

ART IN MOTION

by *Betsy Delurgio*

Desk Top Mobile
Mobile on a Stable
October 2023



“Above All Art Should Be Fun.”
-Alexander Calder

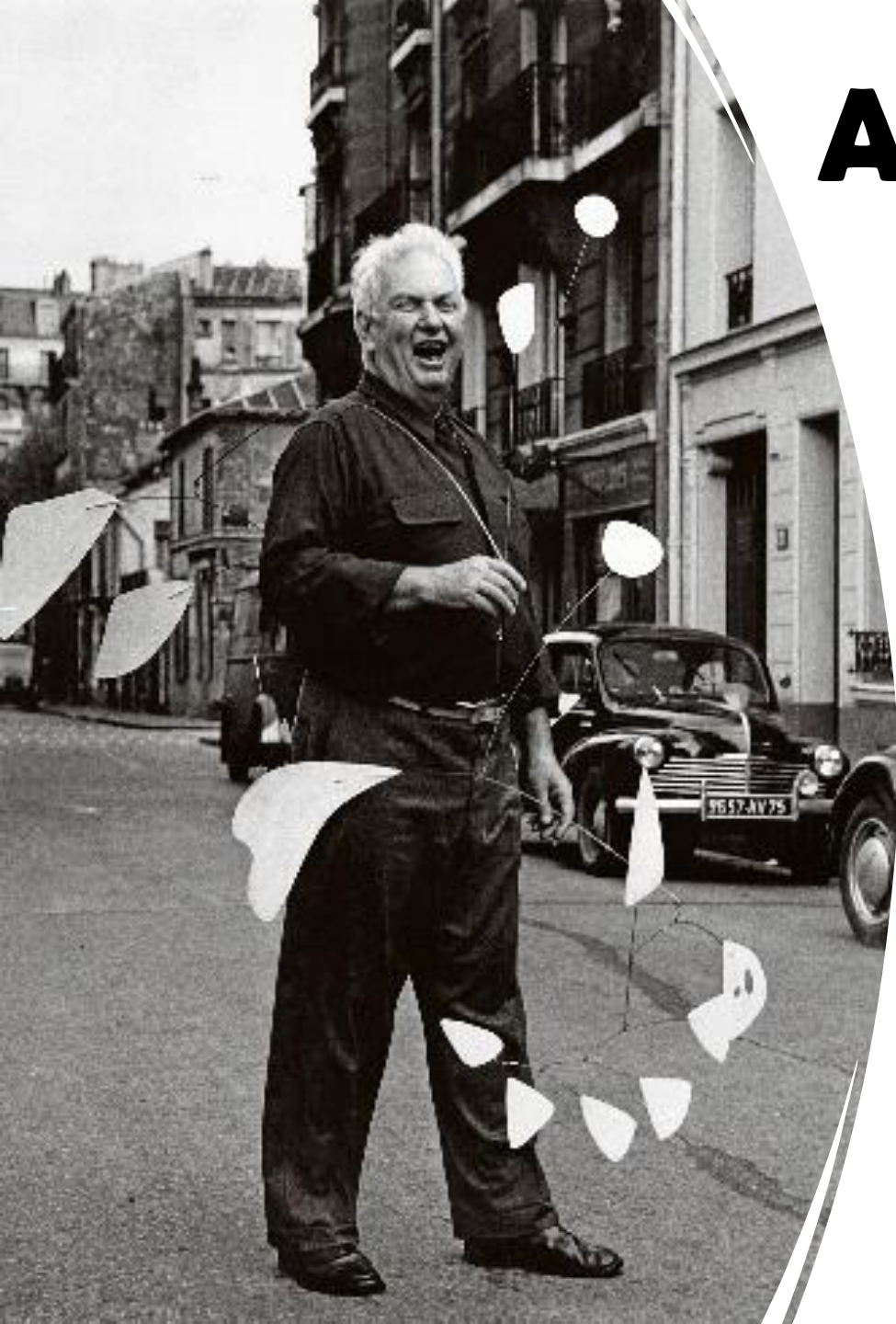


Brought to you by:



