the difference between carving out their artwork and drawing their artwork. How hard would it have been to chisel designs like circles to represent the sun into a rock?
9. Have your students examine the individual parts and shapes of their petroglyphs. Discuss how the different shapes come together to create one image.
10. Discuss with your students the similarities and differences between their petroglyphs and historic / prehistoric petroglyphs. Explain the difference between historic and prehistoric petroglyphs, and how researchers can distinguish between the two.
11. Discuss how historic petroglyphs can help us understand history better. What could petroglyphs (both historic and prehistoric) have been used for? What groups of people could have been responsible for making them? How do we interpret their meanings accurately and apply what we know to other historical evidence?
12. End the lesson by distributing paint, paint rollers (or brayers), paper, and trays to put paint in. Have your students cover their rollers in paint and then use the roller to paint

their Styrofoam or linoleum carving. Have them place a piece of paper on top of their painted carving and have your students lightly rub the backside of the paper. Slowly remove the paper and your students will have a print of their petroglyph which can be hung in the classroom.

## References

- Charles, Tommy. *Discovering South Carolina's Rock Art*. University of South Carolina Press, 2010.
- Clottes, Jean. *Cave Art*. Phaidon Press, 2014.
- Huey, Lois Miner. *Children of the Past: Archaeology and the Lives of Kids*. Millbrook Press, 2017.
- Lauber, Patricia. *Painters of the Caves*. National Geographic Society, 1998.
- Moe, Jeanne M., et. al. *Project Archaeology: Investigating Rock Art*. Project Archaeology, Montana State University, 2018.