



National Park Service
U.S. Department of the Interior

Old-Growth Bottomland Forest
Research and Education Center

Congaree National Park

100 National Park Road
Hopkins, SC, 29061
(803) 776-4396 park office
(803) 783-4241 fax

Congaree K12 Lesson Plan

“Water” You Looking At?

Grade Level: 3rd
Duration: 30-45 minutes
Curricular Areas: Visual art, science

Unit Description:

The Linking Ecology and Art of Floodplains (LEAF) Program is a continuing partnership between the Columbia Museum of Art and the Old-Growth Bottomland Forest Research and Education Center at Congaree National Park. These programs have also developed with the direct support of the National Park Foundation, Richland One School District, the Richland County Conservation Commission, the Geological Society of America GeoCorps Program, and the National Park Service Geologic Resource Division.

The purpose of LEAF programs is to turn STEM into STEAM (with an added “A” for “Arts”) by engaging local third graders in connecting the science, art, experience, and stewardship of the floodplain landscape at Congaree National Park. Specifically, students investigate how landscapes and soils form through weathering, erosion, deposition. The full unit consists of five parts over three days. *This* lesson is intended as a pre-site lesson to prepare the students for a one-day, multi-disciplinary field experience. A post-site lesson invites the students to draft a letter or post card to a relative to tell them about the trip.

Lesson Description:

The essential purpose of this lesson is to engage the students in a tour of selected paintings from the Columbia Museum of Art as well as some photographs of Congaree National Park. As the students work through these photos, they will be challenged to think critically about earth science elements (soil, water, and earth processes) in the picture as well as artistic considerations about the style, perspective, and their own personal reaction to the place.

This lesson is very adaptable. Printed color images posted around the room as an “Art Museum for a Day,” but it might also work as a Power Point / Smart Board Presentations. The students sheets are probably too long for every student to assess every image, but small student groups may work on sub-sets of the images; they may then discuss their thoughts with their peers or present their ideas to the class.

Essential Questions:

1. How do visual artists share water features and soil in various images?
2. How do we see the effects of erosion and deposition in landforms shaped by water?
3. What is a floodplain?

Preparation:

Teacher Background

1. This lesson was originally designed to be taught in a classroom setting in one 30 to 45 minute session.
2. Collaboration between classroom, art, and science specialists is encouraged.
3. Teacher note – sometimes it is tricky to tell the difference between erosion and deposition in the landscape at first glance.
 - a. One trick is to think about rock type. Low-lying sedimentary landscapes, such as the SC coastal plain, are often shaped differently than landscapes associated with volcanic and metamorphic rocks. For the purposes of this lesson, we are focused on low-lying sedimentary landscapes in the SC coastal plain.
 - b. One trick is to think about scale. Very large landscape features – such as forested hills or valley slopes that are several hundred meters or more in size – often result from the erosion of streams that cut down between the hills. Large flat areas, however, are often the result of deposition rather than erosion.
 - c. At a smaller scale, another trick is to look at the plants. If there is a steep hill with no plants, for example, then there may be enough erosion to keep them from growing. If there is a large flat sandy area with no trees, then there may be enough of both (but especially deposition) to keep plants from growing.

Prerequisite Student Knowledge

- This lesson is designed to integrate science standard 3.S.1A.2, 3.S.1A.7, 3.E.4A.2, 3.E.4B.1, 3.E.4B.3, and 3.L.5A.1 with visual arts standards.
- Students should be familiar with the concepts of rivers and how they are different from oceans.
- A key concept emphasized here – that is implied but not explicit in the standards – is that rivers are surrounded by soil. Rivers and soils change. Water levels go up and down. Through erosion and deposition, the channel moves around (much like a fire hose). The landscape around the river is sculpted by erosion (think of this as “minus” shapes in the earth where soil has been washed away) and deposition (think of this as “plus” shapes in the earth where soil has been added). When we look at a river landscape we must think about how it changes.

Vocabulary

Foreground – The area of a [picture](#) or [field](#) of vision, often at the bottom, that appears to be closest to the viewer. Also, to give priority to one aspect of a thing over another

Middle ground – The part of an artwork that lies between the [foreground](#) (nearest to the viewer) and the [background](#).