Alexander 'Sandy' Calder

American Artist



- Born in Philadelphia, PA in 1898 - Died 1976
- One of the most inventive artists of the 20th century
- Calder is the inventor of the Mobile
- He changed the nature of sculpture with movement.
- He wanted art to jump off the canvas like wings taking flight. He brought shapes alive.
- Calder connects imagination with the making of things



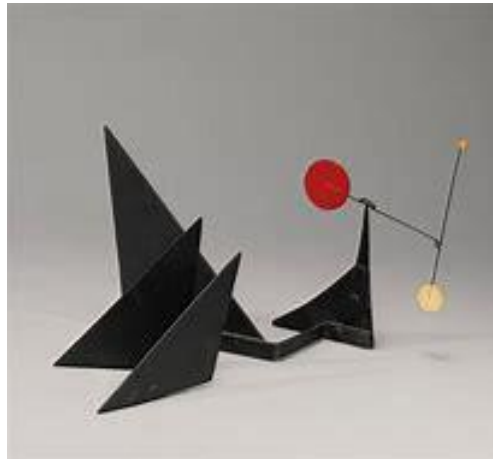
ALEXANDER CALDER FACTS

- Calder's father and grandfather were both sculptors and his mother was a professional portrait artist.
- Calder always had a "workshop" – As a young child he was constantly creating and made his own toys
- He first became a mechanical engineer, then went to art school, and in 1926 he moved to Paris to join the art scene and became great friends with Piet Mondrian (modern artist).
- Calder is well known for 3 main types of artwork:
 - Mobiles, Stables, and Monumental Sculptures
- Calder produced more than 22,000 pieces of art in his lifetime including drawings, paintings, stage sets and jewelry.
- Calder fused beauty, movement, color and play in a single work

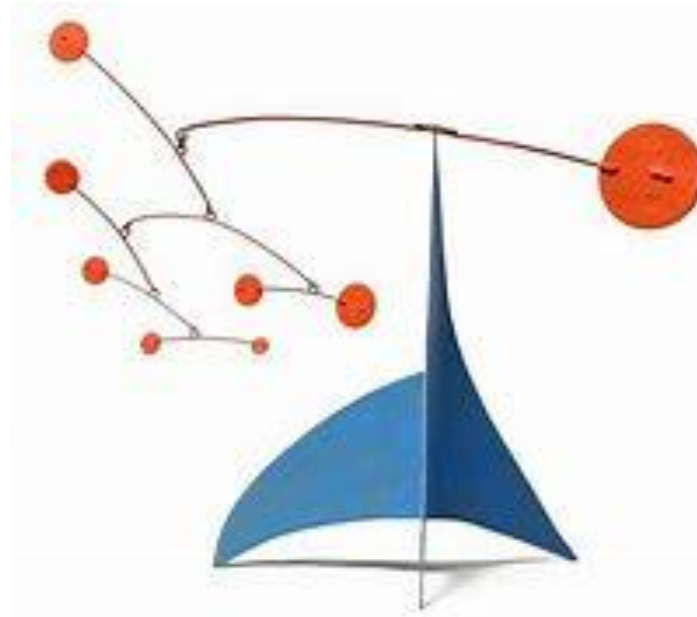


QUOTES

Wowed by the solar system:
“The basis of everything I do is the universe.”
– Alexander Calder



Regarding Performing sculpture:
“The next step in sculpture is motion.”
– Alexander Calder



Mobile on a Stable Vocabulary

Mobile – A sculpture or decorative arrangement made of items hanging so that they can move freely and independently from each other

Stabile – stationary (doesn't move) abstract works. Sculptures that suggest volume using multiple flat planes – defines volume without mass – it changes as you move around it.

Monumental Sculptures - enormous public works at schools, airports, museums and parks

Abstract Art – Art that does not attempt to represent external reality, but seeks to achieve its effect using shapes, forms, colors, and textures.

Kinetic Energy - a term used to describe the energy of an object in motion. The word "kinetic" comes from the Greek word that means motion.

