

Project 2: Soil Study Artistic Rendering

Soil • Compare & Contrast



Project Essential Questions

- How do scientists classify soil?
- How do I distinguish between the four types of soil?

PROJECT DESCRIPTION

This arts integrated project should be taught after the students are able to identify the four types of soil, compare and contrast the four types of soil, as well as classify soil based on its attributes. The students will be led through a “Gallery Walk” of photographs of plants and or animals living in specific types of soil. The students will draw/illustrate/paint a naturescape depicting something (plant or animal) that lives in a specific type of soil.

LEARNING TARGETS “I Can...”

- Identify the four types of soil visually and verbally
- Explain how each type of soil is alike and different from one another
- Classify soil based on the attributes I observe
- Illustrate a specific type of soil along with a living thing that uses the soil for living

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Units provide differentiated ideas and activities aligned to a sampling of standards.

The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program
Cherokee County (GA) School District and ArtsNow, Inc.

Duration: 1-2 days

Project Description	Learning Targets
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ESSENTIAL QUESTION

<ul style="list-style-type: none"> How do scientists classify soil? How do I distinguish between the four types of soil?
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STANDARDS

Curriculum Standards	Arts Standard
<p>S3E1 Students will investigate the physical attributes of rocks and soils c. Use observation to compare the similarities and differences of texture, particle size, and color in top soils (such as clay, loam or potting soil, and sand)</p> <p>S3CS8 Students will understand important features of the process of scientific inquiry</p>	<p>VA3C.2 Develops life skills through the study and production of art</p> <p>VA3PR.2 Understands and applies media, techniques, and processes of two-dimensional art processes (drawing, painting, printmaking, mixed-media) using tools and materials in a safe and appropriate manner to develop skills a. Creates drawings with a variety of media (e.g., pencils, crayons, pastel)</p>

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
<ul style="list-style-type: none"> Clay Silt Loam Sand Topsoil Subsoil Bedrock 	<ul style="list-style-type: none"> Illustration Color Photography Gallery Walk Rendering

ASSESSMENTS

Formative	Summative
<ul style="list-style-type: none"> The students' naturescape renderings could be used as an assessment tool to ensure the students are correctly identifying the specific soil they are depicting along with the correct corresponding living thing. 	<ul style="list-style-type: none"> The students' still naturescape could be used as an assessment tool to ensure the students are correctly identifying the specific soil they are depicting along with the correct corresponding living thing.

MATERIALS

White paper, colored pencils, oil pastels, crayons, markers, pencils

Activating Strategy

Explain what nature photography is:

Nature photography focuses on landscapes, wildlife and plant life as they are found in their natural environment. Photographs of nature provide glimpses of animals, forests or mountains that may not be seen in person. Many nature photographers try to educate people about the beauty of nature, often with the hope that more people will be inspired to help the environment. (Definition by www.ehow.com)

Then share examples of nature photography through a Gallery Walk:

Share **Examples of Nature Photography** (see Downloads) with the class through a Gallery Walk to inspire their Soil Study Artistic Renderings that they'll create in the Main Activity.

Questions to ask students during Gallery Walk of images:

What do you see? (Making close observations.)

What do you notice? (Making sound inferences.)

What do you wonder? (What questions do you have for the photographer?)

Main Activity

- Explain that today students will be creating their own nature scene with the concentration being on the type of soil (clay, silt, loam, or sand) they choose along with a living thing that lives in or around the soil.
- Students will sketch out their soil nature scene first then add color using either colored pencils, crayons, oil pastels, etc.
- As the students complete their rendition, they will gather into small groups. They will each share their soil nature scene and ask the group if they are able to tell which type of soil they depicted. The students are to explain their reasonings with one another.
- Display these soil scenes around the classroom and or hallway to elicit conversations regarding the four types of soil.

REFLECTION

Reflection Strategies

After the teacher has completed the differentiation activities, the students will reflect on the following

Reflection Questions (see Downloads) using complete sentences:

- How did my illustration of soil help me to better understand the differences in the four types of soils?
- Which type of soil did you think would hold water the best? Explain why. Which type of soil did not hold water the best? Why?

DIFFERENTIATION

Below Grade Level:

- Students could take their own photographs of soil scenes outside of the school setting and or on their school playground. They could then share their photos with the class having a discussion regarding the soil type and living things that may inhabit that particular type of soil.

Above Grade Level:

- Students could look deeper into the concept of which types of soil holds the most water. Soil types that are able to hold more water may or may not be better to use for farming purposes. This group of students could research the concept of soils ability to hold water. They could then “teach” the other groups/students why knowing which types of soil are able to hold the most water is or is not important to the world around us.

EL Students:

- As a part of the Above Grade Level soil/water research activity, this group of learners could actually do a hands-on experiment using the four types of soil. They could have 4 containers that each contain a specific type of soil, then add water to each to examine which soil holds water most efficiently. This information could then become a part of the soil/water activity.

ADDITIONAL RESOURCES

- Soil resource website: <http://www.soils4kids.org/>
- Soil & water resource website: <http://www.kidsgeo.com/geology-for-kids/0013-waterr-in-soil.php>
- *How Soil Is Made* by Heather L Montgomery
- “What’s the Dirt on...Dirt?” Youtube video: <https://www.youtube.com/watch?v=if29mjcd5bc>

APPENDIX (see Downloads)

- **Examples of Nature Photography**
- **Reflection Questions-Soil Study**

CREDITS

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