Improving Teacher Quality
Arts and Science Integration

Visual Art and Earth Science

Grade 4
Edited Version Fall 2012
### Art Elements and Landforms

**Lesson 1**

**FOSS Kit Grade 4, Earth Science: Solid Earth, Investigation 5: Landforms**

### CONTENT STANDARDS

**Visual Art Grade 4**
- 1.5 Describe and analyze the elements of art (line, shape/form, color, texture, space and value), emphasizing form, as they are used in works of art and found in the environment.

**Science Grade 4**
- ES5c Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt and mud in other places (weathering, transport and deposition).

### ESSENTIAL QUESTIONS *(Questions students might ask about the topic)*

- What is form and value?
- What are landforms?
- How are landforms created?
- How can I create a work of art that shows my knowledge of landforms and value?

### OBJECTIVES & STUDENT OUTCOMES *(Students will be able to.....)*

- describe a landscape, especially the depicted landforms, using the vocabulary of visual art and science.
- define form as an element of art and how it is different from shape.
- create a value scale of at least five values including black and white.
- illustrate a landscape photograph that depicts more than one landform using at least five values including black and white.

### ASSESSMENT *(Various strategies to evaluate effectiveness of instruction and student learning)*

- **Feedback for Teacher**
  - Informal assessment of student skills by observation
  - Formal assessment: Landform Pencil Drawing Rubric
- **Feedback for Student**
  - Informal verbal feedback from teacher
  - Direction and suggestions offered at conferences throughout work process

### WORDS TO KNOW

**Visual Art Vocabulary**
- **Form**: A three-dimensional volume or the illusion of three dimensions; the particular characteristics of the visual elements of a work of art (as distinguished from its subject matter or content).
- **Shape**: A two-dimensional area or plane that may be open or closed, free-form or geometric. It can be found in nature or is made by humans.
- **Sketch**: A drawing without much detail, usually completed in a short amount of time; sometimes used as a rough draft for a later work of art.
- **Value**: Lightness or darkness of a hue or neutral color.
- **Value Scale**: Scale showing range of values from black to white and light to dark
Earth Science Vocabulary

- Canyon: A deep gorge, a long narrow valley with high cliffs on either side
- Delta: A triangular tract of sediment deposited at the mouth of a river, typically where it diverges into several outlets
- Landform: A feature of the land, such as a mountain, canyon or beach.
- Mesa: An isolated flat-topped hill with steep sides, found in landscapes with horizontal strata
- Mountain: A large natural elevation of the earth's surface rising abruptly from the surrounding level; a large steep hill
- Plateau: An area of relatively level high ground
- Plain: A large area of flat land with few trees
- Valley: A low area of land between hills and mountains, where a stream often flows

MATERIALS

- Black and white photographic images of landforms captured by Ansel Adams
- 3 x 6 strip of drawing paper, one per student
- 9 x 12 drawing paper, one per student
- ruler
- graphite pencil, one per student
- eraser, one per student

RESOURCES

- FOSS Kit Grade 4, “Earth Science: Solid Earth”, Investigation 5: Landforms
- Portfolios, Grade 4, Robyn Montana Turner, Kendall Publishing
  - Ansel Adams (page 73),
  - Earthworks (page 76),
  - Landscapes (pages 78 & 79)
  - Value (page 73)
- Internet
  - Photographs of various landforms: ask.com Landform Picture Gallery
    http://geology.about.com/library/bl/images/bilandformindex.htm
  - Black and white photographs depicting multiple landforms
    - The Tetons and The Snake River
      http://en.wikipedia.org/wiki/File:Adams_The_Tetons_and_the_Snake_River.jpg
- Instructional Media Center (IMC)
  2442 Cardinal Lane, San Diego, CA 92123
  To order instructional materials on line: http://desiny.sandi.net

PREPARATION

- Visual Art, Grade 3 Lesson 2, The Illusion of Space
  http://www.sandi.net/204510720114515653/lib/204510720114515653/lessons/visualart_2.pdf
- This lesson can be taught before or after FOSS Kit Grade 4, “Earth Science: Solid Earth”, Investigation 5: Landforms
- You may want to copy the value scale in black and white from page 2 of this lesson, one per student to compare and contrast to their value scale.