Rotation - one complete turn (as on an axis)

Fulcrum – The point on which a lever rests or is supported/balanced, and on which it pivots. (Like a see-saw)

**Calder used metal, wire and wood
We will use poster board, wire and foam sheets**

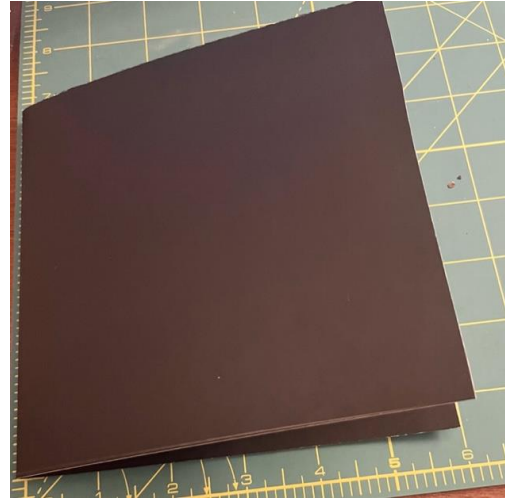


Let's begin by Making a Stable

Poster Board, Scissors, Pencil, Ruler



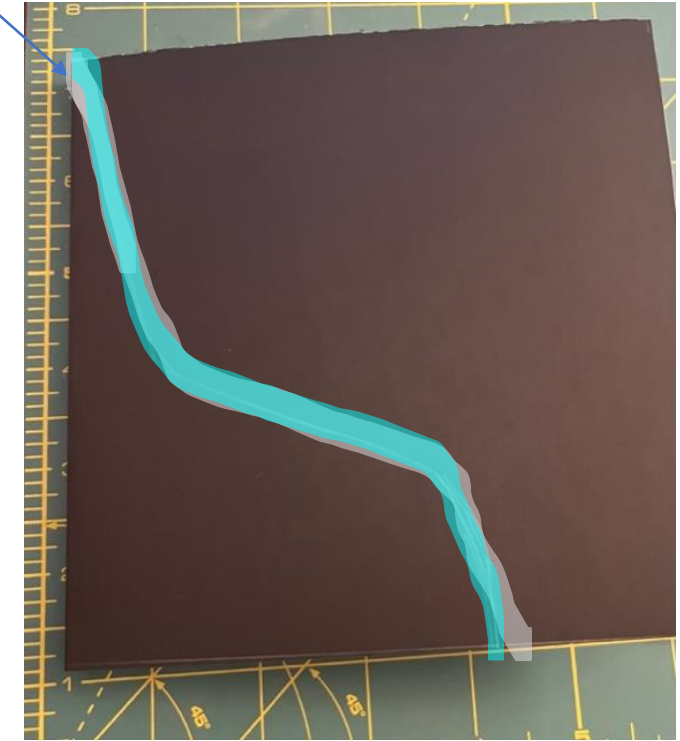
A



B, C

(Fold side)

(Needle sharp peak/point)



