PUBLIC ART FOUNDATION
GREATER DES MOINES

Educational Resource

EXPANSION BY JUN KANEKO

Expansion by Jun Kaneko / Photo courtesy Hannah Stueben

ABOUT *EXPANSION* AND THE ARTIST

Expansion is a colorful artwork by acclaimed artist Jun Kaneko, commissioned in April 2012 and installed in late October 2013. The piece is lit from behind with 39,060 LED lights, and "talks" with Kaneko's *Five Dangos* ("dumpling" in Japanese) just yards away in the Hubspot Plaza.
This 15-foot high by 21-foot wide glass mural is constructed of blown glass, meant to highlight "rhythm, balance, and color... Hundreds of hand blown glass bands in 45 different colors were cut and each individually selected for composition by the artist." (Find further information on this piece here: **https://dsmpublicartfoundation.org/public-artwork/expansion**

Jun Kaneko is one of the world's most famous and respected ceramic artists, with more than 30 public installations in the United States and Japan, and work in over 50 museums. Though Kaneko works with a variety of materials, his specialty is large-scale ceramics, such as the *Five Dangos* on view at the Riverwalk Hub. Born in Nagoya, Japan in 1942, Kaneko eventually established his studio in nearby Omaha, Nebrask in 1990, which is open to the public.

PRE- AND POST-VISIT ACTIVITIES
(can work as best fits for your planning):

Expand In Your Classroom
(Grades Kindergarten – 12 / Art)

Weave different colored paper or cloth strips in a thoughtful pattern to mimic the style of *Expansion*. Parameters could include color themes per column, as in this particular work, or keep it as a free pattern. Complexity of this activity can grow by starting younger children with larger, thicker strips, then moving onto smaller, thinner strips, or incorporating cloth for a more complicated objective. Take this activity a step further by using translucent color strips, which can be hung on a window to be naturally illuminated – imitating the backlit lighting of *Expansion*.

For older or advanced students: just as this mural "emphasizes rhythm, balance, and color", require this same idea to be reflected in students' own artwork.

Create a Mural of Glass Art
(Grades Kindergarten – 12 / Art)

The teacher should collect various colors and sizes of glass shards with which students can make their own glass murals. This can be done by (safely!) destroying different color glass bottles in double-wrapped cloth, canvas, or plastic bags to create a collection of varying-sized shards and colors. Students should be encouraged to wear gloves while working with these glass pieces, or work slowly and carefully after a safety briefing. Encourage students to sketch a meaningful design first, then create their design by cementing in their glass to a clay base. Advanced (and mature) students can even try gluing these pieces directly together so that when held to the sun, their own pieces are "backlit"!

Finding the Math in Glass-Blowing
(Grades Kindergarten – 4 / Math)

First, watch a YouTube video on the glass blowing process (a kid-friendly one has been linked in **Internet Resources** below), asking students to pay close attention to anything that might seem like a math concept of prior learning. After watching the videos, elicit responses from students and remind them that math is not just numbers: it involves shapes, as well as measurements like distance and temperature. Create a list on the board of math concepts that students noticed from the video.

Then, using the article, **Glass Blowing: Where the Math Heats Up** from mathforgrownups.com to guide you, introduce (or review, if students have already learned) the following shapes: **cylinder, rectangle, sphere,** and **ellipsoid (remember this shape by thinking, "ellipsoid – like closed lips")**. Using a paper and writing utensil – or something even more fun, like shaving cream on the desk! — have students make these shapes one at a time while you call them out. Reference in the video where these concepts (temperature, measurement) and shapes occur during the glass blowing process (Suggestion: print the short article to keep handy for this discussion). Finally, pull up a picture of *Expansion* and discuss the shapes students see in this particular work and note that these shapes were also made during glass blowing technique.

How Glass is Made

(Grades Kindergarten – 12 / Science)

While actually making glass in the classroom is nearly impossible for most, students of all ages will be interested and intrigued with learning how glass is made, and they may not believe it all starts with a grain of sand! Linked below are two resources with videos and useful information for a brief study on the material from which *Expansion* was created:

(Grades 2–5): **http://mocomi.com/how-is-glass-made**
(Younger children can be shown this video and a discussion on it can take place prior to another activity, such as the "faux-glass" transparent art activity above.)

(Grades 2 –12): **http://www.watchknowlearn.org/Video.aspx?VideoID=28563**

DISCUSSION QUESTIONS ON-SITE

What are your first thoughts when seeing this work? Do any initial words or phrases come to mind?

How does this artwork represent the ideas of "rhythm, balance, and color"?

What kinds of emotions or feelings do you have when looking at *Expansion* in this particular space (by the river and opening into downtown)?

The artwork was commissioned to "dialogue" with *Five Dangos* just across from you.
How do you think this was accomplished, and what kinds of conversations might these two pieces of art stimulate from visitors?

(For younger students after being taught vocabulary of "row" and "column"):
There are 45 different colors represented here.
What are your favorite colors?
Which **row** is your favorite?
Which **column** is your favorite?

ON-SITE ACTIVITY

Color in Poetry

(Grades 6–12 ELA, Art)

Colors are often incorporated into poetry, frequently used as a literary device for themes and emotions (i.e. *The Red Wheelbarrow*). After discussing the different literary devices colors can be used for (like symbols and imagery), ask students to write a poem reflecting their initial feelings and thoughts about *Expansion*. Have students share out in a big group, or in small groups of 3–4 if more comfortable. If you'd like to keep this a "silent" activity, students can sit with small groups in a circle, passing their poem to the person next to them. Continue this passing until all poems have been read by all members of the group.

