## VIRTUAL FAMILY OPEN STUDIOS: Collaborative Art Lesson

PROJECT TITLE: Light \& Shadow/Collaborative Wire \& Bead Abstract Sculpture
THEME: Four Visions: A Celebration of the Year of the Woman (A Cannon Art Gallery Exhibit) \& artist, Anne Mudge AGE RANGE: All ages

INSPIRATION ARTWORKS: Anne Mudge artworks from left to right: "Vegg", "Carriage", "Gain", "Array"


## ABOUT THE ARTIST:

Anne Mudge is a nationally acclaimed sculptor and public artist who lives and works in northern San Diego County. Nature informs much of Anne Mudge's sculptures. She has lived on a nursery for 30 years and her experience of seeing the germination and the seedlings growing out of the dirt inspires her work. Her pieces, like seedlings, are made of "very simple acts of repetition" a collection of small acts that eventually creates something complete like a tree or a sculpture." She says that from the time she was a child she has always loved working with her hands and been fascinated by the power of color and form. Most of her artwork consists of hanging sculptures made using varying materials that are inspired by the natural world.

The core of her work has to do with process, and she makes work with an organic feel. She manipulates natural and man-made materials in an incremental build-up of forms, utilizing stainless steel wire, beads, fiber, cable, lead, wax and pigment. In her fragile-looking and exquisite sculptures, she often employs a variety of processes to reference living forms and systems.

Artists who inspire Anne Mudge are sculptor Eva Hesse, painter Giorgio Morandi, and the other artists in the Four Visions exhibit: Marisol Rendon, Kline Swonger, and Bianca Juárez.

## ART PROJECT INTRODUCTION:

Participants will create an organic, abstract, wire sculpture influenced by the artwork of Anne Mudge. Participants will observe natural forms and shapes, while strongly considering the effects of light and shadow as part of their artwork. An emphasis on line as the tool for expression throughout the artwork will be encouraged.

Using wire-sculpting tools (wire, pliers, beads) family members and friends will work together to twist, coil, shape, and form various types of wire to create a hanging sculpture. Beads (in a limited palette) will be used to add color and emphasize movement of the wire lines.

Family members or groups will work together to create one wire hanging sculpture.
WIRE SCULPTURE- Brief History
An ancient folk art form, wirework was probably first practiced by the Egyptians beginning around 3,000 BC. By the midnineteenth century this lively folk art flourished with the availability of an impressive range of wire products from kitchen tools to wire fencing. By the 1920's, wire sculpture introduced the medium of wirework to the world of fine art. Famous wire artists from the past include Alexander Calder and Ruth Asawa, and artists such as Zimbabwean Clyde Bango and our inspiration artist, Anne Mudge, continue the tradition of wirework in the art world today.

## Anne Mudge's thoughts on working with wire:

"I listen to where the wire wants to bend, or maybe there are times where the thing I'm wrapping won't let me do what I thought it should, and it shows me another way to do it. In that way, I'm dancing with a different kind of partner - these days usually with wire and string or beads."

## PROMPT QUESTIONS:

- Have you ever worked with wire sculpture before? Have you ever created abstract three-dimensional art before? What is different about doing art in 3D?
- How do realistic lines and shapes seen in nature influence abstract lines and shapes in art?
- Have you ever done a collaborative family art project? How will you work together to represent different family member's ideas? How will you help each family member be creative and use the provided materials collaboratively?
- Abstract art does not represent images of our everyday world. It has color, lines and shapes, but is not intended to represent objects or living things. Can abstract art convey feelings? How can lines and shapes show emotion and movement? Consider the overall feeling you want your artwork to have.


## ART PROJECT MATERIALS (provided in Art Kit):

- Silver wire, $2 \mathrm{ft}(\mathrm{Q}: 1)$
- 22 gauge, Brown Floral Wire (Q: 5 pcs)
- 26 gauge, Black Floral Wire (Q: 5 pcs)
- Small Plastic Container holding all beads (Q: 1)
- Small Beads: Red \& Yellow Seed Beads (Q: 70 each color)
- Medium Beads: Silver (Q: 20)
- Large Beads: Red (Q: 30)
- Pliers (Q: 1)
- Wire/Line Inspiration Sheet
- Working with Wire Information Sheet

OPTIONAL MATERIALS (from your home):

- Small Towel: to place beads onto so they don't roll off the work space
- Something with a cylinder shape: to coil the wires around to create coiled wire designs (Ex: pencil, toilet paper or paper towel cardboard roll)
- Scissors: To cut wires into different lengths (*Note: sometimes cutting wire can damage scissors)


## ART MAKING INSTRUCTIONS:

## Step 1:

Spread all of the materials from the Art Kit out onto your work space and organize them so you can access them easily. Find the thick coil of SILVER WIRE to begin.

## Step 2:

Begin with the 2 ft . piece of silver wire, which is in a circle shape in your Art Kit. Stretch the silver wire out into a long line (it does not have to be perfectly straight).

## Step 3:

Have one family member use their hands to loop one end of the wire to form a small upside down teardrop. Use your hands to twist the wire several times to secure it, this will be the loop that the entire sculpture will hang from (FIG.1A \& 1B).

