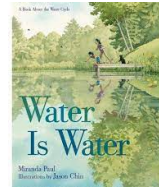


Unit 3: Wind and Water

WEEK 1



Art Studio: Ice Sculpture

Children create collaborative sculptures using large chunks of ice.

NOTE: This is a two-part learning experience that continues in Week 2.

Big Ideas	Wind and water can inspire art, play, and other activities. Water can change from a liquid to a solid to a gas.
Guiding Questions	How can water and wind inspire play? How does water change?
Family Engagement	Invite families to try their own ice sculpture at home. Ice sculptures could be played with on a tray in the bathtub. Share some photographs of the experiences from school and invite caregivers to share their ice sculpture photographs.
Vocabulary	<p>freeze: to become solid and hard</p> <p>liquid: something that flows, like water, juice, or milk</p> <p>melt: to change from a solid to a liquid</p> <p>sculpture: a three-dimensional artwork</p> <p>smooth: even and flat to the touch</p> <p>solid: something hard and firm</p> <p>texture: how something feels</p> <p>transform: to change</p>
Materials and Preparation	<ul style="list-style-type: none"> ● <i>Water is Water</i>, Miranda Paul Flag pages 13-14 and 19-20. ● a device to take photographs such as a tablet or phone (to document the ice as it melts) ● water ● kitchen salt, baking soda, or sugar ● salt shaker ● tempera paint or liquid watercolor paint

	<ul style="list-style-type: none"> ● large plastic container or cake tin container to freeze water ● large plastic tub or tray, for children to play with the ice in ● small containers (e.g., yogurt pots) ● paintbrushes and kitchen tools (e.g., metal spoons, chopsticks, etc) ● smocks ● small spray bottles for paint ● clipboard, pen, and paper ● Ice Sculpture Artists Resource Print out to display in the Art Studio. <p>If possible, project additional images from this website during the Intro to Centers and/or in the Art Studio: https://olafureliasson.net/artwork/ice-watch-2014/</p> <p>Preparing the melting ice sculpture:</p> <ol style="list-style-type: none"> 1. The day before the activity, freeze some water into the large plastic container/cake tin in a freezer or outdoors (if the weather allows). If using small figurines, gems, or natural materials, add them to the water at this time. 2. Once frozen, tip the large ice block out into the large tub/tray. Running the ice under hot water for 30 seconds may help loosen it from the plastic container. 3. Fill spray bottles with a mixture of tempera paint and water. Or if using food coloring, dilute the color a little – 2 drops food coloring to 1 TBSP water. 4. Lay out paintbrushes and kitchen tools nearby and display the Artists Resource images.. <p>This activity works well outside on a warm day if space/supervision allows.</p> <p>Bring to the Intro to Centers Meeting: clipboard, pen, and paper</p>
<p>Intro to Centers</p>	<p>The day before this experience: <i>We are starting to learn all about water. Today, we will put some water in the freezer (or outside) where it is very cold. What do you think will happen to the water?</i></p> <p>Invite children’s predictions and write down their ideas.</p> <p>The next day: <i>Yesterday, we put some water into the freezer. Here are your predictions about what would happen.</i></p> <p>Revisit the list of predictions. <i>Now let’s see what happened!</i></p> <p>Show the frozen ice.</p>

	<p><i>The water transformed! It changed; it turned from a liquid into a solid, ice!</i></p> <p><i>Today in the Art Studio, we will make melting ice sculptures. Here's a picture of an artist named Olafur Eliasson who makes artwork using ice.</i></p> <p>Show the Artist Resource and the images of Olafur's sculptures. If able, project the images from the website.</p> <p><i>Today we will use tools and add salt and paint to the ice and see what happens. How do you think the ice will change?</i></p> <p>Invite responses.</p> <p><i>We will take photographs so we can see how our ice sculpture transforms, or changes over time. You might want to touch the ice and feel the texture; how does it feel?</i></p>
<p>During Centers</p>	<p>Children experiment with the ice, colors, kitchen tools, and salt. Children can spray paint onto the ice, shake on salt, or scrape the ice with the kitchen tools. The salt will melt the ice and the paint will create beautiful streams of color. The sculpture itself will change form dramatically over time. A large piece of ice will likely take 2-3 hours to fully melt.</p> <p>There is no finished "product" for this experience; take photographs during the Centers to document the artwork and so that children can revisit the process of ice melting. Save these photographs to show during the Intro to Centers in Week 2.</p>
<p>Differentiation Ideas</p>	<ul style="list-style-type: none"> ● Focus on one part of this learning experience at a time: observing the ice, painting the ice, using salt and kitchen utensils to modify the ice. ● To increase child engagement in this center, freeze items of high interest (e.g., cars) in the ice. ● If children's hands get cold from touching the ice, or if they are reluctant, offer mittens or tools (see the Artists Resource for ideas) so they can engage with the ice without touching it directly.
<p>Facilitation</p>	<ul style="list-style-type: none"> ● What materials will you use with the ice? ● What happens if you _____ [scrape, spray, shake salt onto] the ice? ● Why do you think the ice is melting? ● What part of our sculpture is solid? What part is liquid? ● What would happen if we poured hot water on the ice? ● How does the ice look different now? ● What do you think the ice sculpture will look like tomorrow?

