



Overview

My fourth grade students recognized how light travels and when it is refracted, reflected, and absorbed. Students applied skills and concepts needed in other disciplines such as a science to become an informed creative artist. Students examined the differences of mixing primary colors, mixing filtered colored lights, and of how colors can be layered. Students learned the science behind light and color while experimenting with glass prisms and dichroic glass cubes. Showing my fourth graders how white light separates into the color spectrum when hitting a glass object fascinated them and made them more curious.

There are two different but similar sculptors within this unit, Soo Sunny Park and Jack Storms. Soo Sunny Park refers to herself as a Kinetic Grid Artist. She creates twisted chain link fence designs using colored plastic squares then placing it in an empty space to see how the light reflects and absorbs on the walls. Jack Storms is a cold press sculptor who layers glass with metal oxides to create reflections of different colors when moved. Both artists use reflection of light and color in their work. Students created their own color wheels, kaleidoscopes and layer paint using a liquid pour technique. The large culminating project will be weaving colored plastic strips through the chain link fence that divides our playgrounds. This will be similar to Soo Sunny Park's grid installations. After studying all of the ways color can be reflected, refracted and absorbed, students had a better understanding of color, while at the same time looking at two contemporary modern artists.

Goals

My "why" for any unit I am teaching is for my students to leave my class with a strong understanding of the content whether it is art, science, social studies, etc. I continually stressed to my art students that color is an ingredient for a successful painting. This unit completed their understanding of color by learning the science behind it. I wanted my students to understand what light is and how light travels in a straight line until it strikes other mediums, and that light can be reflected, refracted, and absorbed to create different colors. My students learned the difference between mixing primary colors (red, yellow, blue) and mixing the same colors using filtered colored lights. They experimented with the visible color spectrum, learning its unique qualities and predicting the outcomes using the scientific method. By integrating science into art lessons about color, the students connected their prior knowledge of science into these light and color lessons. The goal for our school is to strengthen a student's abilities in science, getting them ready for the end of year 5th grade science test. What better way could there be to do this than integrating science with art?

Artists

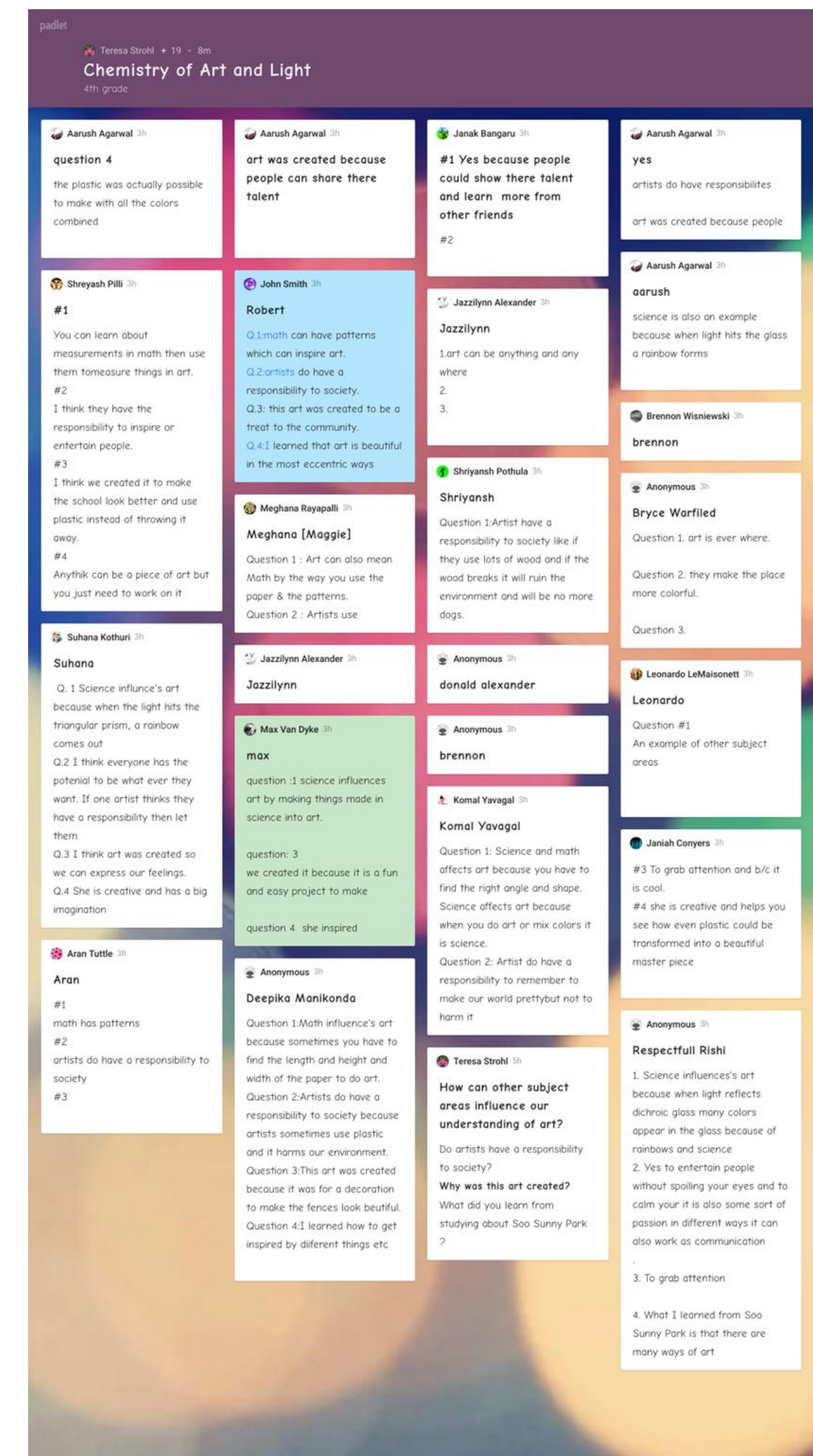
Soo Sunny Park, Photo Kinetic Grid Sculptor Soo Sunny Park was born in Seoul, South Korea. She is a sculptor who received a BFA in painting and sculpture from Columbus College of Art and Design in Columbus, OH and a MFA in sculpture from Cranbrook Academy of Art in Bloomfield Hills, MI. She has won numerous awards for her work, most recently in a group exhibition called, *You are Here: Light, Color and Sound Experiences* at North Carolina Museum of Art in Raleigh, NC. Park lives in New Hampshire and teaches at Dartmouth College.