Background – The part of a [picture](#) or scene that appears to be farthest away from the viewer, usually nearest the horizon. This is the opposite of the [foreground](#). Between background and foreground is the [middle ground](#).

Landscape – A [painting](#), [photograph](#) or other work of art which [depicts](#) scenery such as mountains, valleys, trees, rivers and forests. There is invariably some sky in the scene. The perspective (see below) in a landscape is usually that of a person looking out across the land at eye level.

Floodplain – A floodplain is a low place near a river that gets wet when there is too much water in the channel.

Perspective – Perspective in art refers to the viewpoint of the painter or photographer. Are they looking up, down, or sideways? Are they focused at something up close or are they looking at a large area?

Key Materials and Equipment

1. Printed Images (Ideally color, ledger-sized prints) of the attached powerpoint presentation **OR** Computer projector or smartboard for digital presentation
2. Student Activity Sheets and Pencils

Teacher Preparation (20 minutes)

1. The teacher should spend some time familiarizing themselves with the attached images – both in terms of time studying (looking at) at each image and time spent understanding the historical, artistic, and scientific context of each work.
2. Review the “My Art Notes” page and see if there are any changes that you might like to make.
3. The teacher should divide the class into small groups of three or four students each.
4. This lesson plan may be run in two ways:
 - a. A series of printed images that will turn the classroom or hallway into an “art museum for a day;” in this model the small groups rotate through the images on their own.
 - b. With a power point presentation; in this model each student group works through the images at the same time.

Instructional Objectives using the “5E” Model:

Engagement (3 minutes)

1. Present the students with a collage of the images (Powerpoint Slide 1) and ask the students about what they see. The focus the students on figuring out what the images have in common – plants, soil, and water. Tell the students that they are going to look at all of these images (and a few more) in detail to see how the artists show us water and what we can learn about science from these scenes.

Exploration (5 minutes)

2. Present the students with a comparison of “Congaree Riverbank” and “The Riverbank” (Powerpoint Slide 2). Ask them questions about similarities and differences, but give them some silent time to think themselves before you ask for responses. Which is a painting and which is a photograph? Can they see evidence of erosion and/or deposition? Can they see evidence for weathering (i.e. the sun and water)? Where is the artist standing? Is the water moving fast or slow? Do they like the images? What would it be like to be there?

Elaboration (2 minutes)

3. Introduce the art concepts of landscape, foreground, middle ground, background, perspective, and floodplain.
4. Pass out the “My Art Notes” activity sheets

Extension (30 minutes)

5. Have the students work in small groups to complete their activity sheets by answering questions related to each image. The group should talk about the answers, but each student should complete their own sheet.

6. There are only two to three specific questions for each image on the activity sheet, but there are more questions to talk about in the teacher notes. You may select or alter questions. Some questions have definite answers, but some are more opinion based. Sheets are designed so that they can be shared in sets of three if there is not time for each student to see every picture.
7. Alternatively the students may – as either individuals or groups – use the questions as a guide to writing a short paragraph about each image
8. Additional artwork has been provided if time or interest allow.

Evaluation (5 minutes)

9. At some point call the activity to a halt but have each group stay at whatever image they are looking at. Have each group of students present/share their image and their answers with the class. You could also print “DOCENT” badges (a docent is someone who gives art museum tours) to give the students making the presentation.

Standards:

This lesson covers visual arts standards 3–VI (Connecting the Visual Arts to other Disciplines) as well as science standards 3-3 (Earth Materials and Changes), with some application to Standard 3-2 (Habitats and Adaptations).

Attachments:

- Appendix I – images and teacher notes
- Powerpoint Presentation (Contains high-resolution images for projection or printing)
- Student Activity Sheets
- Student Activity Sheets - KEY

Resources:

- Congaree National Park website: www.nps.gov/cong

Acknowledgements:

This lesson designed as part of the Linking Ecology and Art of Floodplains (LEAF) Partnership Program between the NPS Old-Growth Bottomland Forest Research and Education Center at Congaree National Park (www.nps.gov/cong), The Columbia Museum of Art (CMA; www.columbiamuseum.org), and Richland One School District (ROSD). This 2012 program was funded in part by the National Park Foundation through a grant from the Disney Corporation. Lesson content was developed by David C. Shelley (NPS), Kerri Kuhlkin (CMA), and Colette Dryden (ROSD). Please share any comments, questions, feedback, or suggestions on this lesson with program staff at 803.776.4396 or david_shelley@nps.gov.