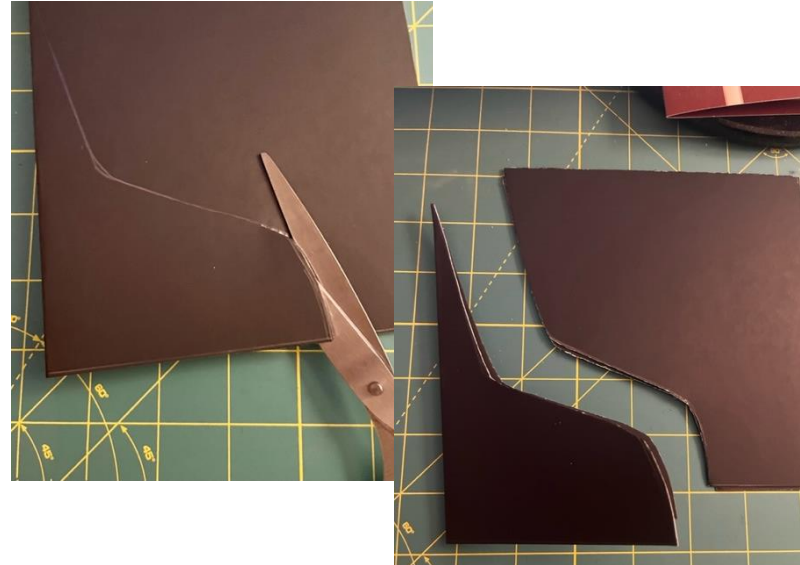
D, E

- A. Start with the 6"X12" poster board
- B. Fold in half so you have a 6"X6" square
- C. Place the fold side of the poster board on the left side in front of you flat on table.
- D. Using a pencil - start at the top left corner (fold side) to create a tall sharp peak or point (see image – Needle sharp at top)
- E. Keep it thin for the top half of the poster board – then freely move pencil down towards the bottom right of paper
-The bottom should be at least 4 inches across - can be more, but 4 inches is best!

This pencil line can be fun and abstract but best to keep it simple.

6"X6" Square Continued...

- A. Cut at the pencil line
- B. Unfold - it should stand on its own.
- C. Fine tune, make sure you have a needle-sharp peak



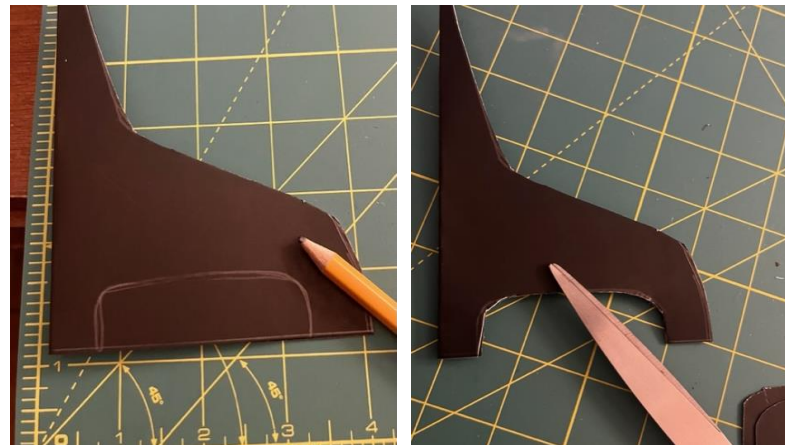
A



B, C

May create extra design element if students choose:

- Fold and lay flat again
- Pencil in and Cut out notch in bottom base of stable – be sure not to cut in too close to the fold side or outside edge (leave an inch on each side)



The 4"X8" Piece of Poster Board

A. Start with the 4"X8" piece of poster board

B. Fold in half to make a 4" square

C. Place the fold side of the poster board on the left side in front of you flat on table.

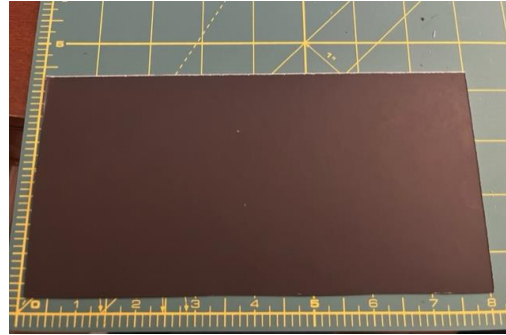
D. Using a pencil - start at the top left corner (fold side) to create a line of your choosing going down all the way to the right bottom corner.
NOTE: No Peak Necessary – and you may trace the 6 inch tall piece of the stabile if you want it to match (for symmetry).