WARM UP (Engage students, access prior learning, review, hook or activity to focus the student for learning) (10 minutes)
- Display The Tetons and The Snake River by Ansel Adams in an area easily seen by all students. (This photograph appears at the end of this lesson.)
- Instruct students to examine the photograph silently for 1 minute.
- Say:
  - This image shows many landforms. Landforms are features of the land.
- Ask:
  - What landforms do you see? [mountains, valley, plateau, mesa]
How do you think this image was made? Why? [black and white photograph using camera and film, NOT digital]

Where are the darkest areas of the image?

Where are the lightest areas of the image?

Say:
- This is a photograph created by the famous American photographer, Ansel Adams. Before this photo was published, Americans were interested in expanding cities and creating more and more factories and businesses. This particular photograph changed how Americans thought about the land.

Ask:
- How do you think this photograph changed their minds? [protection of natural landforms, establishment of national parks, wildlife reserve areas]
- What makes you say that?

MODELING (Presentation of new material, demonstration of the process, direct instruction)

(15 minutes)

Share reading "Photographer and Ecologist: Ansel Adams", a selection about a famous American photographer from California and his contribution to ecological awareness and art. (Suggestion: You may choose to read this to the students during the time they are creating their individual value scales or during Guided Practice for more efficient use of time.)

Say:
- In art, the word "form" refers to "three-dimensional volume or the illusion of three-dimensional volume".

Distribute a 3"x6" strip of white construction paper and a pencil to each student. (If you copied the value scale from page 2 of this lesson, distribute one to each student.)

Demonstrate how and instruct students to divide the strip into five or more sections.

Use the pencil to create the darkest area possible in one of the end sections.

Create three gradually lighter sections of gray.

Leave the opposite end section empty, or white.

Say:
- You have just created a value scale. Value is an element of art and refers to the lightness and darkness of a hue or neutral color. Black and white are neutral colors. A value scale shows the range of values from black to white.

Ask:
- How could we use these values when we create a drawing?

GUIDED PRACTICE (Application of knowledge, problem solving, corrective feedback)

(20 minutes)

- Demonstrate how and instruct students to draw the black and white landform photograph using graphite pencil on 12" x 18" white construction paper.

Instruct students to find the line that extends across the photograph at the bottom of the mountains where the plateau begins.

Notice that this horizontal line is about in the middle or slightly above the middle of the photograph.

Demonstrate how to sketch this line on the drawing paper.

Notice where the river begins visually just below the line, slightly right of vertical center.

Trace your finger over the curve of the river starting at the narrowest point.

Point out to the student that the river gets wider the closer it gets to the viewer.

Sketch the two curved lines representing each riverbank.

Trace your finger over the jagged line representing the top of the mountain range.
Notice that the highest peak point is about half way between the top edge of the photograph and the horizontal line and all of the mountains are shorter.

Notice that the left side mountain range begins about 1/3 the way between the top of the photograph and the horizontal line.

Sketch the line representing the top of the mountain range.

- Now that the landscape drawing is mapped or planned, instruct students to continue to draw the photograph creating details and areas of black, white and at least three levels of gray using a graphite pencil and an eraser.
- Advise students to refer to the value scale they created so they use all five values, black, white and at least three grays.
- Monitor student progress.
- Remind students to draw what they see, especially the landforms, looking up at the displayed photograph frequently for visual information.

DEBRIEF & REFLECT (Identify problems encountered, ask and answer questions, discuss solutions and learning that took place. Did students meet outcomes?)

(10 minutes)

- Ask all students to stand in a circle around the room holding their drawings.
- Ask students to look silently around the room at the works created by fellow students.
- Say:
  - What were the difficulties you experienced when drawing what you saw in the photograph?
  - Which art form, pencil drawing or photography, helped you learn the most about landforms? Why?
- Display the landscape drawings created by the students.
- Instruct students to attach their value scales to their science notebook. (If you made copies of the value scale from page two of this lesson, allow students to attach them to the science notebook too.)
- Science Notebook Prompt: How did drawing the photograph help you understand landforms?

EXTENSION (Expectations created by the teacher that encourage students to participate in further research, make connections, and apply understanding and skills previously learned to personal experiences.)

- Write a description of the landforms present in the student drawings and a reflection on the drawing process. Display the writings next to the works of art.
- Identify landforms in the school and neighborhood environment.
- Allow students to create digital photographs in black and white depicting landforms from their environment.
- Look at Portfolios Grade 4, page 76. Discuss how humans manipulated the land to create art called "earthworks."
Photographer and Ecologist: Ansel Adams

Ansel Adams was born in San Francisco, California on February 20, 1902. He was an only child. His family home was on a high part of the land, facing the Golden Gate Bridge, where he spent most of his time exploring nature. Ansel liked collecting bugs, exploring creek beds and beaches and climbing sea cliffs.

