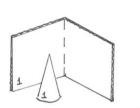
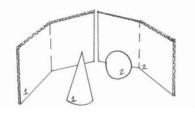
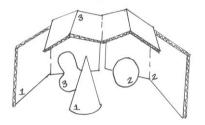
Drawing for Observation & Description

Enduring Understanding	Artists often create photographs to describe the properties of objects.
Grades	K—12
Time	One to three class periods
Art Concepts	Line, 2D shape, 3D form, composition, symmetry, light, value
Materials	Assorted found objects, cardboard, pencils, and paper. Optional: miniature flashlight.
Talking about Art	View and discuss the printed image of <i>Articles of Porcelain</i> (circa 1844) by William Henry Fox Talbot.
	What do you see? Use the language of the visual arts to describe your observations. Identify organic (curvy) lines and geometric (straight, angular) lines. What shapes do these lines create? Identify 2D shapes, such as rectangles, circles, and triangles.
	What familiar objects do you notice? Use the language of mathematics to describe your observations. Identify 3D forms such as rectangular prisms, cylinders, and pyramids.
	How are the objects arranged? In art, the arrangement of objects (or visual elements) is called composition. Use your finger to divide the composition in half. What do you notice about either side? In math, this composition can be described as symmetrical and the dividing line as the line of symmetry.
	If you were to rearrange these objects to create a different composition, what changes would you make? How would you keep the arrangement symmetrical? How might you create asymmetry?
	This symmetrical composition was created by a mathematician-turned- photographer named William Henry Fox Talbot. Talbot became increasingly frustrated with his inability to draw realistically so he thought about other ways to capture images of the world around him. He began a series of experiments with light, which led to the important invention of the negative-positive print process, a process that proved fundamental to the growth of photography. <i>Articles of Porcelain</i> (along with a companion image of glassware) showcased photography's ability to easily capture details and reflections that would require much time to render through traditional methods such as drawing and painting.

Making Art







Reflection

Bring a miniature object from home to the classroom. Create a simple still life with your miniature object by placing it in front of a standing piece of cardboard, folded in half to create a corner. Place the still life in the direction of the sun and watch as the light source creates spatial and shadow effects. Record your observations by sketching the object, taking careful note of the lines and shapes that you see. Add values of light and dark to the 2D shapes that you drew, in order to describe the object's 3D form. The spot where direct light hits the object should be the lightest value. The bottom of the object and the shadow that it creates should be the darkest value.

Next, pair up with a partner and combine your objects and cardboard pieces to create a new still life. Place the still life in a different part of the room, under a different light condition. Study the properties of the objects and note differences, such as the changing light source, shadows, and reflections. Record your new observations in drawing.

Then, ask another student to join your pair to create a group of three. Combine all three objects and cardboard pieces. Try enclosing the objects, using the cardboard pieces to form walls and a roof, and experiment with different ways to control the light source. Study the changing lines, shapes, shadows, and reflections that you see and record your final observations in drawing.

Along the way, you may consider comparing and contrasting natural versus artificial light sources, using sunlight and a miniature flashlight.

Combine your drawings to create a portfolio that documents the observations of the group. Share your group's portfolio with another group and talk to each other about your individual and group investigations. Reflect by responding to the following questions:

What lines and shapes did you find in your object(s)? How did these lines and shapes create shadows and reflections under light? How did the shadows and reflections change when you changed the light source?

Curriculum ConnectionLayer in the language of mathematics as you analyze the composition of
Articles of Porcelain and as you discuss the forms that simple objects can
take. For the upper grades, select one object from the artwork and assign
dimensions to the object. Ask students to calculate the area of the 2D
shape created by the object as well as the volume of the 3D form. Start
with simple cubes and rectangular prisms then move on to more complex
forms such as cylinders and pyramids.