E. Now cut at the pencil line

F. Unfold and stand up and make sure it is how you want it to look – fine tune if necessary.

Feel free to add a notch at bottom as you did for 6" X 6" square

You should now have 2 cut outs in front of you (one 6 inches tall, and one 4 inches tall)

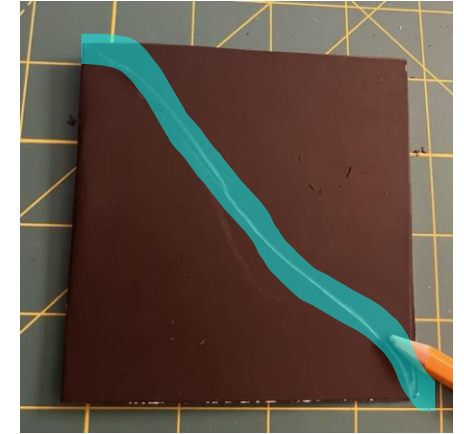


A



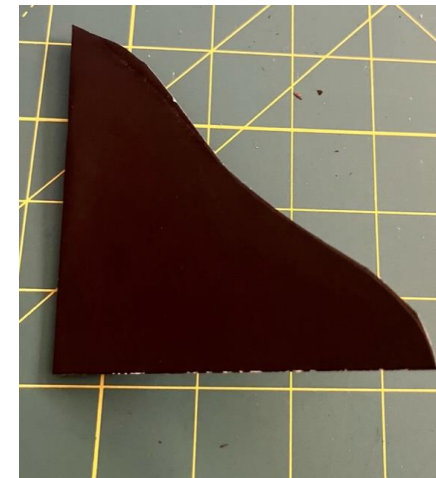
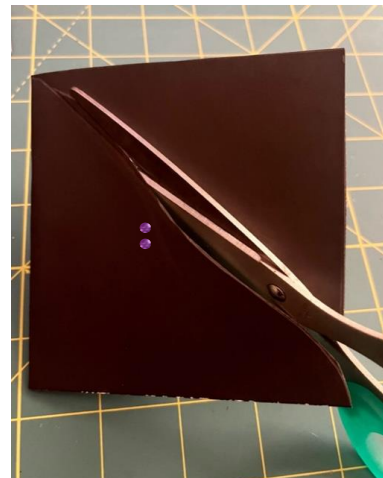
B

(Fold side)

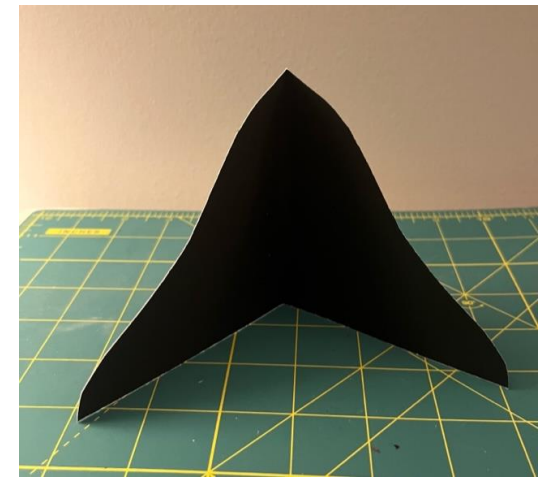


C, D

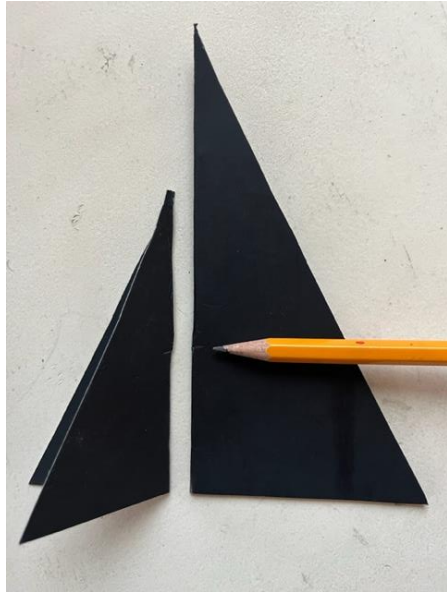
(Not necessary to have a sharp peak/point)



E



F



A



B

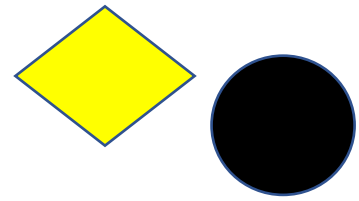
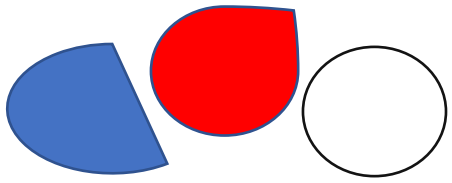