Congaree K12 Lesson Plan

“Water” You Looking At? Appendix I – Artwork, Notes, and Key

Standard Questions for All

Earth Science Observations

1. Is there soil in the picture? What kind?

2. Do you see erosion? Where?
3. Do you see deposition? Where?
4. Is the water moving? What evidence do you have?
5. What color is the water?
6. What kind of water body is this?

Art Observations

1. Is this a painting or a photograph?
2. Is the image a "landscape"?
3. Where would you be standing or sitting to get this view? On a hill? In a boat? In an airplane?
4. What sounds might you hear around you?
5. Where does the artist want you to look?

Reactions

6. What do you think is going on beneath the surface of the water?
7. Would you like to visit this place? Why or why not?
8. How does this painting make you feel? Why?

Important Points For The Trip

- Draw the students' attention to the fact that most of these show trees and soil in addition to water.
- We will not see the river on the trip, but will mainly see the forest; these pictures, though, should give the students some ideas for the river in other parts of the park.



Image 1 Title: View of Ironbridge in Shropshire

Date: 1880

Painter: Attributed to John Linnell

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes:

Student Questions:

1. What is growing in the soil? **Lots of trees**
2. What kind of water body is found here? Where is it in the image? **River. Glimpses of the River in the Middle Ground, Back Ground**
3. Do you see people and evidence of people? **Cut the trees, built factories**
4. What is the low place next to the water in the middle ground of the painting called? **Floodplain**

Other Discussion Questions:

1. What time of day is it in this painting? Why? **Evening. The artist uses color and light to depict the time of day. This technique is called luminism.**



Image 2 Title: Falls on Reedy River, Greenville, South Carolina

Date: 1852

Painter: William Harrison Scarborough

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

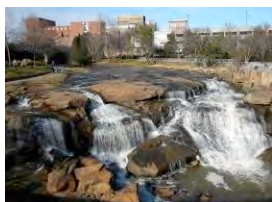
Notes:

Student Questions:

1. Is the water running fast or slow? FAST / SLOW How does the artist show us that? **Fast. The water is blurred**
2. What is happening to the land as the water rushed by? **Weathering and Erosion of the Rocks**
3. Which way is the water flowing? **Towards the foreground / viewer**

Other Discussion Questions:

1. Does this landscape have any man made features? What are they? **YES – the Bridge**
2. Has anyone been to these falls up in Greenville? Do they look the same? **YES, but with more buildings in the background. Today there is a great park there!**



See a picture on the Clemson University website at: <http://www.clemson.edu/extension/county/greenville/>



Image 3 Title: Bridge – Garden of Dreams, Charleston, South Carolina

Date: 1920's

Painter: William Posey Silva

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes:

Student Questions:

1. What kind of water body is shown here? **Lake – the Water doesn't seem to be moving. Swamp or Floodplain might also be acceptable (Yes, I know that this is not standard 4-2)**
2. Use your imagination. Where are you in this painting? In a boat? What sounds do you hear? **Hopefully students are familiar with Charleston and Spanish Moss**

Other Discussion Questions:

1. What types of animals do you think you might see?



Image 4 Title: The Sea, Myrtle Beach, South Carolina

Date: 1936-37

Painter: Frederick Theodore Weber

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes:

Student Questions:

1. Would the water shown in this painting be fresh water or salt water? **FRESH / SALT**
2. What is the weather like in this landscape? How does the artist show us that? **Sunny and hot; bright light and blue sky with the clouds**
3. What kind of soil do you think you would find near the waves? (Hint: Castle) **Sand**
4. What sounds would you hear if you stood beside the artist? **Roaring waves**

Other Discussion Questions:

1. What is the weather like in this landscape? How does the artist show that? **By showing the sky bright and partly cloudy. Green plants suggest summer, which suggests hot.**