Literature, Illustration, and Photography

Enduring Understanding	Artists often create photographs to add sensory dimension to the written narrative.
Grades	3–12
Time	One to three class periods
Art Concepts	Composition, mood, collage, texture
Materials	Source imagery (such as magazine cut-outs or pre-printed images on vellum paper), sturdy paper (such as cardboard or cardstock), glue (glue sticks or decoupage glue and foam brushes), scissors, pencils
Talking about Art	View and discuss the printed image of <i>The Little Novice & Queen Guinevere</i> in the Holy House of Almsbury (1874) by Julia Margaret Cameron.
	What do you see? Discuss the interaction unfolding between these two figures. What is their relationship? What has brought them together? Are they sharing the same physical space? If you joined them in this space, what might you see, hear, smell, and feel? What do you see in the image that makes you say that?
	This 1874 photograph by renowned female photographer Julia Margaret Cameron illustrates a scene from a collection of poetry entitled <i>Idylls</i> <i>of the King.</i> The popular British poet Alfred Lord Tennyson spend nearly 40 years writing the collection of poetry, drawing inspiration from the literary epic of King Arthur. Tennyson asked Cameron, his friend and neighbor, to provide photographic illustrations for the poems. She worked hard to arrange models, settings, costumes, and accessories to create photographs that evoked the narrative and environment created by Tennyson. This particular photograph illustrates the section of Tennyson's poem where Guinevere, who is married to King Arthur but has fallen in love with Sir Lancelot, flees to take anonymous shelter at the convent at Almsbury. It is there that she is befriended by a young novice (an inductee into the religious order).
	What mood is evoked by this photograph? What choices did the photog- rapher make to evoke this mood? Wanting to challenge the mechanical, technical, and descriptive photographs pervasive at the time, Cameron strove to create photographs that would tell stories and express feelings. Elevating photography beyond description, she often used atmospheric lighting, a soft focus, and imprecise printing methods to create expressive images.

Making Art	Choose a classroom text to illustrate through photographic collage. Analyze the structure of the text, using the following vocabulary: exposition, inciting incident, rising action, climax, falling action, denouncement, and resolution. Choose one scene from the text to translate into a collage.
	What mood does your scene evoke? Is it characterized by a dramatic rising action, a chaotic climax, or a serene and peaceful resolution? Choose three found images that best illustrate the scene's mood. Think about how you will combine the images to create one composition. Where will you place the first image and why? The second? The third? On your sheet of cardboard or cardstock, lightly sketch the arrangement of visual elements within the frame.
	Next, use scissors to cut out each image, or try a variety of paper cutting techniques (such as scoring or tearing) to add texture. Then, use glue sticks or decoupage glue and a foam brush to lightly coat the back of each image. Place the images on the cardboard as illustrated in your sketch. Lastly, place a light coat of decoupage glue over the finished product to secure the edges of the cut imagery.
Reflection	Pair up with a fellow student who chose the same scene as you did. Compare and contrast your illustrations. What similarities and differences do you notice? What moods do your artworks evoke? What kinds of artistic choices did you make to capture this mood?
Curriculum Connection	Combine students' collages to create a final storyboard that illustrates the structure of the classroom text. Have students write captions that summarize each scene. Then, they can choose one student work as inspiration for an alternate ending to the story.
	How does the outcome of the story change? Does the new story flow follow a traditional narrative structure? How might you change the story structure to manipulate the story's mood?

The Photographer's Eye: Art, History, and Science

Enduring Understanding	Photography is a unique medium that combines concepts from art, history, and science.
Grades	6-12
Time	One to three class periods
Art Concepts	Shape, form, composition, perspective, expression, experimentation
Materials	Paper and pencil
Talking about Art	View and discuss the printed image of <i>Paris, 1929</i> (1929, printed circa 1970) by André Kertész.
	What do you see? Describe the artwork's composition, or the arrangement of visual elements. What choices did the artist have to make in order to capture this skewed sense of perspective? Where might he have been standing in relationship to the street, the meandering people, and the looming architecture? What do you think the artist was thinking about when he created this image?
	This photograph, created by André Kertész, documents a typical Parisian day at the landmark Eiffel Tower. The Tower became a primary object of inspiration for a generation of avant-garde painters, poets, architects, filmmakers, and historians seeking new ways to represent the world around them. Kertész, a Hungarian born photographer living in Paris, made several studies of the Eiffel Tower. Taken from an aerial perspec- tive, this particular photograph juxtaposes shadows from the Tower's ironwork with the pedestrians below, creating an intriguing and curious composition.
	How does this image compare to other images that you have seen of the Eiffel Tower? How is it similar? How is different? While some photographers of the time included the Tower as part of the Parisian landscape, Kertész chose a unique vantage point, resulting in abstraction of shapes, shadows, and form.
	Compare Kertész's photograph with later photographs by György Kepes and Jo Ann Callis. György Kepes, an inspiration to artists and scientists alike, was known for experimenting with the nature of light and vision. His book, <i>The Language of Vision</i> , explored the nexus of perception science and visual imagery as well as the use of new technologies that impacted the growing medium of photography. A former professor at the Massachusetts of Technology, his approach to photographic practice was truly interdisciplinary. How is this experimental approach reflected in his 1942 photograph <i>Balance</i> .



György Kepes, Balance, 1942 Gelatin Silver Print The Marjorie and Leonard Vernon Collection, gift of The Annenberg Foundation, acquired from Carol Vernon and Robert Turbin. © The Györev Kepes Estate.



