

<p>10-15 mins</p>	<ul style="list-style-type: none"> ● Each teacher will take a group of three students to a spot on the river to observe the water. The teacher may ask guiding questions like “How is a river different from a puddle? Where do you think the water comes from?” Students may pose their own questions about the river, and the small group can talk about them. ● As they are observing, students will sketch what they observe using paper and pencil on their clipboards. They should try to think of ways to represent the movement of the river (this can be explored more with the water colors as well). Students can get close to the water, but they should not step into the river. ● After students have finished their sketches, they will go back to the classroom to paint ● The group will create their representations using different watercolor techniques (wet on wet, wet on dry, splatter with brush, dropper, salt). ● With students seated, a teacher at each group can demonstrate the different watercolor techniques to the students. (Wet on wet uses a wet brush on wet paper, wet on dry uses a wet brush on dry paper, splatter is tapping the brush to splatter paint on the paper, dropper is using the pipette to drop water on the paint, and salt is sprinkling salt onto the wet paint). ● Encourage students to observe how the colors and paints change with each technique. They will use these techniques to create their representation of the river. ● After students have completed their paintings, they may talk about the techniques they used, their favorite techniques, etc. ● Ss share out painting and describe how the water movement is shown in their paintings 	
<p>60 mins</p>	<p>Materials List (please be detailed; include exact quantities)</p> <ul style="list-style-type: none"> ● water color sets (1 per student + 1 teacher set) ● water color paper (2 sheets per student + 4 extra) ● paint brushes (1 per student + 1 teacher) ● pipettes (2 per student) ● kosher salt if available (1 box) 	<p>Modification for Inclement Weather</p> <p>Show video of water or bring in tub of water and experiment placing rocks or objects in it</p>

<ul style="list-style-type: none"> ● Dixie cups or similar for holding salt (1 per student) ● paper (3 sheets per student) ● pencils (1 per student + a few extras) ● clip boards (1 per student + 1 teacher) ● water cups (1 per student + 2-3 extra) ● paper towels (1 roll) 	
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Week 2: Light and Shadow

Lesson Title: Exploring Light and Shadow Grade: 2	Instructors: Topic: Light and Shadow
Lesson Objectives: -Students will understand how a camera operates and how it can be used to capture light -Students will understand the difference between light and shadow -Students will explore light and shadow in both manmade and natural settings -Students will explore the idea of temporary vs permanent in terms of capturing light and shadow	
<p>Art/Science Inclusion (brief description of how your lesson presents an integration of art and science concepts.)</p> <p>Students will explore a variety of techniques they can use to capture light and shadow in abstract, artistic ways. They will be exploring the concept of light through a scientific lens by creating light paintings with glow sticks and high exposure cameras. They will then explore shadow through the artistic lens by creating abstract watercolor paintings by tracing shadows they find in nature</p> <p>Art Open-Ended Question (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))</p> <p>Opened-ended problem: How can we manipulate light and shadows to create abstract works of art?</p> <p>Open-ended problem: How can we capture the unique shadows casted by nature?</p> <p>Art Education Standard (should include at least one, see https://www.arteducators.org/learn-tools/national-visual-arts-standards)</p> <p>Anchor Standard 2: Organize and develop artistic ideas and work. Experiment and develop skills in multiple art-making techniques and approaches through practice.</p>	

Science Education Standard (should include at least one, see <https://www.doe.in.gov/standards/science-computer-science>, NGSS also great)

K-2.E.3 Analyze data from the investigation of two objects constructed to solve the same problem to compare the strengths and weaknesses of how each performs.