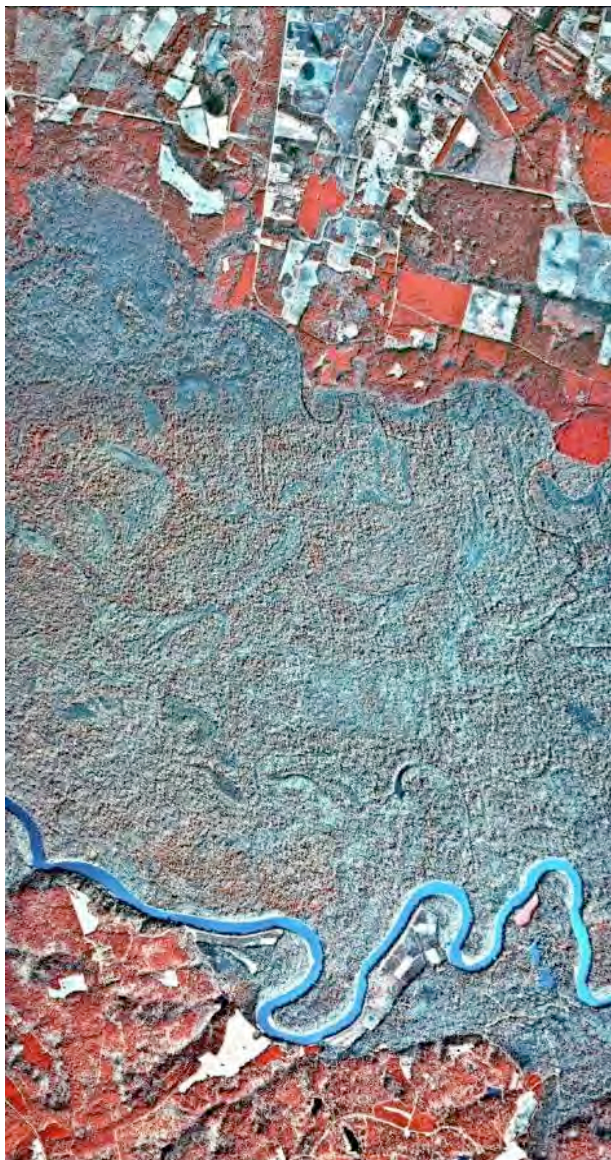


Image 5 Title: Aerial Photograph of the Congaree River

Date: 1999

Photographer: South Carolina Department of Natural Resources

Permission: Public access aerial photograph from the South Carolina Department of Natural Resources

Notes: This is an aerial photograph of the Congaree River taken by a special camera mounted in an airplane. Scientists and city planners use photographs like this to keep track of changing water features, changing earth features, and changes in human development. This photograph actually uses special infrared film. Areas that are wet and have wet soil show up as blue-green. Areas that are drier and have drier soil show up as red. The channel of the Congaree River is the obvious blue line. The blue-green area around it is the floodplain. The red areas are the uplands on either side of the floodplains. The “contact” between the uplands and the floodplain is a hill called a bluff.

Student Questions:

1. Is this a landscape? **YES / NO -Typically landscapes are eye-level perspectives that include some sky.**
2. Where was the artist or scientist who captured this image? **In an airplane**
3. What is the “blue ribbon” near the bottom of the image? **The Congaree River**
4. What is the blue/green area beside it? **The Floodplain (The red areas are the uplands; the students will explore the boundary between the two on their fieldtrip)**
5. Some of the red and white shapes are farm fields. What does this tell you about the soil? **That it is good soil for growing plants.**

Other Discussion Questions:

1. Does the river flow in a straight line or is it curved? **Curved**



Image 6 Title: The Riverbank

Date: Mid- to Late 19th Century

Painter: Albert F. Bellows (1829-1883)

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes: Compare this with the painting “The Seine at Giverny,” by Claude Monet and the “Congaree Riverbank” photograph by Paul Angelo.

Student Questions:

1. What vegetation do you see in this painting (circle all that apply)? **Trees, lily pads, reeds**
2. Is the water running fast or slow? **FAST / SLOW** How does the artist show us that? **Clear (unblurred) reflections, plants aren't carried away**
3. Do you see where people have started to use the soil? **Yes – in the cleared area on the hill; they may be harvesting trees and/or planning to graze animals and/or grow crops.**

Other Discussion Questions:

1. What do you think is going on beneath the surface of the water?



Image 7 Title: Congaree Riverbank

Date: 2010

Photographer: Paul Angelo

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes: Compare this with the painting “The Seine at Giverny,” by Claude Monet and “The Riverbank,” by Albert F. Bellows.