When Ansel was 14 years old his family decided to visit Yosemite National Park for vacation. Yosemite was the first National Park and was established in 1890. Ansel’s father gave him a Kodak Brownie box camera and it changed his life. Yosemite is where Ansel took his first photographs in 1916.

After his trip to Yosemite, he wanted to learn everything he could about photography. Ansel read photography magazines, went to camera club meetings, to photography and art exhibits. He even started working part time in a photography shop. He also began to hang out with his uncle, a retired geologist (one who studies rocks) and amateur ornithologist (one who studies birds). Together they explored the High Sierras, building stamina and skill so Ansel could photograph at high elevations and in the heat of summer and cold of winter.

At age 17, Ansel joined the Sierra Club, a group dedicated to preserving the natural world’s wonders and resources. He became a board member of the Sierra Club in 1934 and served until 1971. Ansel believed that sharing his photographs with the world would encourage people to conserve and protect the land.

Ansel Adams is well known for his curious way to photograph landforms. He mounted a platform on top of his station wagon. There he would climb up, mount his camera and take unobstructed pictures of the landscape.

As an adult, Ansel published books about photography and nature. He testified before the United States Congress in 1940 to establish another national park in California, Sequoia and Kings Canyon. He taught workshops to thousands of photographers every year until his death in 1981.

"...the splendor of Yosemite burst upon us and it was glorious. One wonder after another descended upon us. There was light everywhere...a new era began for me!"
-Ansel Adams
**ITQ ARTS AND SCIENCE INTEGRATION**
GRADE 4
VISUAL ART AND EARTH SCIENCE

**Slow Sculpting of the Earth**
Lesson #2

*FOSS Kit Grade 4, Earth Science: Solid Earth, Investigation 5: Landforms, Part 4: Erosion*

**CONTENT STANDARDS**

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**ESSENTIAL QUESTIONS** *(Questions students might ask about the topic)*

- What is contrast in visual art?
- What is emphasis in visual art?
- What is erosion and how does it occur?
- What is transport and how does it relate to landform change?

**OBJECTIVES & STUDENT OUTCOMES** *(Students will be able to....)*

- describe how negative and positive shapes are used in a work of art.
- describe how erosion occurs and changes landforms.
- create a work of art depicting the result of erosion using positive and negative space.

**ASSESSMENT** *(Various strategies to evaluate effectiveness of instruction and student learning)*

- Feedback for Teacher
  - Informal Observation
  - Finished work of art
- Feedback for Student
  - Comments from teacher during discussion, instruction and individual conferencing

**WORDS TO KNOW**

**Visual Art Vocabulary**

- negative: refers to shapes or spaces that are or represent areas unoccupied by objects.
- positive: shapes or spaces that are or represent solid objects.
- value: lightness and darkness of a hue or neutral color. A value scale shows the range of values from black to white.

**Earth Science Vocabulary**

- erosion: the carrying away of weathered earth materials by water, wind or ice.
- slope: a surface of which one end or side is at a higher level than another; a rising or falling surface.
- transport: to move or carry from one place to another.

**MATERIALS**

- Reproduction of Gunnar Mauritz Widforss' Grand Canyon painting (included in this lesson).
- Photograph of the Cliffs at Torrey Pines (included in this lesson).
- Science notebook, one per student
- 9 x 12 white construction paper, one per student
- set of 8 watercolor pencils, one per student
- water in a container
- watercolor paintbrush (size 8), one per student

**RESOURCES**

- *FOSS Kit, Grade 4, Earth Science: Solid Earth*
- *Portfolios Grade 4, Robyn Montana Turner, Barrett Kendall Publishing*
  - Negative/positive spaces and shapes: page, 10, 11, 16-17, 32, 117
  - Visual Record of Landmarks: pages 26, 27
  - *Moon and Half Dome, Yosemite National Park*, Ansel Adams, page 73
  - Using a paintbrush: page 134
- Internet:
- Instructional Media Center (IMC)
  2442 Cardinal Lane, San Diego, CA 92123
  To order instructional materials on line: [http://destiny.sandi.net](http://destiny.sandi.net)

**PREPARATION**

- *FOSS Kit Grade 4 Solid Earth*, Investigation 5 "Landforms, Part 4 "Rapid Changes".
  Complete the stream table experiment before this lesson.