Continue your Jun Kaneko visit at Riverwalk

Visit Jun Kaneko's **Five Dangos**, just across the way at the Riverwalk Hub. These oval installations partner with *Expansion* to "aesthetically unify the segment of the riverfront at the mouth of Des Moines' Court Avenue entertainment district." *Five Dangos* lesson plan is linked.

Expansion seen from across the street by Kaneko's *Dangos*

POST-VISIT ACTIVITY

(after students have visited *Expansion* and a discussion on color and emotion regarding this piece has taken place)

Poem *Expansion*

After returning to the classroom, recap your discussion around the colors used in *Expansion* and the types of emotions and feelings the artist may have wanted to produce with this artwork in its particular location. Following this discussion, provide poetry resources for students to "look around" and identify 1–2 poems incorporating a color motif with which they connect. Have students draw an illustration to go with this poem, and an accompanying paragraph describing the symbolism of color in their selected poem(s). **(At varying difficulties: 4–10)**

Famous Color Poems|PoetrySoup
Color Symbolism in Literature: What Do Colors Mean in Literature and Poetry?

STAMP YOUR LOCAL CULTURAL PASSPORT

See demonstrations and try out glass blowing in the area:

Ciccotti Art Glass (Napier, IA) offers glass blowing opportunities for all age-levels, demonstrations of small and larger-scale pieces, and has several projects on display.

Indianola Glass Creations (Indianola, IA) also has a variety of classes working with fused and stained glass, as well as ceramic arts. Before you leave, view glass works on display throughout the store.

(16+) Take a Glass Fusion class at the Des Moines Arts Center: "Learn how to cut glass and layer it with colorful glass shards, spaghetti-like stringers, and pebbly frit to create unique fused glass pieces that can be turned into magnets, pendants, and ornaments."

Iowa West Public Arts commissioned ***Rhythm*** at the Mid-America Center in Council Bluffs, Iowa in 2009. This is Jun Kaneko's largest single-space undertaking of his career to date! See several large-scale pieces in the 22,000 sq. ft. sculpture garden area, with colorful pieces made from ceramic, granite, stainless steel, and bronze. Listen to a short (under 3-minute) audio clip of Mr. Kaneko inviting visitors in on the **Rhythm|Iowa West Foundation** website.

STAMP YOUR NATIONAL CULTURAL PASSPORT

Visit **KANEKO**, the artist's public studio in Omaha. Exhibitions are hosted here along with public tours. Children and adults alike are free to explore hands-on activities in multiple rooms, exploring the colorful and creative world of Jun Kaneko.

Take a flight to Honolulu, Hawaii and visit **Waikiki Aquarium**, where you will view Mr. Kaneko's **"Tropical Sounds"** (2000): a collection of three ceramic sculptures commissioned for the museum.

LITERATURE RESOURCES

Books & Publications|JunKaneko.com
The artist's own website hosts all books and publications of his past retrospectives for sale. You will even find a free download of **Magic Flute**, diving into the history of Mozart's *Magic Flute* and the development of Mr. Kaneko's commission for the San Francisco Opera (make sure to watch the documentary on this process in the **Internet Resources** below!).

McKelvey, James. **The Art of Fire: Beginning Glass Blowing, Second Edition**.
St. Louis: Third Degree Press, 2010.

While this book is geared towards those who are interested in glass blowing, *The Art of Fire* includes over 500 beautiful color photographs and illustrations by which children of all ages will be fascinated. The artist/author provides a knowledgeable, humorous, and thorough handbook, having co-founded Third Degree Glass Factory **(www.stlglass.com)** in St. Louis, Missouri.

Teacher Created Materials. **Craft It: Hand-Blown Glass (TIME FOR KIDS® Nonfiction Readers)**.
Huntington Beach: Teacher Created Materials, 2012.

K-3rd grade will enjoy reading about the history and process of glass blowing in this nonfiction reader filled with bright photos.

INTERNET RESOURCES

JunKaneko.com
The artist's own website is a wonderful resource to read about the biography of Mr. Jun Kaneko, filled with articles and interviews along with a comprehensive photographic overview of the artist's past and present works. Make sure to sign up for his Studio Newsletter!

How creative are you? It's up to you. Jun Kaneko 1942-2017
This hour-long documentary on Jun Kaneko is available for public view via YouTube. The documentary highlights life events from childhood until today, providing plenty of behind-the-scenes visuals of his art process and focusing on one of his largest projects to date: "the creation of three hours of projected animation on seven screens for the San Francisco Opera's all new, six million dollar production of Mozart's "Magic Flute." Appropriate for all ages.

The Kids Should See This: Glass-Blowing
This website documents "smart videos for curious minds of all ages," and this particular link will take you to a fantastic curation of videos related to the art of glass blowing. From glass marbles to glass fish, there is no doubt this process will fascinate all who watch.

AMAZING GLASS BLOWING CLASS! FIRE+KIDS = FUN! | KITTIESMAMA
Follow this popular family blogger channel along on a glass-blowing adventure in this well-edited YouTube video.

O-I New Zealand
New Zealand's only glass bottle and jar manufacturer hosts wonderful information on their webpage: learn how they incorporate sustainability in their manufacturing and recycling efforts, or watch an enthralling video on how glass is made. There are even sorting guides posted if you'd like to incorporate this sorting method at home.

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