Jo Ann Callis, Black Tablecloth, 1979 Printed 1984, Dye-imbibition Print, The Marjorie and Leonard Vernon Collection Gift of The Annenberg Foundation, acquired from Carol Vernon and Robert Turbin, © Jo Ann Callis.

	By the time Jo Ann Callis began creating her "fabricated photographs" in the 1970s, color photography had become a cultural norm, easily accessible to the everyday photographer. However, working in color photography was looked down upon by many fine art collectors and the subject matter of her photographs—women and the pressures of domestic life—were hardly en vogue. Her work responds to her 1950s upbringing and the changing role of women in society. Carefully staged using actors and an interior setting, her 1979 photograph <i>Black Tablecloth</i> references such issues using graphic color, shape, and line.
Writing about Art	Have you ever collected something? What types of objects have you collected? If you could collect one of the three aforementioned photographs, which would you choose and why?
	Divide the class into teams of two and ask students to discuss the three photographs with their team members. They should consider the photo- graph's important contribution to art, history, or science. Students should use the photograph's unique position within the fields of art, history, and science as an outline for developing their opinions. Each students should argue his or her case to their teammates, arrive at a conclusion, and translate their findings into writing.
Reflection	Find a team who chose the same artwork as you did. Share arguments with one another and discuss the values of each. Join another team of students that chose a different photograph. Present your side to the other team and discuss the values of as well as challenges to the other team's argument.
Curriculum Connection	Extend the lesson into a research project about the history of photography and its unique position within art, history, and science. Students may choose a photographic device (such as the Polaroid camera) or process (such as color photography) and explore its importance to the growth of photography. How did this time invention change the trajectory and potential of the medium? How has this device or process impacted us today? Combine students' research to create a classroom timeline of photography.

A Series through Time & Space

Enduring Understanding	Artists often create photographs to capture change over time.
Grades	9–12
Time	One to two class periods
Art Concepts	Line, shape, texture, composition, perspective
Materials	Digital cameras (or smartphones), projector, camera/projector-compatible cable. Optional: projection screen, computer.
Talking about Art	View and discuss the printed image of <i>Surt Sequence</i> (1940, printed after 1972) by Ansel Adams.
	What do you see? What types of lines, shapes, and textures do you notice? Discuss the composition, or arrangement of lines, shapes, and textures on the page. How does the composition change from one photograph to another? What might these compositions represent?
	The photographer Ansel Adams is best known for his spectacular photographs of natural scenes and this series of photographs, entitled <i>Surt Sequence</i> , is no exception. Adams created this series in 1940 while on a trip along the Northern California coast. Standing at a perspective above the water, he turned his camera down at the surf line and captured the quiet and poetic movements of the water along the sand. A master of the technical aspects of photography, his practice represented a unique combination of mechanical execution and creative expression.
	Imagine that a single photograph from <i>Surt Sequence</i> was presented alone, without the context of the other four photographs. How would this change your understanding of the work? What if you changed the sequence of the photographs? Would it impact the message or mood evoked by the series?
	The photographic series represents an important tool for photographers. It emphasizes the element of space and showcases the element of time. Used by photographers and writers alike, a series can be used to document change, sequence, and trajectory.
Making Art	Choose a place near the classroom or the school that is characterized by rapid change over time. You might choose the playground, where students can be seen running in circles, or an adjacent street, where cars rush by. Form a team of fellow photographers and talk about different ways to document the action unfolding before you. What are the different perspectives you can take around the moving subject? How can you incorporate motion into the way you capture your images?

	Each team member should take a different perspective around or inside the space occupied by the subject(s). One person can stand at the perimeter to photograph while another person might stand in the heart of the action. Choose a different perspective or place from which to photograph and capture as many photographs as you can over a short span of time. Try a rhythmic motion, such as up-down, side to side, diagonal, or circular as you hold the camera to capture your images.
	Regroup as a team and share your perspectival photographs with each other. Have each team member select one photograph from their particular camera roll—a photograph that best captures the subject(s) and that complements the others photographs in the series.
Reflection	Have teams upload their serial photographs to a central computer and project each series for display in the classroom. Compare and contrast the different subjects that students chose. Facilitate a constructive critique using the following questions to help students analyze their artistic choices:
	What rhythm does this series evoke? What mood is evoked by this rhythm? How did the photographer connect with the rhythm of the environment?
Curriculum Connection	Compare the time-based media of photography to historical concepts of change over time. How has evolution impacted history, politics, and societies? How has evolution impacted science, species, and the environment? How might one use the medium of photography to explore or explain evolutionary concepts in history and in science?