**WARM UP (Engage students, access prior learning, review, hook or activity to focus the student for learning)**

5 minutes

- Display Gunnar Widforss' painting, *Grand Canyon* (image at the end of this lesson or at: [http://www.gunnarwidforsspaintings.com/](http://www.gunnarwidforsspaintings.com/)) in an area easily seen by all students.
- Allow students one minute to examine the work of art visually without talking.
- Say:
  - *Now that you have had a chance to examine this image, describe what you see.* [trees, mesas, canyons, colors, lines, The Grand Canyon, etc.]
  - *Let's recall how we discussed the Grand Canyon during our science lesson. Scientists wonder how the Colorado River could have created such a massive, deep canyon."
  - *What were some of your ideas about how slope may have played a part in creating the Grand Canyon."
  - *Who can explain slope?* [a surface of which one end or side is at a higher level than another; a rising or falling surface]
  - *How did Artist Gunnar Widforss illustrate slope in this work of art?* [diagonal lines]
  - *Students, please get out your science notebooks.*
  - *Find the page where you attached the value scale you created in our class on Ansel Adams and Landforms.*
  - *Look at this painting by Gunnar Widforss and think about value. What do you notice about the colors he used to depict the Grand Canyon?* [he used lots of tints and shades of the same color]
  - *How does his use of the value of red compare to the value scale you created?* [he used values of red instead of values of black and white]
  - *How did he make the Grand Canyon look deep?* [used tints and shades to create dark areas and contrasting light areas to show depth and shadow]
  - *What art media did Widforss use to create this painting?* [watercolor]
MODELING (Presentation of new material, demonstration of the process, direct instruction) (20 minutes)
- Say:
  - Watch this video carefully and think about what changes you see.
- Show the students the time-lapse video of beach erosion.
- Ask:
  - What caused the beach to change shape?
  - How did water change the formation of the beach?
  - How did wind change the form of the beach?
- Display the photographs of Torrey Pines State Park cliffs (images included at the end of this lesson) in an area easily seen by all students.
- Discuss the beach waterfall, cave and concretion, wind caves, and bay point formation photographs.
- Say:
  - Does anyone know where this photograph was taken? [Torrey Pines State Park]
  - How do you think the crevices in the cliffs were formed? [erosion caused by water and wind]
  - What happened to the earth that used to be in the crevices? [washed and blown onto the beach]
  - Who can remember what we call moving or carrying earth from one place to another? [transport]
  - In art we would call the crevices negative space because there is empty space. In art, wherever earth is, would be called positive space.
  - Today we are going to make a drawing illustrating the erosion at Torrey Pines State Park using watercolor pencils.
- Distribute one 9 x 12 piece of white construction paper and one set of 8 watercolor pencils to each student.
- Demonstrate how and instruct students to sketch lines and shapes from one of the photographs of Torrey Pines State Park.
  - Identify an important line or the largest shape in the image
  - Trace a finger over the important line or largest shape in the image as it is projected for all students to see.
  - Sketch the line or the shape on the drawing paper in about the same place and about the same size as in the projected photograph.
  - Sketch additional primary shapes or characteristics of the image in the same manner. Trace with your finger and then sketch onto the drawing paper.
- Demonstrate how to use the watercolor pencils to differentiate between the surface of the cliff and the darkened crevices using light and heavy pressure on the pencils.
  - Color or fill in areas of the drawing with colored pencil using strokes in the direction of the characteristics of the landscape.
  - Use the colored pencils lightly to create tinted areas where light hits the outer surface of the cliffs.
  - Use the colored pencil heavily to create shaded areas in recesses of the cliffs causing darker spaces.
  - Use black or brown with the colored pencils to create the darkest recessed areas of the cliffs.