Student Questions:

1. What process might have shaped the sandbar in the left of the image? **Deposition**
2. Why are there no plants on the sandbars? **They haven’t had time to grow because the sandbar changes all the time.**
3. Where is the sun in this image? How can you tell? **The sun is the bright spot at the left. Also notice the deep black shadow in front of the trees.**
4. Is the water running fast or slow? FAST / SLOW How does the artist show us that? **Clear (unblurred) reflections.**

Other Discussion Questions:

- 1.

**Image 8 Title: The Seine at Giverny****Date:** 1897**Painter:** Claude Monet**Permission:** Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)**Notes:** It looks fuzzy because of the way the artist painted it. He wanted it to look fuzzy. This way of painting is called Impressionism which is an [art movement](#) and [style](#) of [painting](#) that started in France during the 1860s. Impressionist artists tried to [paint](#) candid glimpses of their [subjects](#) showing the effects of sunlight on things at different times of day. Compare this with the painting “The Riverbank,” by Albert F. Bellows and the “Congaree Riverbank” photograph by Paul Angelo.**Student Questions:**

1. Are the colors in this painting what you would find in nature? Are they realistic? At what time of day? **Yes these colors are realistic in morning light, although they have perhaps been exaggerated.**
2. Does this picture appear fuzzy or clear? **This picture appears fuzzy- see notes on impressionism.**
3. Do you see soil? How do you know it is there anyways? **We don't see soil, but the plants and trees must be growing in it.**

Other Discussion Questions:

- 1.



Image 9 Title: Congaree River and Campers

Date: 2010

Photographer: Chris Ramaglia

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes:

Student Questions:

1. Is the water here still or moving a little? **STILL / MOVING Notice the slight ripples on the water**
2. What process might have shaped the sandbar on the right? **Deposition of sand during high water**
3. Why are there no plants on the sandbars? **They haven't had time to grow because the sandbar changes all the time.**
4. What process might have shaped the hill in the background? **Erosion by the river**

Other Discussion Questions:

- 1.



Image 10 Title: Boots in the Mud

Date: 2010

Photographer: Steven McNamara

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes:

Student Questions:

1. Is this a landscape? YES / NO
2. What direction is the artist looking? **See notes on Image 5; the photographer is looking down at their feet.**
3. How have people changed the soil here? **People have stomped and stirred the mud with their feet. The water is muddy with clay. This trampling is a type of erosion.**
4. The artist knew there would be mud. How do you know this? **Because they are wearing boots.**

Other Discussion Questions:

- 1.



Image 11 Title: Boardwalk at Congaree NP

Date: 2010

Photographer: Unkonwn

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes: Showing two images side by side is called a DYPTICH. What can you learn by comparing images?

Student Questions:

1. What season is it when the boardwalk is dry? **SUMMER** / WINTER Why? **Leaves on the trees**
2. What season is it when the boardwalk is flooded? SUMMER / **WINTER** Why? **No leaves on the trees**
3. There are sticks and leaves on the ground on the left. What part of soil is this? **Humus!**
4. When would you rather visit? **Personal choice**

Other Discussion Questions:

- 1.



Image 12 Title: Flowing Flood at Congaree NP

Date: 2010

Photographer: Steven McNamara

Permission: United States Department of the Interior, National Park Service, Congaree National Park
(www.nps.gov/cong)

Notes:

Student Questions:

1. Is the water flowing fast or slow around the log? FAST / SLOW Can you spot another indication of flowing besides the blurry water? **This is a little tricky because the photographer left the camera shutter open for a while, which let the water blur as if flows in the lower/left part of the photograph. It is definitely moving there, though. Also notice the floating material backed up behind the stick in the middle of the picture. Parts of the water in the upper/right are very still, though.**
2. Do you think that the soil around here would have a lot of humus? Why or why not? **Yes, because of all of the sticks and leaves.**
3. Do you see the sky? How? **Yes the sky is visible, but it is a reflection.**

Other Discussion Questions:

- 1.

“Water” You Looking At? Appendix II – Extra Artwork, Notes, and Key



Image 13 Title: What is he pointing at?

