Push and Pull: Ideas of Migration in the Beehive State

A Different Kind of Photograph
William Lamson’s *A Line Describing the Sun*

Summary:
Students will learn about what defines a photograph and explore different kinds of image-making with light before creating their own sun-exposure print.

Curriculum Ties:
K-2 Integrated Core- Standard 1, Objectives 2, 3
Fine Arts- Visual Arts- Grades 3-6- Standards 1-4
Fine Arts- Visual Arts- Foundations I and II- Standards 1-4
Fine Arts- Visual Arts- Photography- Standards 1-4
Fine Arts- Visual Arts- Printmaking- Standards 1-4
Science- Grade 6- Standard 6
Science- Physics- Standard 5

Time Frame:
45 minutes

Materials:
- Nature Print® Paper
- Flat objects (leaves, buttons, string, paper cutouts, etc.)
- Cardboard and pins
- Water and container

Resources:
Website: William Lamson
www.williamlamson.com

Video: *A Line Describing the Sun*
William Lamson is an American installation and performance artist who utilizes photography and video to document his work. His artworks are based on interactions with the natural and man-made environment, and may include the use of homemade machines to harness the powers of wind, water and the sun. He explores themes such as masculinity, amateurism, science and personal heroism while maintaining a sense of play and experimentation. Projects have included: *A Line Describing the Sun*, in which he follows the path of the sun across a lakebed in the Mojave Desert with a makeshift moveable lens, burning a 366 foot arc into the earth; and *Solarium*, a glass house made up of rectangles of caramelized sugar sealed between panels of glass.

**Background For Teachers:**
Students should understand the following vocabulary for this activity:

*Photography*- A photograph is an image created when light hits a light-sensitive surface (like paper made light-sensitive through chemicals), typically created using a digital or film camera but open to a multitude of interpretations and processes.

*Film Photography*- Film photography utilizes photographic film and chemical processes, and requires a more in-depth knowledge of film exposure and lighting (you often can’t go back and adjust the film’s exposure to light or retake a photo). Film cameras can be 35mm, medium format or large format.

In a film camera that uses the gelatin-silver process, light falling upon photographic emulsions containing silver halides is recorded as a latent image. The latent image is subjected to photographic processing, which makes it visible and insensitive to light. (Source: Wikipedia)

*Digital Photography*- Digital cameras use an array of electronic photo detectors to capture the image focused by the lens, as opposed to an exposure on photographic film. The captured image is then digitized and stored as a computer file ready for digital processing, viewing, digital publishing or printing. (Source: Wikipedia)

*Printmaking*- Printmaking is the process of making artworks by printing, normally on paper. Printmaking normally covers only the process of creating prints that have an element of originality, rather than just being a photographic reproduction of a painting. Except in the case of monotyping, the process is capable of producing multiples of a same piece, which are called prints and are considered "originals". There are a wide variety of techniques that produce unique qualities, including: engraving, etching, screenprinting, woodprinting, lithography and more. (Source: Wikipedia)

*Shape*- Shape pertains to the use of areas in two-dimensional space that can be defined by edges, setting one flat specific space apart from another. Shapes can be geometric (e.g.: square, circle, hexagon, etc.) or organic (such as the shape of a puddle, blob, leaf, boomerang, etc.). (Source: Wikipedia)
Line- Lines are marks that span a distance between two points (or the path of a moving point). As an art element, line pertains to the use of various marks, outlines and implied lines in artwork and design. A line has a width, direction, and length. Lines are sometimes called "strokes", especially when referring to lines in digital artwork. (Source: Wikipedia)

Movement/Rhythm- Movement refers to the visual suggestion of motion in a two- or three-dimension artwork through the use of art elements.

Balance- Balance is arranging elements so that no one part of a work overpowers, or seems heavier than any other part. The three different kinds of balance are symmetrical, asymmetrical, and radial. (Source: Wikipedia)

Emphasis- Emphasis is the area of the artwork that holds the most interest, or where your eye is drawn first.

Composition- Composition is the placement or arrangement of visual elements or ingredients in a work of art, as distinct from the subject of a work. It can also be thought of as the organization of the elements of art according to the principles of art. (Source: Wikipedia)

Shape, form, color, line, value, space, texture

Movement/rhythm, unity/harmony, variety, balance, proportion/scale, pattern, emphasis

Intended Learning Outcomes:

Understand the importance of light in photographic processes.
Understand how light travels and how the human eye sees what it sees.
Understand what defines printmaking.
Understand how three-dimensional objects translate into two-dimensional shapes.
Understand the relationships between various art elements and principles and how to use them to compose an artwork.

Instructional Procedures:

Lead your students in a discussion about photography, including the differences between digital and film photography, the science of how light travels and how people see what we see, and the importance of light in making a photo. Use the video and images of A Line Describing the Sun as visual aids to discuss the idea of creating a non-traditional photograph.

Questions to be asked during the discussion:

What is light and how do our eyes see light?
How do cameras record images? What are similarities between cameras and our eyes?
What do you see in these images of the artist’s project A Line Describing the Sun? Can this project be described as photography? Is it more of a performance? Or both? What are similarities and differences between the tools and processes used in traditional film photography and those used by the artist in this artwork? Is he using the earth instead of paper? A hand-made apparatus instead of a camera lens? The sun directly instead of light that bounces off of objects?

Explain that they will now use a chemical paper to create photography-inspired prints using energy directly from the sun. Have students select the objects they wish to use for their print; flatter objects like leaves, keys, string, buttons or shapes cut from paper work better for creating clean translations of the shapes onto the paper.

Remove one sheet of the Nature Print® paper for each student from the black plastic bag (when not in use, use this light-tight bag to prevent paper from being accidentally exposed to sunlight). Have each student pin their paper, blue side up, to a piece of cardboard for support, then place their objects on top of the paper. Plastic wrap or a piece of clear plastic can be used to hold down lightweight objects if necessary.

Each print should be exposed to the sun until the paper turns a pale blue, usually about two minutes. Be careful not to overexpose, and make sure that the paper remains out of the direct sun after it has been exposed. Remove the objects from the paper and remove the paper from the cardboard. Place paper in a container of plain water for about one minute and lay flat to dry. The image will sharpen while drying.

Questions to be asked during the art-making process:

How will the shapes of your three-dimensional objects translate onto the flat surface of the paper?
What art elements have you used to compose your image? Line, shape, space, others?
What art principles have you used to organize your composition? Movement, balance, emphasis, pattern, others?
Is this a photograph or a print? Why?

Extensions:

Have students experiment with using objects of varying shapes and heights to print on the Nature Print® paper. How do taller objects translate onto the paper differently than flat objects? Students can study odd-shaped objects in the classroom and make drawings to predict what a two-dimensional print of the object will look like, then use the sun-sensitive paper to find out how close their prediction was. How does the angle of the sun in the sky change this outcome? What can this exercise teach us about the idea of perspective?

Can images be created with Nature Print® paper using photographic film negatives as stencils? How does the length of time the print is exposed to the sun affect the end result of the image?
What are the similarities and differences between traditional photographic film developing and this process?
Example Images:
A Line Describing the Sun

Performance
A Line Describing the Sun

Installation View (including excavated 22 ft. long mark created during repeat performance and 13:35 minute 2 channel HD video, 2010) at Pierogi Gallery, New York