Timeline	Lesson Description	Modification for Inclement Weather
<ul style="list-style-type: none"> ● 5 mins 	<ul style="list-style-type: none"> ● Lessons will begin indoors to introduce the activities to the students. We will ask the essential questions such as “What are ways we can capture light and shadow?” “Where do we see interesting lights and shadows in our lives?” 	<p>Modification for Inclement Weather</p> <p>In case of weather, shadow tracing can be done inside with a variety of objects used to cast shadows</p>
<ul style="list-style-type: none"> ● 5 mins 	<ul style="list-style-type: none"> ● Using flashlights and glowsticks students will have the opportunity to explore the way light is produced by these objects in a dark room. Teachers will ask guiding questions such as “what do you notice about the light?” “what happens if you move the light fast or slow?” 	
<ul style="list-style-type: none"> ● 20 mins 	<ul style="list-style-type: none"> ● Solving the problem of capturing light with a camera. Students will each have the opportunity to create an abstract light design that will be captured by a high exposure camera. We will discuss how in this way the light designs that were once temporary will become permanent 	
<ul style="list-style-type: none"> ● 5 mins 	<ul style="list-style-type: none"> ● Discuss how light in nature is used to cast interesting shadows. Students will be asked to brainstorm objects that they think will cast interesting shadows prior to going outside. ● Just like how the camera captured the light, students will capture 	

<ul style="list-style-type: none"> ● 10 mins ● 35mins ● 10 mins 	<p style="text-align: center;">shadows using tracing and watercolor</p> <ul style="list-style-type: none"> ● Once outside, in small groups teachers will demonstrate how to trace abstract shadows on their paper. ● Students will be encouraged to find interesting shadows of their own and fill the whole page. They will be encouraged to fill in their traced shadows with watercolors to create a complete painting ● Once inside students will share their paintings and be encouraged to talk about what interesting shadows they found and their artist process! 	
<p>Materials List (please be detailed; include exact quantities)</p> <ul style="list-style-type: none"> -tripods (2) -camera (2) -flashlights (8) -cheap glow sticks (2-3 packs) -8 pieces of watercolor paper -8 pencils and erasers -8 watercolor sets -cups for water -paper towels 		<p>Modification for Inclement Weather</p> <p>All materials will stay the same</p>

Handouts: Please include links to handouts needed for the lesson (and how many you need), or copy the handout material to this document.

<https://www.digitalphotographyformoms.com/light-painting-steel-wool-photography/>

<http://sketch42blog.com/2013/06/art-with-kids-how-to-make-light-paintings/>

Week 3: Exploring Color in Nature

Lesson Title: Color Scavenger Hunt!	Grade: 2nd
Week: 3	Topic: Color in Nature/camouflage
<p>Lesson Objectives:</p> <ul style="list-style-type: none"> -Students will explore the artist Alma Thomas how utilizes bright colors and earth tones 	

- Students will create their own color palette paintings and conduct a color scavenger hunt in nature to match their paintings
- Students will reflect on their color in nature collages and discuss how their nature object's colors might change depending on the season
- Students will explore the ideas of camouflage and color as a tool to protect prey in nature

Art/Science Inclusion (brief description of how your lesson presents an integration of art and science concepts.)

Students will be using their nature collages as tools to further explore scientific concepts in regards to concepts such as camouflage. This will be done by having students observe their paintings under different colored lenses and exploring how "bugs" or skittles of different colors blend in or stand out compared to their natural environment.

Art Open-Ended Question (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))

- In what ways might artists be inspired by color in nature?
- How can natural elements be used as collage materials?

Art Education Standard (should include at least one, see <https://www.arteducators.org/learn-tools/national-visual-arts-standards>)

VA:Cr2.3.2a :Repurpose objects to make something new.