Date: 2010

Photographer: Steven McNamara

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes:

Discussion Questions:

1. What are the children doing? **Canoeing**
2. What do you think the two boys in the foreground are thinking? Why? **Personal opinion**



Image 14 Title: Congaree Bluffs

Date: 2010

Photographer: Steven McNamara

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes: This picture is taken of the steep bluffs on the south side of the Congaree River. The bare earth you see in the landslides is old soil that was put down in the edge of the ocean about 70 million years ago, when Dinosaurs roamed SC. These are not the bluffs that the children will visit, but nicely show erosion.

Discussion Questions:

1. Do you see a pattern in the image? **Yes, the reflections make a pattern and the repeating triangles are an example of “rhythm” in the visual sense.**
2. Are the orange areas steep or flat? Why? **They are steep. Gravity has caused the steep slope to fail, and no plants can grow there.**
3. Why are they orange and not green? **The orange color is due to the weathered soil and sediment.**



Image 15 Title: Down on Cedar Creek

Date: Unknown, Probably early 2000's

Photographer: Unknown

Permission: United States Department of the Interior, National Park Service, Congaree National Park
(www.nps.gov/cong)

Notes: This picture was taken from the northern bluffs of the Congaree River floodplain. The view is looking down on Cedar Creek

Discussion Questions:

1. What color is the water? **Brown. This color is due to the water soaking chemical out of all of the leaves and humus in the soil – it is basically a lot like tea (though not at all the kind we drink)**
2. What else is in the creek? **Logs**
3. Is the water moving? **Yes, a little**



Image 16 Title: Canoers on Cedar Creek

Date: 2012

Photographer: Paul Angelo

Permission: United States Department of the Interior, National Park Service, Congaree National Park (www.nps.gov/cong)

Notes:

Other Discussion Questions:

Discussion Questions:

1. What are the children doing? **Canoeing**
2. Is the Canoe in the foreground, middle ground, or background? Why? **Middle ground – it is behind the rippling water (foreground) and behind the branch.**
3. Is the water moving? **Yes, a little**
4. Do you see soil? How do you know it nearby? **We don't see soil, but the plants and trees must be growing in it.**



Image 17 Title: Landscape

Date: Mid- to Late 17th Century

Painter: Jacob Van Ruisdael (1628-1682)

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes:

Discussion Questions:

1. Does this painting have more detail in the background, middle ground or foreground? **This artist painted his landscapes from the back to the front which is why the foreground of this painting is more detailed.**
2. What happened to the tree? **No specifically correct answer; Lightning? Disease?**
3. Noticed the log on the bank, what will happen to it over time? **It looks like someone has cut it with a saw and may come back to use it. Otherwise it will rot.**



Image 18 Title: Fishing Village

Date: 1862

Painter: Herman Herzog

Permission: Used with permission for educational programs from the collection of the Columbia Museum of Art in Columbia, SC (www.columbiamuseum.org)

Notes:

Discussion Questions:

1. Where does the artist want you to look? **By placing the brighter colors in the foreground the artist starts your eye there but as you take in the scene your eye is drawn to the background and the opening in the fjord.**
2. How was the fjord created? **The third grade answer here is "erosion!" At a higher level, it was carved by glaciers!**
3. Do you think the soil in the foreground has more sand or clay? **Sand, judging from all of the rocks and boulders.**
4. Look carefully, what different types of weather does the artist show us? **Sunny in the foreground, and stormy in the background.**

MY ART NOTES

Name: _____

Teacher: _____

Date: _____

#	Image	Circle or answer the questions below with a sentence.
1	View of Ironbridge in Shropshire	<ol style="list-style-type: none">1. What is growing in the soil?2. Do you see a body of water here? Where is it in the image?3. Do you see people and/or evidence of people?4. What is the low place next to the water in the middle ground of the painting?
2	Falls on Reedy River, Greenville, South Carolina	<ol style="list-style-type: none">1. Is the water running fast or slow? FAST / SLOW. How does the artist show this?2. What is happening to the land as the water rushes by?3. Which way is the water flowing?
3	Bridge – Garden of Dreams, Charleston, South Carolina	<ol style="list-style-type: none">1. What type of body of water is shown here?2. Use your imagination. Where are you in this painting? In a boat? What sounds do you hear?