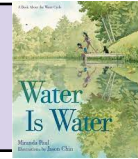
Extensions	Try freezing two containers: one of fresh water, and a second container of salted water. Notice with children what happens with each - do both containers freeze? What might be different about the salt water?
Standards	<p>PreK-PS1-1(MA). Raise questions and investigate the differences between liquids and solids and develop awareness that a liquid can become a solid and vice versa.</p> <p>PreK-PS1-4(MA). Recognize through investigation that physical objects and materials can change under different circumstances.</p> <p>APL4: The child will demonstrate creativity in thinking and use of materials.</p> <p>L.PK.6. Use words and phrases acquired through conversations, listening to books read aloud, activities, and play.</p>

Image citations for Center Language Support:

- freeze: Jan Antonin Kolar on Unsplash
- liquid: MRJN Photography on Unsplash
- melt: H Levy on Pixabay
- sculpture: Sean Sweeney on Unsplash
- solid: Zoltan Tazi on Unsplash
- transform: Suzanne Williams on Unsplash

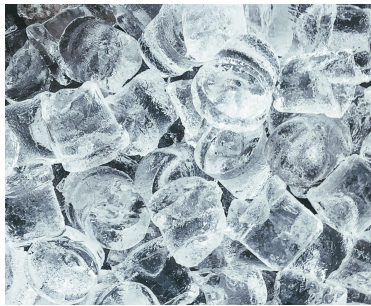
Notes

Art Studio: Ice Sculpture

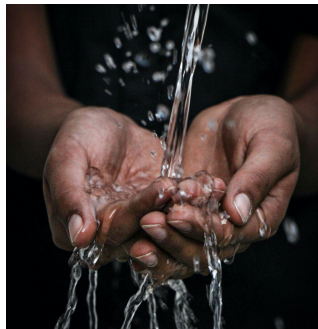


Facilitation prompts:

- What materials will you use with the ice?
- What happens if you _____ [scrape, spray, shake salt onto] the ice?
- Why do you think the ice is melting?
- What part of our sculpture is solid? What part is liquid?
- How does the ice look different now?
- What do you think the ice sculpture will look like tomorrow?



freeze



liquid



melt



sculpture



solid



transform

Children are learning to...

- ask questions and investigate the differences between liquids and solids and develop awareness that a liquid can become a solid and vice versa. (PreK-PS1-1)
- recognize through investigation that physical objects and materials can change under different circumstances. (PreK-PS1-4)
- demonstrate creativity in thinking and use of materials. (APL.4)
- use words and phrases acquired through conversations, listening to books read aloud, activities, and play. (L.PK.6)

Art Studio: Ice Sculpture Artists Resource

Learn about a contemporary artist who engages in artwork with ice.

Artist: Olafur Eliasson



Image Citation: Design Boom

The Danish artist Olafur Eliasson makes melting ice sculptures. Olafur got twelve giant blocks of ice that had melted off the North Pole and displayed them as sculptures in cities. His sculptures help people learn about climate change, because as the earth's climate gets warmer, more ice on the North Pole melts. Here are some pictures of Olafur's melting ice sculptures.



Image Citation: Charlie Forgham-Bailey on <https://olafureliasson.net/artwork/ice-watch-2014/>



Image Citation: Tim White on Flickr

Ice Sculptures Artists Resource U3 W1

Focus on Pre-K 3s | Boston Public Schools Early Childhood Department P-2

To access more photographs: <https://olafureliasson.net/artwork/ice-watch-2014/>

Here are some ideas for setting a melting ice sculpture.



These are some ideas for tools.



Here is what ice might look like after adding color and salt.

Ice Sculptures Artists Resource U3 W1



Here's what freezing some natural materials into ice could look like.

Images and ideas in collaboration with Louisa Penfold.
<http://www.louisapenfold.com/melting-ice-sculpture/>

Ice Sculptures Artists Resource U3 W1

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