

MINING LESSON PLAN:

Ghosts and what is left with Technology's progress

by Melissa Howell

Students will learn about mining in Utah—a brief local history and how the process works and has impacted our community in the past as well as now. Students will select two images of mines from the *Mining the West* collection and will make photocopies of the images and create photo-transfers. They will visually express what is lost in our communities due to mining and technology through utilizing a stippling technique inspired by Sandy Brunvand's ink trail style.

Objectives:

Students will:

- Learn the basic history of mining in Utah, how the process works, and how mining technology impacts nature and our community
- Understand positive and negative space in art
- Explore different Gestalt principles and apply one principle to the composition of their work
- Conceptually represent what is important to them that is lost with technological advancement

Grade level:

6th grade

Duration:

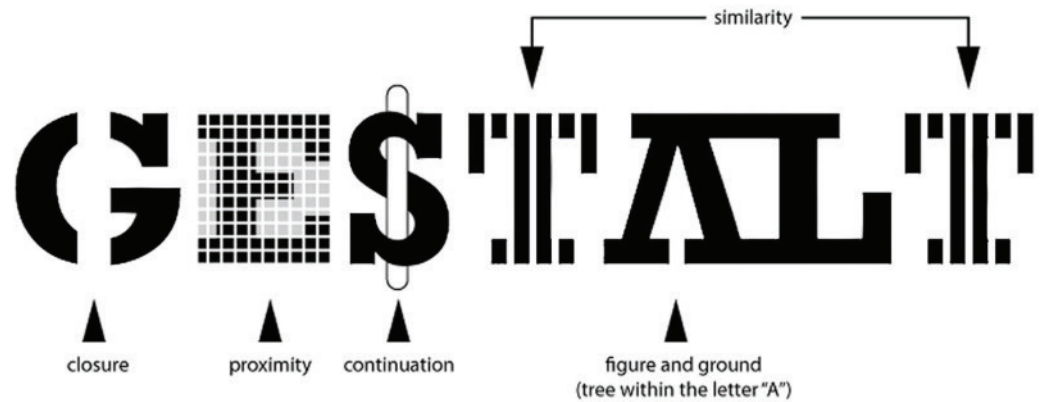
Approx. 3 hours/3 class periods

Materials:

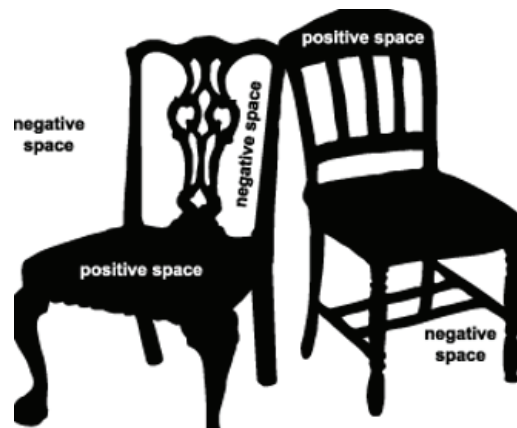
- 2 photocopied images from the *Mining the West* collection
- 1 pencil
- 1 large paint brush
- 1 ink pen or fine tipped black or dark blue marker
- Acetone/nail polish remover
- 1 sheet watercolor paper

Vocabulary/Key Terms:

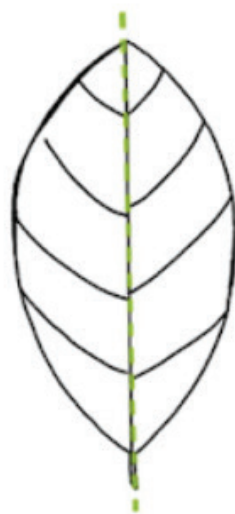
- Extraction – The action of taking out valuable minerals or material from the earth by force.
- Acid mine drainage – Acidic waste from mines that is the most common pollutant of U.S water sources like rivers, lakes and streams.
- Sedimentation – The tendency of sand or other particles suspended (moving about) in liquid to settle on the stream, river or lake floor.
- Ghost town – An abandoned town often where many structures remain. It is often abandoned because of economic failure.
- Stippling – Art technique where dots are used to create an image.
- Gestalt – Visual rules that predict how viewers perceive the parts and overall whole of an image.