MY ART NOTES

Name: _____

Teacher: _____

Date: _____

#	Image	Circle or answer the questions below with a sentence.
4	The Sea, Myrtle Beach, South Carolina	<ol style="list-style-type: none">1. Would the water shown in this painting be fresh water or salt water? FRESH / SALT2. What is the weather like in this landscape? How does the artist show this?3. What kind of soil do you think you would find near the waves? (Hint: Castle)4. What sounds would you hear if you stood beside the artist?
5	Aerial Photograph of the Congaree River	<ol style="list-style-type: none">1. Where was the artist or scientist who captured this image?2. What is the "blue ribbon" near the bottom of the image?3. What is the blue/green area beside it?4. Some of the red and white shapes are farm fields. What does this tell you about the soil?
6	The Riverbank	<ol style="list-style-type: none">1. What vegetation do you see in this painting (circle all that apply)?2. Is the water running fast or slow? FAST / SLOW. How does the artist demonstrate this?3. Do you see where people have started to use the soil?

MY ART NOTES

Name: _____

Teacher: _____

Date: _____

#	Image	Circle or answer the questions below with a sentence.
7	Congaree Riverbank	<ol style="list-style-type: none">1. What process might have shaped the sandbar in the left area of the image?2. Why are there no plants on the sandbars?3. Where is the sun in this image? How can you tell?4. Is the water running fast or slow? FAST / SLOW. How does the artist show this?
8	The Seine at Giverny	<ol style="list-style-type: none">1. Are the colors in this painting found in nature? Are they realistic? At what time of day?2. Does the picture appear fuzzy or clear?3. Do you see soil? How do you know it is there?
9	Congaree River and Campers	<ol style="list-style-type: none">1. Is the water still or moving?2. What process might have shaped the sandbar on the right?3. Why are there no plants on the sandbars?4. What process might have shaped the hill in the background?

MY ART NOTES

Name: _____

Teacher: _____

Date: _____

#	Image	Circle or answer the questions below with a sentence.
10	Boots in the Mud	<ol style="list-style-type: none">1. What direction is the artist looking? What is the artist's perspective?2. How have people changed the soil here?3. The artist knew there would be mud. How do you know this?
11	Boardwalk at Congaree NP	<ol style="list-style-type: none">4. What season is it when the boardwalk is dry? SUMMER / WINTER. Why?5. What season is it when the boardwalk is flooded? SUMMER / WINTER. Why?6. There are sticks and leaves on the ground in the image to the left. What type of soil is this?7. When would you rather visit?
12	Flowing Flood at Congaree NP	<ol style="list-style-type: none">1. Is the water moving or still?2. Do you think that the soil around here would have a lot of humus? Why or why not?3. Do you see the sky? Where? Why?

MY ART NOTES

Name: _____

Teacher: _____

Date: _____

#	Image	Circle or answer the questions below with a sentence.
1	View of Ironbridge in Shropshire	<ol style="list-style-type: none">1. What is growing in the soil? Lots of trees.2. Do you see a body of water here? Where is it in the image? Yes, a river. Glimpses of the river in the middle ground, background.3. Do you see people and/or evidence of people? Yes. They cut the trees and built factories.4. What is the low place next to the water in the middle ground of the painting called? Floodplain.
2	Falls on Reedy River, Greenville, South Carolina	<ol style="list-style-type: none">1. Is the water running fast or slow? How does the artist show this? Fast. The water is blurred.2. What is happening to the land as the water rushes by? Weathering and erosion of the rocks.3. Which way is the water flowing? Towards the foreground / viewer.
3	Bridge - Garden of Dreams, Charleston, South Carolina	<ol style="list-style-type: none">1. What type of body of water is shown here? Lake - the water doesn't seem to be moving. Swamp or floodplain might also be acceptable.2. Use your imagination. Where are you in this painting? In a boat? What sounds to you hear? Some students may be familiar with Charleston and spanish moss.