Jack Storms, Cold Press Dichroic Glass Sculptor Jack Storms has always been interested in some form of art but was not sure what direction his art would take. In Jack Storm's junior year at Plymouth State University he got a job working with a glass artist that was experimenting with combining lead crystal and dichroic glass using a coldpress process. He was intrigued! This process is something he had never seen before. Most glass artists were blowing glass from molten glass. Jack Storms opened his own studio in 2004, delving deeper into the process by perfecting his creations and inventing a cold-working lathe. He has won numerous awards for his gorgeous designs. His glass cube and tear drop were featured in a scene from the movie *Guardians of the Galaxy*.

Student Impact



“Wow! When you look through the plastic you see different colors.”



“Ms. Strohl, plastic is not good for the environment.” says Jazzylyn.
My response: “You are right. That is why it is a temporary installation.”



Spectrum of colors ROYGBIV

Dichroic Glass



Acknowledgements

Dale Chihuly: *Working with Color*. Jefferson City, MO: Scholastic Art, 2008. This is a student magazine focusing on the colored glass work of artist, Dale Chihuly. Felice, Cathy. *Arts and Activities Primary Painting: Mixing Colors with Confidence*. Vol. 163. Series 3. This is a student and teacher magazine focusing on mixing primary colors. Jobson, Christopher. "Soo Sunny Park's Unwoven Light Documented by Walley Films." Colossal. May 17, 2018. Accessed September 02, 2018. <http://www.thisiscolossal.com/2013/05/soo-sunny-parks-unwoven-light-documented-bywalley-films/>. A website reviewing Soo Sunny Park's large installation *Unwoven Light*. "Light Waves and Color." *The Physics Classroom*. Accessed September 02, 2018. <http://www.physicsclassroom.com/>. This is a website focusing on the science behind light, waves, and color. O'Connell, Cathal. "What Is Light?" *Cosmos*. June 13, 2016. Accessed September 09, 2018. <https://cosmosmagazine.com/physics/what-is-light>. This is a website defining what is light and how it can be manipulated. Phil. Trans. 1671 6, 3075-3087, published 1 January 1671. <http://intl-rstl.royalsocietypublishing.org> Reynolds, Peter H. Rynolds. *Sky Color*. Toronto: CNIB, 2014. A children's book about a girl painting a sky for a class mural and she can't find the color she needs to complete it. Strickland, Carol. *The Annotated Mona Lisa*. Kansas, MO: Andrews McMeel, 2018. This is an informational text on artists, art movements, and art history. Storms, Jack <https://jackstorms.com/> This is Jack Storm's website which has his biography and collection of his glass sculptures. Townsend, Michael. "Understanding the Techniques of Pouring Acrylics." *Just Paint*. August 15, 2016. <https://www.justpaint.org/understanding-the-techniques-of-pouring-acrylics/>. A website for understanding the technique of liquid pours a popular art technique used on canvases. "Unwoven Light." SOO SUNNY PARK. Accessed September 02, 2018. <https://www.soonsunnypark.com/unwoven-light>. This is a website that lends biographical information on large installation artist, Soo Sunny Park Phil. Trans. 1671 6, 3075-3087, published 1 January 1671. <http://intl-rstl.royalsocietypublishing.org>