C



ATTACH THE STABILE

- A. Take the taller stand and fold it and place it flat in front of you, and then take the shorter stand and fold and place it flat in front of you.
 - Put the fold sides next to each other so the base (or bottom edges) are level and the fold sides are touching.
 - Put a pencil mark about $\frac{1}{2}$ way up on the fold edge of the shorter stand and move pencil across so it marks the taller stand in that same spot as well.
- B. Using Scissors - IMPORTANT:
 - On shorter 4-INCH STAND - Cut from TOP DOWN to pencil mark
 - On taller 6-INCH STAND - Cut from BOTTOM UP to pencil mark
- C. Connect the taller stand to the shorter stand at the cut lines and slide together. The two bases should now be connected to create a 4-legged base and stand up. Adjust and refine, as necessary. *Please write your name on bottom of Stabile using the pencil.*



Make the Mobile

Wire, Foam Shapes, Glue Stick, Scissors, Ruler

WIRE

1. Cut one piece of wire about 9 inches long
2. Cut another piece of wire about 6 inches long
3. Set Aside Both Pieces of Wire

NOTE: Docents may precut for younger grades

CREATE 3 SIMPLE GEOMETRIC SHAPES

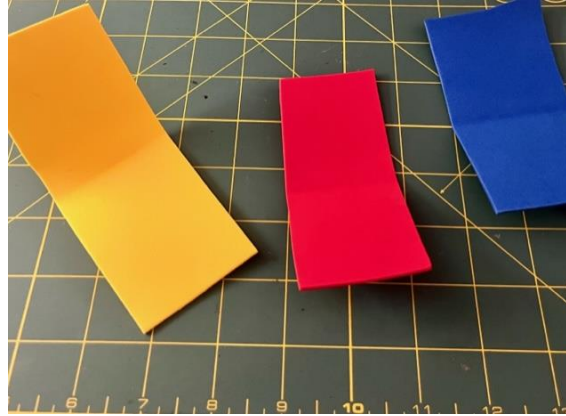
Use Foam Color Sheets. Shapes should be about 2" diameter.

Calder was inspired by planets, flower petals, fish fins, bubbles, wings etc.

- A. Fold the foam sheets in half for each shape you make.
- B. You need 2 identical of each shape
- C. You will be gluing them together on each side of the wire (like a sandwich) in the next step.

Use a pencil to draw (or trace) if necessary

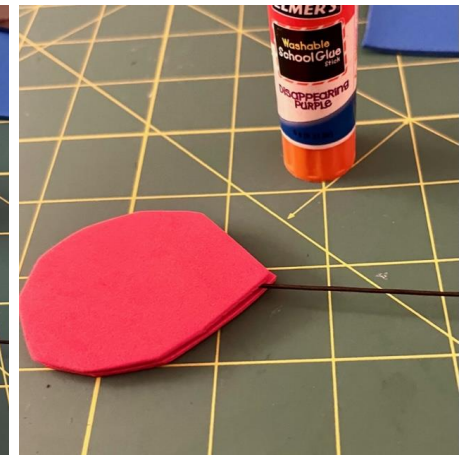
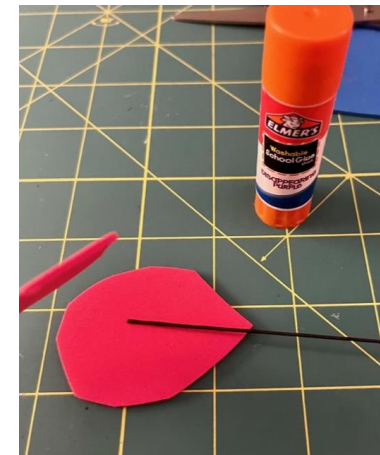
Make them fun but keep them simple – they can be all the same color or all different, but they can only be Black, White, Red, Yellow, or Blue (primary colors).