## Step 4:

Decide together what shape you want to create for the remaining silver wire that is below the loop that was just made (this is the shape from which all the smaller floral wires will hang off of). There are endless possibilities! Here are some examples to consider:

- Make a big loop under the $1^{\text {st }}$ small loop (FIG.2A) then twist the wire together with your hands to connect it (FIG. 2B).
- Make a triangle under the $1^{\text {st }}$ small loop (FIG.3) then twist the wire together with your hands to connect it.
- Make various shapes that meet back up with the small loop (FIG.4) then twist the wire together with your hands to connect it.
- Make shapes where the line does not reconnect with the small loop (defy gravity with the strength of the wire!) (FIG.5)
- Or come up with your own idea for the shape of the base silver wire for your family sculpture, maybe a shape that has special meaning to your family!


## Step 5:

Set aside the silver wire you are working on. You will return to it after Step 12.

## Step 6:

Locate the two sets of FLORAL WIRES. Untwist the wire that is wrapped around each group of wires. Each family member will select and use the 2 different sizes of floral wires to create wire lines and shapes that will eventually hang or branch off from the base silver wire you designed in Steps 1-4.

## Step 7:

String different sized BEADS to the wires to emphasize movement, lines, and shapes. Try letting your wire piece evolve as you create it, as Anne Mudge does with her sculptural art.

## Step 8:

Use your hands or the pliers to manipulate and bend the wire creating organic shapes. Experiment with stringing desired beads on your wire as you are creating your shapes, or after you have designed your wire's shape.

Step 9:
Use as many wires as you want. You can use the entire length of the wire, or cut them into different lengths using scissors you have at home (FIG.6). If you are adding beads to your wire, there are techniques to make sure the beads don't slip off as you are working with them (See Working with Wire Information Sheet, page 8).

- A basic way is to loop your wire around the bead that is closest to the end of the wire and twist the wire with your fingers or the pliers, this will secure the beads onto the wire to ensure they don't slip off the end (FIG.7).
- Or,ifyou aremakingaclosed loop,onceyou haveaddedallthebeadsyou'dlike to the loop, use your fingers or the pliers to twist the wire together several times to close the loop securely so the beads won't fall off (FIG.8A \& 8B).


## Step 10:

See the Wire/Line Inspiration Sheet (page 11) for methods to create different lines in your sculpture with the wire. Think about what feeling each wire line might convey as you are creating it. As the artist, decide if you want straight wire lines, or curved, or both! Think about lines you see in nature and how they might inspire you in your artwork. Be creative and thoughtful in how you add beads to your wire. Consider how they will effect your overall design. Here are some ideas:

- Use random spacing and bead sizes on some or all of the black wires (FIG.9).
- Create patterns using color, bead size, and bead shape (FIG.10).
- Think about numbers that are important to your family and incorporate those in your sculpture by considering the number of beads you use. For example, if your birthday is May $10^{\text {th }}$, you would use 5 beads for May and 10 smaller beads for the $10^{\text {th }}$ (FIG.11).
- Anne Mudge likes to work with a Fibonacci sequence, a mathematical series that often shows up in nature. Tip: Either keep your beads in the plastic container, or lay down a towelto spread them out on, so they don't roll around on your workspace or fallonto the floor.

Step 11:
Asthe artist, decide if you want to secure both ends of yourwire (FIG.12) or leave one end unsecured that you will secure to the final sculptural piece in Step 14 (FIG.13).

Step 12:
Wheneachfamilymemberhascompletedtheirwiredesigns,laythemallasidecarefullyonyourworktable
(FIG.14). You will use them again at Step 13.

## Step 13:

Assemble yourhanging sculpture. Lay the silver wire loop in front of you on your worktable and as a group discuss wheretopositionyourwiredesignsontheloop.

## Step 14:

Taking each wire design, use your hands or pliers to attach the floral wire onto the silver wire. Twist it to secure the attachment either loosely or stiffly or by hooking the pieces together (See Working with Wire
Information Sheet, page 8). Think about how the wires will work together in your sculpture: some may
cross over each other, some may overlap, some may hang low, some may point out horizontally or vertically.
Step 15:
Hold up your sculpture periodically to see how the floral wire designs are branching off the main silver wire. Some might slide down together. That's totally fine! As artists, collaboratively decide how much to "control" and how much to let things happen naturally. Some of the wires may tangle up, and this is totally fine too- think of them as branches on a tree and how sometimes they intertwine naturally.

## Step 16:

As you assemble your sculpture, discuss and decide together if you want to use all the floral wire designs you created or if you want to leave some off. Consider if you want to connect any of the hanging wire lines together.

Step 17:
While assembling your sculpture, remember that you can make changes to your design as you work. You can use your pliers to untwist the floral wire from the main silver wire and reposition it if you'd like. So experiment!

## Step 18:

As a group, when you think you are finished, hold up your sculpture in a darkened room and using a flashlight or phone light look at the shadows your sculpture creates.