GUIDED PRACTICE (Application of knowledge, problem solving, corrective feedback) (20 minutes)
- Allow students time to work independently illustrating the effects of erosion on the landforms at Torrey Pines State Park.
- Encourage students to color in large light areas of color and smaller dark areas quickly.
- Say:
- The colored pencils you are using are watercolor pencils.
- I will be bringing some additional art materials to your desk while you are working. Please leave them alone until I show you what to do with them.
- While students are working, distribute one watercolor paintbrush, a paper towel, and a small container of water to each student.
- When the drawings are completed, instruct students to put their name on the back of the drawing.
- Collect the colored pencils.
- Demonstrate how and instruct students to apply small amounts of water on the pencil areas using a watercolor (soft) paintbrush.
  - Show students how to apply clean water with a small paintbrush over the colored pencil areas to blend the pencil strokes. This makes the work appear like a watercolor.
  - If water containers become heavily colored, replace with clean water as needed.
  - Remind students to use the paper towel to blot water or color from their brushes as needed.
  - Highly detailed areas of the student paintings may remain without water to preserve the features.
- Place the paintings in an area to dry, store art materials and clean up as needed.

**DEBRIEF & REFLECT** (Identify problems encountered, ask and answer questions, discuss solutions and learning that took place. Did students meet outcomes?)
- **Science Notebook Prompt:** Describe how the earth at Torrey Pines State Park may have looked centuries ago before erosion with lots of positive space and how it may look in the distant future with more negative space.

**EXTENSION** (Expectations created by the teacher that encourage students to participate in further research, make connections, and apply understanding and skills previously learned to personal experiences.)
- Take students on a walk through the school campus or neighborhood after a strong rain. Take a photograph or make a drawing as evidence of erosion and transport.
Grand Canyon Landscape by Gunnar Mauritz Widforss, watercolor
http://www.gunnarwidforsspaintings.com/
Torrey Pines State Park
http://www.torreypine.org/geology/geology.html#erosion
Torrey Pines State Park
http://www.torreypine.org/geology/geology.html#erosion
Grand Canyon Landscape by Gunnar Mauritz Widforss, watercolor
http://www.gunnarwidforsspaintings.com/
Rapid Changes in the Landscape
Lesson #3

FOSS Kit Grade 4, Earth Science: Solid Earth, Investigation 5: Landforms, Part 4 Rapid Changes

CONTENT STANDARDS
Visual Art Grade 4
2.7 Use contrast (light and dark) expressively in an original work of art.

Science Grade 4
ES5a Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes such as landslides, volcanic eruptions and earthquakes.

ESSENTIAL QUESTIONS (Questions students might ask about the topic)
- What is contrast?
- What are rapid processes that change the landscape?
- How do I create a work of art that demonstrates rapid processes changing the landscape using contrast?

OBJECTIVES & STUDENT OUTCOMES (Students will be able to...)
- use and describe contrast in an original work of art.
- describe rapid processes that change landforms.
- create a landscape depicting rapid landform changes.

ASSESSMENT (Various strategies to evaluate effectiveness of instruction and student learning)
- Feedback for Teacher
  - Informal observation
  - Completed works of art
- Feedback for Student
  - Comments from the teacher during discussion, instruction and individual conferencing

WORDS TO KNOW
Visual Art Vocabulary
- contrast: difference between two or more elements (e.g., value, color, texture) in a composition; juxtaposition of dissimilar elements in a work of art, also, the degree of difference between the lightest and darkest parts of a picture.

Earth Science Vocabulary
- earthquake: a sudden movement of Earth's crust along a fault.
- flood: covered with water.
- landslide: the movement of earth materials down a slope.
- volcano: an opening in Earth's crust where lava, cinders, ash and gases come to the surface.

MATERIALS
- Works of art depicting floods, volcanoes, earthquakes and mudslides
- Photographs of changed landforms after floods, volcanoes, earthquakes and mudslides,
preferable current, one per pair of students
• One 12 x 18 piece of construction paper, one per student
• A variety of colored, tints, shades and textured papers
• Glue bottle or glue stick, one per student
• Science Notebook, one per student

RESOURCES
• FOSS Kit Grade 4, Earth Science “Solid Earth”, Investigation 5
• Portfolios, Grade 4, Robyn Montana Turner, Barrett Kendall Publishing
  o Contrast: pages 10, 11, 16-17, 26, 30-31, 74, 92, 93, 126
  o Making a Collage: page 135
  o Using Glue: page 133
  o Views of Land and Sea: pages 78-79
  o Earthworks: pages 76-77
• Internet
  o Hansa Arts Learning:
• Instructional Media Center (IMC)
  2442 Cardinal Lane, San Diego, Ca 92124
  To order instructional materials on line: http://destiny.sandi.net

PREPARATION
• FOSS Kit, Grade 4 “Solid Earth, Investigation 5, Part 4
• Collect photographs of landforms recently changed by rapid processes (floods, earthquakes, volcanoes, mudslides, etc.)
• Collect a variety of papers, newspaper, construction, cardboard, paper towel, tissue, tissue paper, wrapping paper, grocery bags, textured, embossed, card stock, etc.