A



B



C – wait to glue until next step

Make the Mobile Continued..

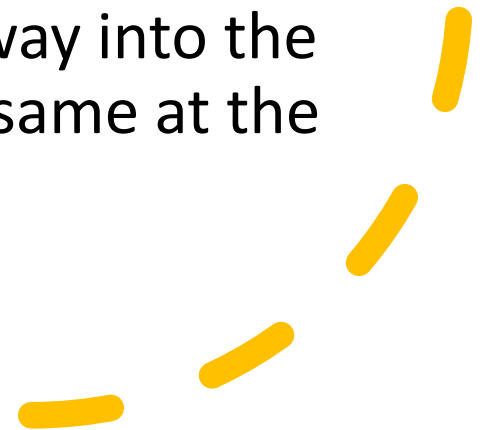
- **To only one end of longer 9-inch wire, choose one shape to attach.**

Use glue stick to adhere this shape - glue the 2 pieces together with wire end about halfway into the middle of the shape. Set aside to dry.

- **Attach your remaining 2 shapes to each end of the shorter 6-inch wire.**

Use glue stick to adhere a shape to each end - one shape to one end (glue the 2 pieces together with wire end about halfway into the middle of the shape), and then do same at the other end of this wire.

Set aside to dry.

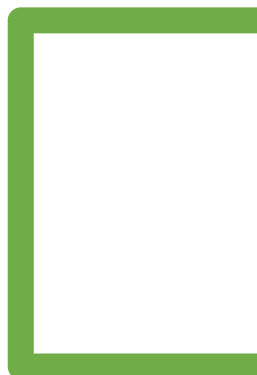
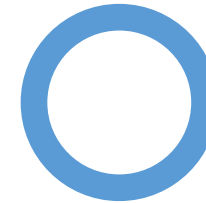
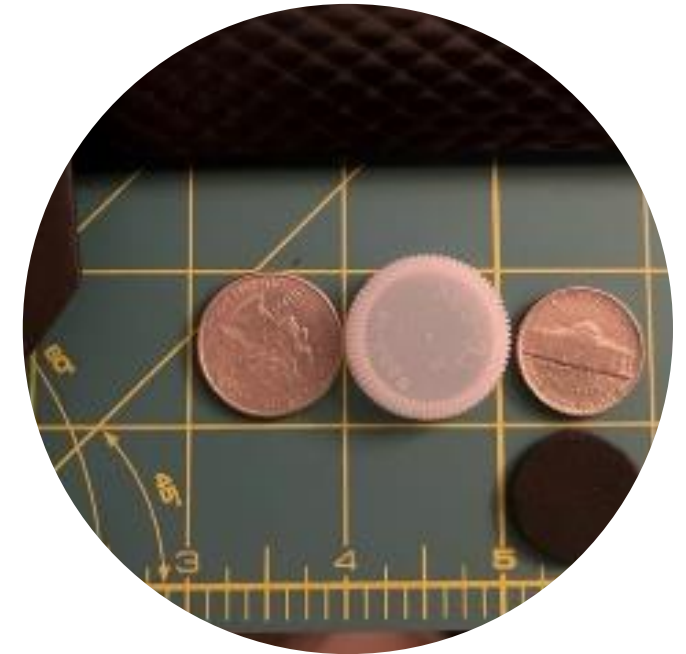


Create Foam Disc

Functional piece to allow mobile to spin on top the stabile

NOTE For younger students: Recommend Docents create foam disc and slide on to 9-inch wire ahead of class / may need to for older students as well depending on allotted time.

