

ARTS ALIVE

PRESENTS
AN

ARTS CURRICULUM

INSPIRED BY THE
WONDERFUL WORK OF

ALEXANDER

CALDER

INCLUDING

HANDS-ON ART PROJECTS

THE CIRCUS

MOBILES

AND

STABILES

INTRODUCTION

ART/ALIVE is a series of project packets, each highlighting the life and work of an individual artist and presenting hands-on student projects based on that artist's work. These creative learning tools are visually exciting and user-friendly.

The projects are designed for large or small groups, or individuals. Step-by-step instructions facilitate undertaking the projects. Look to the reproductions of the artist's work for inspiration and a point of departure. Don't copy; create, unleash your imaginations. If you are drawn in a different direction, go for it. On a once-through, you gain an understanding of process and acquire specific skills. Repeat the projects or use them to create others. Your imagination is amazingly freed up.

Above all, cultivate, encourage, affirm, and honor individual expression. If a student flies off on a different avenue of imagination, cheer them on in their journey.

These project packets provide opportunities to learn to articulate and discuss various visual concepts, and to enhance critical thinking skills. Take time to look at and to react to the reproductions of an artist's work. Lead discussions as to what the group sees and how they respond to it. Utilize the questions that are posed to stimulate discussion. Look to the section on vocabulary. Observation and discussion sessions promote an understanding of visual concepts and build an arts vocabulary. These sessions may occur before, during and after the projects are completed.

Bibliography, resources and some ideas regarding related studies are included in each packet. Gather and utilize some of these resources to enrich the project.

I have selected these artists because I find their creative process and their work fascinating and inspiring. My selections include artists, male and female, from different races and cultures. Their work represents a variety of disciplines: painting, photography, sculpture, installation art. These are "modern" artists; many are working today. Yet, their work provides opportunities to relate to the past, connect to the here and now, and to project to the future.

Enjoy!

RA Featherston

TABLE OF CONTENTS

Page 1-3..... Introduction to Calder, Personal History/ Context

Page 4-9..... Projects inspired by Calder's Circus

Page 10- 13..... Projects inspired by Calder's Mobiles

Page 14- 15..... Projects inspired by Calder's Stables

Page 16- 18..... Vocabulary

Page 19..... Ideas for Interdisciplinary Studies

Page 20-22..... Photo Credits and Questions related to the Photos

Page 23..... Bibliography and Resources

Insert (Here Page 24)... Packet of Color Reproductions

Note: Color coding: Questions are coded blue.
Vocabulary is coded red.

CALDER'S CIRCUS, MOBILES AND STABLES

Alexander Calder's art is a marriage of graceful motion, shocking originality, and gentle playfulness. We are going to look at three areas of his work, his circus, his mobiles and his stables.

During his entire life, Calder was fascinated with toys and play. The circus became a focus for this passion. As an adult, Calder created a miniature circus, filled with joyful, movable caricatures of performers and animals. He would perform the circus to the delight of his friends. "The circus esthetic- a combination of suspense, surprise, spontaneity, humor, gaiety, playfulness- is at the heart of all of Calder's work." ¹

Like the circus, Calder's mobiles, are animated and alive. An ultimate balancing act, Calder brought motion to sculpture. While the early mobiles incorporated found objects, his later ones were constructed with sheets of metal painted with primary colors. This new art form combined his training as an engineer with his love of movement.

Calder also made "stables", mostly monumental sculptures of steel shapes, bent and bolted together. While these sat on the ground, they looked as if they might just walk off at any time!

ARTIST'S PERSONAL HISTORY/ CONTEXT

Alexander "Sandy" Calder was born in 1898, into a family of artists. Both his father and his grandfather were well known classical sculptors. His mother was a portrait painter. As a child, Sandy always made things, small toys, usually with wire and pliers. He had a facility for caricature. He was also intrigued with movement and the solar system. Later in life, he repeatedly stated that the universe was his basic theme.