## Step 19:

Discuss how the shadow your sculpture creates looks. Notice how the shadow changes as your sculpture moves. Are there any changes or adjustments you want to make to your sculpture? Move any pieces or add and subtract any wires to give your sculpture it's finishing touches (FIG.15).

Step 20: Hang your sculpture in a place where you can look at it in different lighting and notice different shadows as it rotates. Enjoy seeing the artwork you have created together!

## POST PROMPT QUESTIONS:

- What is your favorite thing about your family's art project? Why?
- How did you feel collaborating with your family members? Did you learn new ideas and ways of looking at things from each other?
- How does your family's artwork relate to Anne Mudge's artworks in the exhibit?
- Did you get a chance to try a type of artmaking that you have never done before? Had you ever thought of using this art medium before? Would you like to do wire sculptures in the future?

For more educational resources related to this art project, please check out the Family Open Studios webpage: https://www.carlsbadca.gov/services/depts/arts/education/studios.asp

## ARTS EDUCATION PROGRAM

LESSON PLAN

ART SAMPLE PHOTOS:


FIG.1A


FIG. 3


FIG. 7


FIG.1B


FIG. 4


FIG.8A


FIG.2A


FIG. 5


FIG.8B


FIG.2B


FIG. 6


FIG. 9

City of
Carlsbad

## ARTS EDUCATION PROGRAM

LESSONPLAN


FIG. 10



FIG. 13


FIG. 11


FIG. 12


FIG. 14

FIG. 15 EXAMPLES OF FINISHED SCULPTURES:


Cultural Arts

## WORKING WITH WIRE INFORMATION SHEET

## USEFUL WIRE METHODS:

Beginner: Wire Wrapping an End Bead (to prevent beads from slipping off the wire)


Loop your wire around the bead that is closest to the end of the wire and twist the wire with your fingers or the pliers, this will secure the beads onto the wire to ensure they don't slip off the end.

Advanced: Wire Wrapping an End Bead (to prevent beads from slipping off the wire)


ATTACHING WIRE METHODS (twisting wire to attach black wires to larger silver wire):

| To hang wire loosely from another wire: | To attach a wire stiffly: |
| :---: | :--- |
| Loop the ends of the black wire around the silver wire <br> and use the pliers or your hands to twist the black wire <br> together tightly. The black wire will hang loosely from <br> the silver wire. | Loop the black wire several times around the silver wire <br> and then twist the ends of the black wire tightly together. <br> The black wire will sit stiffly along the silver wire. |

Hook method to hang wire from another wire and also to create balance points:
1.Hold the wire with your pliers.

## EXPLANATION OF WIRE GAUGES:

A wire is measured in a thing called a "gauge." Gauges range from 0 to around 50 . The higher the gauge number, the thinner and easier the wire is to bend. It can be a bit confusing when you first start to think about it, but there's a perfectly simple explanation. A gauge measures the diameter of the wire in a fraction of an inch. So an 8 gauge wire has a diameter of $1 / 8^{\prime \prime}$, and a 20 gauge wire is $1 / 20^{\prime \prime}$. In this project we are using wires that are 22 gauge and 26 gauge, so the diameters of the wires are $1 / 22^{\prime \prime}$ and $1 / 26^{\prime \prime}$, and are thin and easy to bend, but not soft and thread-like ( 30 gauge). The wires we are using will be strong enough to hold their sculptural form. Wire is a remarkably malleable material. It can be braided, coiled, twisted, wrapped, corded, woven, crocheted, spiraled, filigreed and fashioned into innumerable wonderful shapes.

| Gauge Number | Thickness for crafting \& flexibility | Thickness (diameter in inches) |
| :--- | :--- | :--- | :--- |
| 3 | Very heavy \& thick wire, cut with a bolt cutter <br> or saw | $1 / 3$ |
| 10 | Very thick wire, not bendable by hand <br> Heavy Wire, similar to a wire hanger | $1 / 10$ |
| 12 | Medium Wire, similar to a paper clip | $1 / 12$ |
| 20 | Medium-Fine Wire, bendable by tool or hand | $1 / 20$ |
| 22 | Very fine wire, easily bendable by tool or by <br> hand | $1 / 26$ |
| 26 | Extremely fine wire, not much wider than a <br> human hair, Hard to handle due to it's <br> tendency to get tangled | $1 / 30$ |
| 30 |  |  |

## WIRE/ LINE INSPIRATION SHEET

SPIRALS: Make a small loop and hold the loop using the pliers. Hold the pliers pointed down onto your worktable and slowly twirl your pliers while guiding the wire along the outer edge of the growing coil with your hand. Once you have a flat spiral you may pull it apart and extend it as much or as little as you choose. Try spiraling both ends of the wire or creating loops and spirals on the same piece of wire.
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COILS: Make a length of dimensional cylindrical coils by wrapping the wire around any object with a cylindrical shape (ex: pencil, dowel, cardboard from a paper towel roll, etc.). Remove the wire from the cylinder when the desired length is reached. After removing the coiled wire from the object, you may manipulate the coils into any manner of shapes.


ORGANIC LINES \& SHAPES: Use your hands and/or pliers to manipulate the wire, creating lines and shapes that you find interesting and remind you of lines and shapes from nature.