- Positive Space – The space occupied by the subject in an image.
- Negative Space – The space not occupied by the subject in an image.



- Symmetry – An image can be either symmetrical where equal parts of the image are the same OR an image can be asymmetrical where equal parts look different. ([Image source](#))



symmetrical



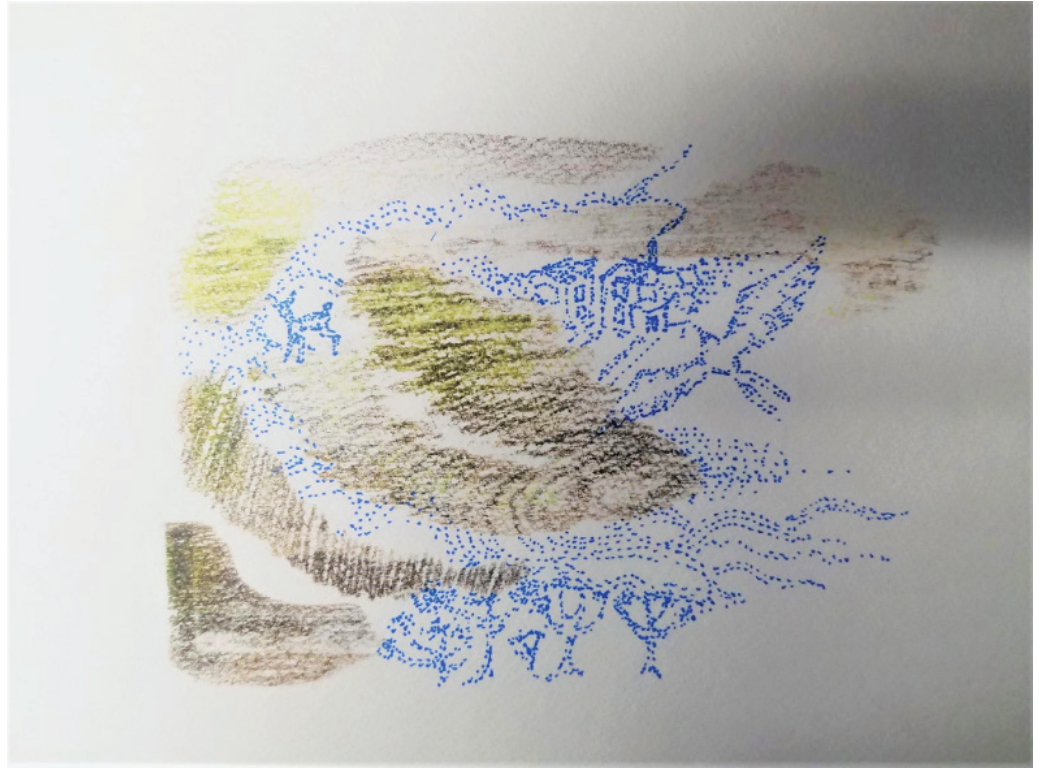
asymmetrical

Activity

Students will be provided with xerox photocopies of their chosen images of *Bingham Canyon Mine* from *The Mining the West* collection. Students will then turn photocopies over and lay them on top of their watercolor paper.

- Using a large paintbrush, they will paint acetone over the turned over sheet in small sections.
- Then, they will draw over the section they painted with pencil (shading however they would like). They will do this only with certain areas of the image (with the intention of creating negative space on the final product). They will not shade in the entire sheet.
- Once students have completed shading their areas, they will then grab their pens/fine point markers and use a stippling technique to create images inspired by Sandy Brunvand's "ink trail style". Students will draw dots to create shapes of figures displaying what is lost in our Utah communities

Below is an example of a finished work:



Methods for Assessment:

- Students will write a reflection using 1 vocabulary word and explaining how their piece displays what is lost to our community with mining technology
- Students will have demonstrated use of one type of composition in their work
- Students will have utilized positive and negative space as well as stippling effectively in their work

Additional Resources

State Core Links

Utah fine art Core standard addressed will be [Connect \(6.V.CO.\)](#) Students will relate artistic skills, ideas, and work with personal meaning and external context. This contains the following standards:

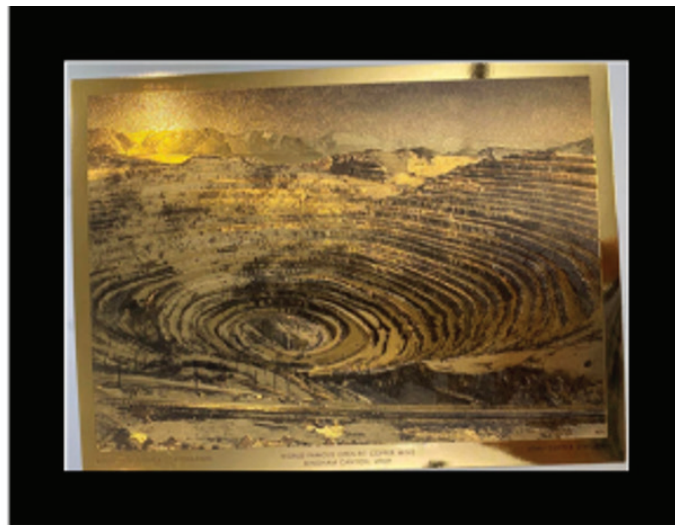
- Standard 6.V.CO.1: Generate a collection of ideas reflecting current interest and concerns that could be investigated in art-making.
- Standard 6.V.CO.2: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding by analyzing how art reflects changing times, traditions, resources, and cultural uses.
- Cross Curricular: If students chose to illustrate how mining impacts the environment and address “the ghosts of nature” the lesson could address [Science strand 6.4: Stability and Change in Ecosystems](#)

Publications and other links:

- [Revisiting Utah's Mining Past](#)
- [Utah's Gold History](#)
- [Earthworks](#)
- [Sandy Brunvard's website](#)
- [Top 31 Composition Concepts](#)
- [Gestalt Principles](#)

Artwork Spotlight:

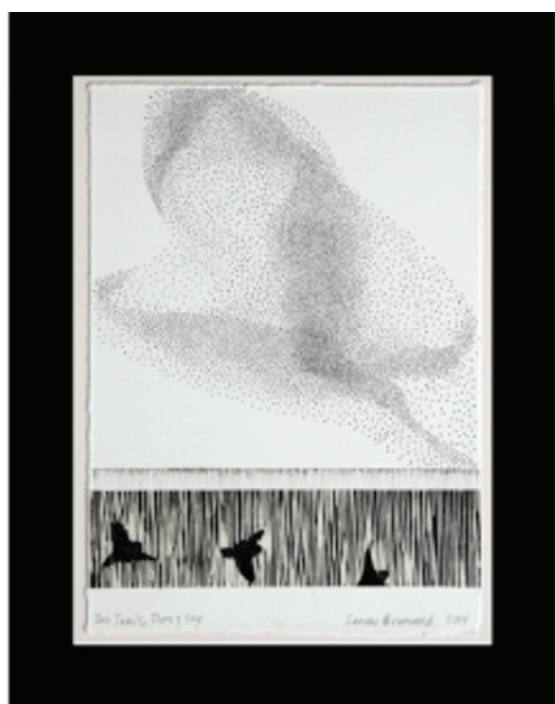
[Bingham Canyon Collection, Accn 1712, Box 1, Special Collections, J. Willard Marriott Library, University of Utah.](#)



Jonas Lie (American), *Bingham Mine*, 1917, oil on canvas. Purchased with funds from The Phyllis Cannon Wattis Endowment Fund, UMFA2009.1.1.



[Sandy Brunvand \(2014\) *Ink Trails, Dots and Sky*](#)



Contributer Bio:

I am an art teaching and history teaching student at the U. I am super excited to help kids create and learn. I love to create art and eat good food. My favorite foods are shrimp fajitas, cold smoked salmon and cinnamon rolls. I believe life is made up of enjoying the small things while working towards big dreams.

Heading image | Photograph of the Buckeye Mine at Silver Reef, Utah, ca. 1885. detail, Mark A. Pendleton Photograph Collection, P0008, Special Collections, J. Willard Marriott Library, University of Utah.