Sandy formally studied and practiced engineering. He excelled in mechanical drawing, descriptive geometry and kinetics. This training and experience would

provide a foundation for his creativity. How can an experience in one endeavor, enrich what you do in another, very different one? Louis Pasteur, a French theoretical scientist, stated that discovery comes to the prepared mind.

Early on, he was drawn to art and studied both in New York and Paris. His wide circle of friends included many famous European artists. Throughout his life, he would spend a lot of time in Europe.

Calder held a wide variety of jobs including designing commercial toys and working for a newspaper making drawings of the circus. This work evolved into Calder's Circus.



Sword Swallower



Calder with Circus, 1929



Ringmaster

Calder created a miniature circus, teeming with moveable animals and performers. Each of the circus characters was full of personality and charm. Calder printed invitations and performed his circus often. These performances were an experience: spotlights, music, sound effects and peanuts. (Noguchi, an internationally famous sculptor, is known to have assisted him). His circus performances became a celebrated attraction in European and U.S. intellectual and artistic circles. "Calder's Circus" was filmed in 1961 at Calder's home in Saxe, France. (See Resources.)

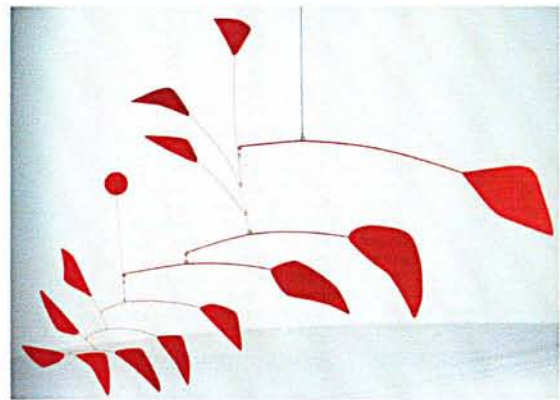
Classical sculpture is massive, stable and for the most part on a pedestal. Calder helped challenge these notions of what is sculpture. **What is sculpture?** (See vocabulary.) He began making his moving sculptures in the 1930s. He was inspired when he saw a show of eighteenth century mechanical birds in cages. (Naum Gabo is credited with introducing motion into abstract art with his vibrating sculpture in 1920.)

Calder's first moving sculptures were operated by a crank. (**How does Calder's three-dimensional work relate to the paintings of Miro or Arp?**) The early mobiles were formed from found objects such as pieces of pottery, glass and carved wood.

Biography continued

Later works were operated by electric motors and became larger in scale. Gradually, these lyrical inventions evolved into simple metal shapes painted with primary colors, freely moving about one another in balanced harmony.

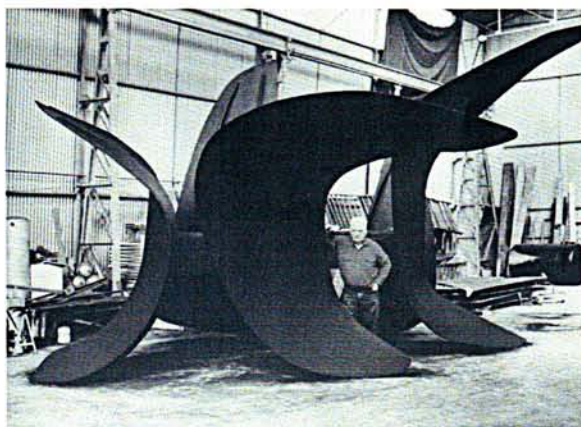
Big Red, 1959



Making art is an evolving process through which an artist clarifies what he /she wants to say, visually. That process grows and changes, reflecting the artist's growth and change. An artist constantly experiments and tries to follow their instincts. Sometimes they are not happy with the results. But through the experimentation they learn.