WARM UP (Engage students, access prior learning, review, hook or activity to focus the student for learning)
(15 minutes)
• Read “It Happened So Fast!” from the FOSS kit, Grade 4 Solid Earth, Investigation 5: Landforms as a Read Aloud.
• Ask:
  o What are some ways in which landforms can change quickly? [floods, earthquakes, volcanoes, mudslides]
  o What kind of rapid landform changes can we expect to see in San Diego? [flooding: especially the San Diego River in Mission Valley, the Tijuanna River at the Border; mudslides during the rainy season, especially after a fire or at slopes and cliffs, earthquakes]
• Project photos, included at the end of this lesson, of mudslide at Torrey Pines State Park, California Earthquake, Hawaiian volcano and Cincinnati flood as students answer the above question.
  o What effects do earthquakes have on landforms? [breaks in the Earth’s surface, landslides, changes in river channels]
  o Would an artist create a work of art about one of these rapid changes to the Earth’s surface? Why? [no correct answer, but hopefully they will reveal that artists create art as reaction or to memorialize to important events]

MODELING (Presentation of new material, demonstration of the process, direct instruction)
(10 minutes)
• Project Landscape by McCoy included at the end of this lesson (or at: http://mccoy.com/learn/lessons/elementary-school/collage-story/what-is-collage.html created with a variety of paper.
  • Say:
    o Take one minute to visually examine this work of art.
    o What do you see? [torn paper arranged to look like a landscape]
    o Where do you see the lightest areas?
    o Where do you see the darkest areas?
    o When do you see the lightest areas?
    o Is contrast important in this work of art? Why? [more expressive, powerful]
    o How did McCoy create this work of art? [tore paper, layered it, glued it]
    o What materials did the artist use? [paper and glue]
    o What would the landscape look like if there had just been an earthquake?
    o A flood? A volcano? A mudslide?
  • Distribute one 12 x 18 sheet of construction paper and a glue bottle or glue stick to each student. This paper will be the background of the work of art.
  • Instruct students to write their names on the paper, then turn it over.
  • Allow students to choose 3 or 4 pieces of paper from a variety of colored and/or patterned papers. You may place students in groups at a table or group of desks and have them share from a pile of papers, or you may choose to let individual students choose from a quantity of paper in a central area.
  • Demonstrate how and instruct students to tear the papers and arrange them on the background sheet.
    o Choose a colored paper that will represent sky
    o Place it over the area you wish to cover on the background paper.
    o Determine where you need to tear the colored paper to create the sky.
    o Tear the colored paper and place it on the background paper.
    o Choose a different colored paper to represent the ground that is farthest away.
    o Tear this piece of paper to the desired shape.
    o Place this paper on or next to the sky paper.
    o Choose another paper to represent middle ground and tear it to your needs.
    o Place this paper on or next to the others.
    o Move the papers around until you have decided on the best arrangement.
    o Advise students to experiment with placement before they actually glue pieces onto the background.
  • Demonstrate how and instruct students to glue the torn pieces of paper onto the background sheet.

DEBRIEF & REFLECT (Identify problems encountered, ask and answer questions, discuss solutions and learning that took place. Did students meet outcomes?)
• Ask all students to stand in a circle holding their work of art.
  • Allow each student to quickly describe the rapid landform change process they chose to depict.
  • Science Notebooks Prompt: Explain how the rapid change process you chose in your work of art changes the earth's surface and how you used contrast in your work of art.

EXTENSION (Expectations created by the teacher that encourage students to participate in further research, make connections, and apply understanding and skills previously learned to personal experiences.)
• Research artists who have recorded landform changes through their works of art from around the world and throughout history.
• Explore how artists use the earth to create art. See Portfolios Grade 4, Lesson 12 “Expressions About the Land”, pages 76-77

Visual Art and Earth Science Grade 4, Lesson 3
Landscape by McCoy

Torrey Pines State Park: mudslide
http://www.torreypine.org/geology/geology.html#erosion

Slide by entrance road

California Earthquake
Google Imag
Hawaiian Volcano
www.mail.colonial.net
1997 Flood in Cincinnati, Ohio
www.enquirer.com