

# Unit 4: Pinhole Photography

Content Area: **Fine Arts**  
Course(s):  
Time Period: **Marking Period 1**  
Length: **30-35 Classes**  
Status: **Published**

## Brief Summary of Unit

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: Students will familiarize themselves with the camera obscura and its relation to modern day pinhole and lens photography. Through lecture, multimedia presentations, discussion and text readings students will begin to understand the image making process in its simplest form. The unit culminates in having the students construct and create images with their own pinhole cameras. Technical specifications in relation to the construction of the cameras will be addressed.

## Transfer

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## Essential Questions

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- • What is pinhole photography?

## Essential Understandings

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- • pinhole photography is a medium chosen by contemporary artists as a means of expression.
- • pinhole photography offers unique creative possibilities that do not exist with lens based image making.

## Students Will Know

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- • how to work safely in a darkroom studio environment.
- • pinhole photography is a form of visual communication and an expressive tool of the photographer.
- • the differences between pinhole and lens-based image making processes.

## Students Will Be Skilled At

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## Evidence/Performance Tasks

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- • answer the essential questions.
- • calculate appropriate exposure time based on daily EV rating.
- • calculate the maximum image size, optimal pinhole diameter, and F-stop based on individual pinhole cameras.
- • complete a journal sheet, rubric and quiz.
- • construct pinhole cameras from light tight found objects brought in from home.
- • create paper negatives and positives through the use of the pinhole process.
- • present their pinhole images mounted on mat board for final evaluation.
- • writing prompt: Is pinhole photography an outdated art form? Do you agree or disagree? Support your position utilizing information and understanding you have gained through this unit.

## Learning Plan

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- • Comparative study of pinhole vs. lens based photography in following aspects: image formation process, visual characteristics of photograph, and mechanical characteristics of camera.
- • Discussion of steps involved in constructing pinhole camera.
- • Group critique based on image exploration. Class examines images to determine the criteria for a successful photograph.
- • Group critique of finished artwork.
- • Individualized critique throughout the pinhole image making process.
- • Internet browsing of contemporary pinhole artist images and International Pinhole Photography Day
- • Lecture on darkroom safety, care and use. Large and small group demonstration.
- • Loading cameras and calculation of exposure time based on EV rating.
- • PowerPoint presentation of pinhole photography including historical development from camera obscura.
- • Presentation of formulas to calculate maximum image size, optimal pinhole diameter and F-stop.
- • Presentation of images on mat board with rubric and journal sheet for evaluation.
- • Preview the essential questions and connect to learning throughout the unit.
- • Student construction of pinhole camera from light tight boxes and containers. Students will use formulas to calculate optimal pinhole diameter and F-stop based on their unique container.
- • Student experimentation with creation of paper negatives and positives through the use of pinhole image making process.
- • Students complete writing prompt related to study of Pinhole Photography.
- • Students examine a variety of matting and mounting examples to determine the most suitable finish for their images.
- • Students will produce properly exposed negatives using EV rating and keep track of exposures on journal sheet.
- • Use of visual aids to reinforce differences between two mediums.

## Materials

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### Websites:

[www.pinholeday.org](http://www.pinholeday.org)

[www.alternativephotography.com](http://www.alternativephotography.com)

<http://users.rcn.com/stewoody>

### Reference text:

The Photographic Eye, Michael F. O'Brien & Norman Sibley, Davis Publications, Inc., Worcester, Massachusetts, 1995.

The Dark Chamber: A Pinhole Photography Cookbook, Guy Glorieux, 2003.

Pinhole Photography, Eric Renner, Focal Press, 2004.

## Suggested Strategies for Modifications

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- • additional time on task
- • alternative outcome options
- • assessment based on individual development in the area of study
- • audio tape of instruction
- • cooperative learning groups
- • handouts of notes, procedures, processes, diagrams, etc.
- • images and visual aids
- • one-to-one instruction and assistance
- • preferential seating
- • reading material modified to student level
- • revised techniques, use of tools and media in hands-on activity
- • study partners
- • testing materials appropriate to student level