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#	Image	Circle or answer the questions below with a sentence.
4	The Sea, Myrtle Beach, South Carolina	<ol style="list-style-type: none"> 1. Would the water shown in this painting be fresh water or salt water? FRESH / SALT 2. What is the weather like in this landscape? How does the artist show this? Sunny and hot; bright light and blue sky with the clouds. 3. What kind of soil do you think you would find near the waves? (Hint: Castle) Sand. 4. What sounds would you hear if you stood beside the artist? Roaring waves.
5	Aerial Photograph of the Congaree River	<ol style="list-style-type: none"> 1. Where was the artist or scientist who captured this image? In an airplane. 2. What is the "blue ribbon" near the bottom of the image? The Congaree River. 3. What is the blue/green area beside it? The Floodplain (The red areas are the uplands; the students will explore the boundary between the two on their fieldtrip.) 4. Some of the red and white shapes are farm fields. What does this tell you about the soil? That it is good soil for growing plants.
6	The Riverbank	<ol style="list-style-type: none"> 1. What vegetation do you see in this painting (circle all that apply)? Trees, lily pads, reeds. 2. Is the water running fast or slow? FAST / SLOW How does the artist show us that? Slow. Clear (unblurred) reflections, plants aren't carried away. 3. Do you see where people have started to use the soil? Yes - in the cleared area on the hill; they may be harvesting trees and/or planning to graze animals and/or grow crops.

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#	Image	Circle or answer the questions below with a sentence.
7	Congaree Riverbank	<ol style="list-style-type: none">1. What process might have shaped the sandbar in the left area of the image? The sand was deposited there. Some students might also point out that erosion of sand sculpts the sand bar.2. Why are there no plants on the sandbars? They haven't had time to grow because the sandbar changes all the time.3. Where is the sun in this image? How can you tell? The sun is the bright spot at the left. Also notice the deep black shadow in front of the trees.4. Is the water running fast or slow? FAST / SLOW How does the artist show this? Clear (unblurred) reflections.
8	The Seine at Giverny	<ol style="list-style-type: none">1. Are the colors in this painting found in nature? Are they realistic? At what time of day? Yes these colors are realistic in morning light, although they have perhaps been exaggerated.2. Does this picture appear fuzzy or clear? This picture appears fuzzy.3. Do you see soil? How do you know it is there? We don't see soil, but the plants and trees must be growing in it.

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#	Image	Circle or answer the questions below with a sentence.
9	Congaree River and Campers	<ol style="list-style-type: none"> 1. Is the water still or moving? MOVING. Notice the slight ripples on the water. 2. What process might have shaped the sandbar on the right? Deposition of sand during high water. 3. Why are there no plants on the sandbars? They haven't had time to grow because the sandbar changes all the time. 4. What process might have shaped the hill in the background? Erosion by the river shaped this hill—I know that from personal exploration of the area as a geologist, though, and from this photo alone we cannot rule out the idea that the hill was shaped by deposition of material (so that answer may be okay, too).
10	Boots in the Mud	<ol style="list-style-type: none"> 1. What direction is the artist looking? What is the artist's perspective? See notes on Image 5; the photographer is looking down at their feet. 2. How have people changed the soil here? People have stomped and stirred the mud with their feet. The water is muddy with clay. This trampling is a type of erosion. 3. The artist knew there would be mud. How do you know this? Because they are wearing boots.
11	Boardwalk at Congaree NP	<ol style="list-style-type: none"> 4. What season is it when the boardwalk is dry? SUMMER / WINTER Why? Leaves on the trees. 5. What season is it when the boardwalk is flooded? SUMMER / WINTER Why? No leaves on the trees. 6. There are sticks and leaves on the ground in the image to the left. What type of soil is this? Humus! 7. When would you rather visit? Personal choice.

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#	Image	Circle or answer the questions below with a sentence.
12	Flowing Flood at Congaree NP	<ol style="list-style-type: none"><li data-bbox="449 245 1990 456">1. Is the water moving or still? Both, in different parts. This is a little tricky because the photographer left the camera shutter open for a while, which let the water blur as if flows in the lower/left part of the photograph. It is definitely moving there, though. Also notice the floating material backed up behind the stick in the middle of the picture. Parts of the water in the upper/right are very still, though.<li data-bbox="449 464 1898 545">2. Do you think that the soil around here would have a lot of humus? Why or why not? Yes, because of all of the sticks and leaves.<li data-bbox="449 553 1749 602">3. Do you see the sky? Where? Why? Yes the sky is visible, but it is a reflection.