1. Use the black foam sheet
2. Trace a circle using End of the glue stick, or the glue stick cap, a nickel, quarter, or water bottle cap
3. Cut out
4. Fold in half like a taco
5. Use end of the longer 9-inch wire, pierce directly through the middle of the taco, and slide to middle of wire



Connect the Wire Mobile

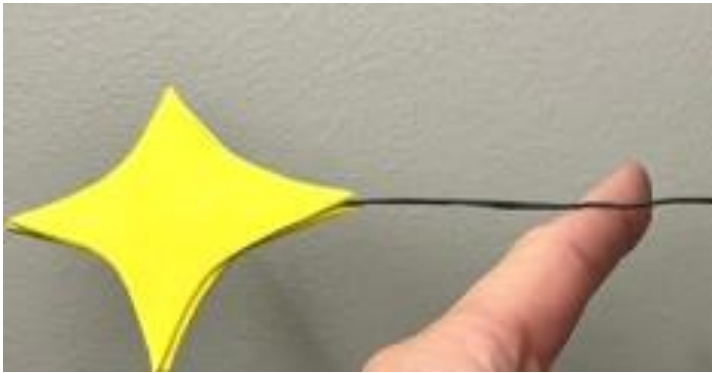
Step 1 of 2

- At the end of the longer wire (9-inch) with no shape on it – use your pencil and wrap the end around it to create a loop-bend/adjust to look like the below picture (fishhook). Set aside.



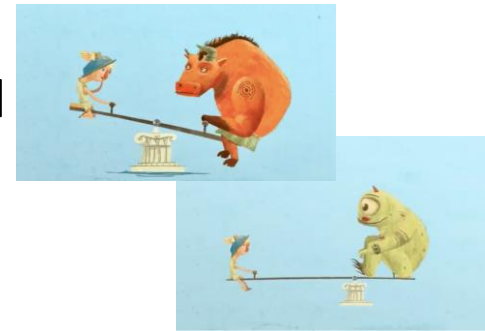
Connect the Wire Mobile

Step 2 of 2




For the shorter 6-inch wire:

- **FIND THE FULCRUM/Balance on Pivot Point**
Use your finger to find where wire is balanced evenly in weight even though shapes may be different on each side.
NOTE: this takes patience – take your time
- Use your pencil to form a loop in this exact spot between the two shapes
- Attach the loop on the 6-inch wire to the loop on the 9-inch wire.
- Close the top of the loop (of 9" wire) and it is connected.



Find the Fulcrum For the Connected Mobile



- **IMPORTANT:** the foam disc should be facing down. The wire should be visible from the top going through the top middle of the foam disc.
- While balancing on your pencil or finger: Gently slide wire through the foam disc until the mobile is balancing on both sides (at the fulcrum) with the foam circle in that place
- Make a slight bump in the wire at the fulcrum (using a pencil helps). Then straighten out the wire on each side like this: 
 - Mold the center of foam circle into the bump in the wire – dent/press with your pencil eraser under the foam circle and into the bend of the wire to secure.
- To ensure mobile moves with air currents - Adjust at least one/or all of the shapes on end of wire to a vertical position (like a picture on a wall) – (as opposed to horizontal-like a picture laying flat on table)– use more glue stick if necessary.

Place Mobile on the Peak of the Stable

- The foam disc will sit perfectly on top of the peak (or coil) of the sculpture and the mobile should be balanced.
- Adjust, as necessary.
- It should move if you gently blow on the shapes, and it will rotate with natural air currents. Different weights and shapes may create different rotational patterns.

ENJOY your Calder inspired Desk Top Mobile as it moves and changes form



OPTIONAL

Create Coil to Balance Mobile on the Stable

For durability /ensure a fine point on top of the Stable /or if the mobile needs to be lifted to clear the stable:

- Cut a about a 4-inch piece of wire to make a cone shaped coil.
- Use a sharpened pencil tip- keeping $\frac{1}{4}$ " of the wire sticking straight up towards the top - wrap the wire around the pencil tip until is a wider and wider coil as it goes down the pencil. Please See Picture
- This will be secured gently on top of the peak of the stable

NOTE: Docents may want to create the coils ahead of time in case needed– especially for the younger students



After watching a Calder mobile for a very long time,
Einstein (theoretical physicist,
and one of the greatest scientists
of all time) muttered with
admiration, he wished he
thought of it!

FOR MORE INFORMATION Check out
www.calder.org

Fun reading for grades 5-8:
The Calder Game, by Blue Balliett

*Thank you for your time and
attention to Art in Motion!*