Science Education Standard (should include at least one, see <https://www.doe.in.gov/standards/science-computer-science>, NGSS also great)

- 4.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction in a different ecosystems.
- 3.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Timeline	Lesson Description	Modification for Inclement Weather
5 mins	-Introduce the topic as well as the artist Alma Thomas. Discuss how artists may be inspired by colors in nature and what colors we see in nature right now!	Rather than go on a scavenger hunt outside we will have a virtual scavenger hunt and brainstorm/ look up pictures of elements of nature that could fit in each color category
20 mins	-Students will use tempera paint to create color scale paintings inspired by Alma	

<p>5 mins</p> <p>20 mins</p> <p>5 mins</p> <p>10 mins</p> <p>20 mins</p>	<p>Thomas. (Students will be encouraged to make each section large enough to fit collage material)</p> <p>-Transition outside</p> <p>-While paintings are drying, students will explore nature to collect materials for their collage. They will be encouraged to find all of the colors on the rainbow</p> <p>-Transition inside</p> <p>- While collaging their materials in place, students will discuss why it was more difficult to find certain colors and what colors they would find more of in other seasons.</p> <p>-Students will then conduct experiments on their collages by observing them through colored lenses and discussing their discoveries. They will also be encouraged to explore how “bugs” or skittles might blend in with particular colors. As a class we will discuss the important of color in nature in terms of camouflage and protection for predators</p>	
<p>Materials List (please be detailed; include exact quantities)</p> <ul style="list-style-type: none"> -8 pieces of cardboard or thick paper -tempera paint -8 paint brushes -cups of water -paper towels -8 bottles of glue -skittles -colored lenses 		<p>Modification for Inclement Weather</p> <p>Objects from nature of a variety of color will be collected prior to the lesson for students to use for their collage</p>

Lesson Title: Animal Homes!		Instructors: Olivia, Spencer, Briana
Grade: 2	Week: 4	Topic: Building with Nature
Lesson Objectives: -Students will understand and be able to discuss different habitats -Students will be able to recognize the importance of shelter for animals survival -Students will draw connections to animal homes they have seen before -Students will use collected material to build a bird nest		
Art/Science Inclusion (brief description of how your lesson presents an integration of art and science concepts.) Students will explore the artistic and scientific elements of building with nature through the creation of a bird’s nest. Students will first explore the importance of shelter for survival and discover how a variety of animals view their homes. They will explore artists such as Andy Goldsworth who create art from nature and use this as inspiration for their own bird nest creations. Art Open-Ended Question (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it)) How can found objects from nature be used and collected in an artistic way? Art Education Standard (should include at least one, see https://www.arteducators.org/learn-tools/national-visual-arts-standards) VA:Cr2.3.2a Repurpose objects to make something new. VA:Cr1.2.2a Make art or design with various materials and tools to explore personal interests, questions, and curiosity. Science Education Standard (should include at least one, see https://www.doe.in.gov/standards/science-computer-science , NGSS also great) <ul style="list-style-type: none"> ● 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats. <p>ESS3.A: Natural Resources. Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do</p>		
Timeline 10 mins	Lesson Description Class discussion of different habitats and the importance of shelter for animal survival	Modification for Inclement Weather Rather than go outside to collect materials, students will choose from a collect of natural materials and we will spend a few minutes
10 mins		

<p>5 mins</p> <p>5 mins</p> <p>5 mins</p> <p>5 mins</p> <p>40 mins</p> <p>10 mins</p>	<p>Brainstorm of animals that build their own homes and allow students to share stories of animal homes they have seen!</p> <p>Play video of hummingbird making a nest</p> <p>Bird nest project introduction: show works by Andy Goldsworthy and discuss how he uses found objects in nature to create something new</p> <p>In groups of 3 students will go outside to collect materials for their nests</p> <p>Outside material collecting</p> <p>In groups of 3 students will transition inside</p> <p>Nest building work time</p> <p>Project sharing and clean up</p>	<p>doing a virtual scavenger hunt of materials used to make nests</p>
<p>Materials List (please be detailed; include exact quantities)</p> <ul style="list-style-type: none"> -9 bottle of elmer's glue -hot glue gun -8 pieces of blue construction paper -8 pairs of scissors -string <p>(sticks and found nature from outside)</p>	<p>Modification for Inclement Weather</p> <p>Twigs, grass, and sticks will be brought in for materials if weather does not permit going outside</p>	



<https://youtu.be/MVOZ8tXI5Nc>