Calder advocated simplicity of equipment. His chief tools in his sculpture were pliers, brushes and various homemade gadgets. He rarely used power tools. He preferred working with his hands, and having the work bear this signature.

Calder also produced a series of pieces, which were called "stabiles". While he made some smaller stabiles, most of these pieces were monumental in scale. Like the mobiles, these works differ from traditional sculpture in that they appear animated and able to walk away from their present location. Calder cut shapes of steel, manipulated them and bolted them together. The larger pieces were fabricated in foundries. Calder employed all his skills as an engineer in the making of his stabiles.



Five Wings, 1967

Calder's was a prolific artist whose work went in many directions. He drew with wire, as well as traditional media. How can you "draw" with wire? He painted, particularly with **gouache**, and fabricated large-scale stationary sculptures, both mobiles and "stabiles". What does two and three-dimensional mean? He also designed jewelry, sets and costumes for the stage, and had his designs painted on airplanes.

Sandy Calder died in 1976.

PROJECTS

INSPIRED BY CALDER'S CIRCUS*

A circus is an event – a magical experience, a theatrical collaboration.

As a group, map out a **PLAN** from idea to performance that includes:

creation, production and orchestration of the performance “acts”, setting, advertising, program, invitations or tickets, lights, music, peanuts, popcorn....What else?

Identify the participants and your target audience at the outset. Those decisions will dictate many of your planning strategies. Give the kids as much responsibility as possible; in planning, construction, and implimenting. They will take greater pride in their involvement. Who will comprise your audience? You could invite other classes or parents, have several classes collaborate, or just perform for yourselves.

1. WHAT'S ON THE PROGRAM?

Decide which acts will populate your circus.

Involved here is **making of the characters** and **deciding on what they will do when performing.**

Examples: Ringmaster, master of ceremonies, clowns- physical antics and jokes.....lion tamer, sword swallower, bearded lady, illustrated man, escape artist, fire eater, snake charmer, acrobats, jugglers, trapeze artists, animals....

Will several acts perform at once? Will there be a parade? Will each character write and perform a script?

* **Note:** While the circus was Calder's “theme”, if it does not resonate with you- use your imagination (or collective imaginations) and come up with another theme. Calder's essence was motion and fun. Design another multi-tiered project, perhaps- a rodeo, an amusement park, a futuristic circus, a comic character universe, or a theme park.

While Calder's figures seem amazingly simple- their characters were brought to life through their **gesture** and with the choreography of their performance.

2. CREATE THE PERFORMERS

Look to the works of Calder. Each of these characters has an expressive personality that brings a smile to your face. They capture an essence - while focusing on the playful nature of the character. Calder loved to draw and drew often. Calder was gifted in **caricature**. He often drew an entire character- using just one line. It was a natural leap from these drawings to making the wire sculptures.



Ringmaster



Clown



Cowboy

A. ANNOTATED DRAWINGS

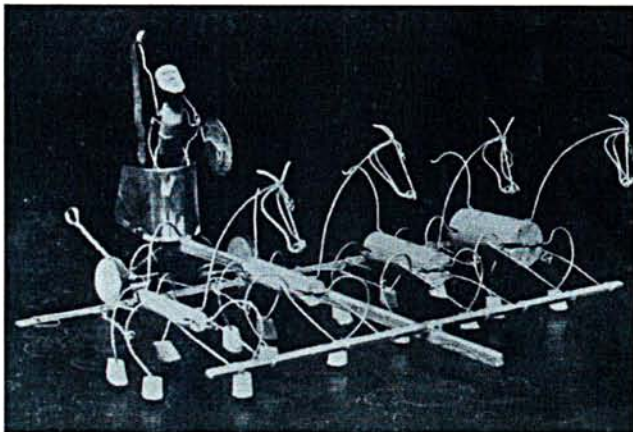
Record verbal and visual ideas in a series of working drawings. As the characters evolve- so will ideas as to their performance. Attempt drawings of the character or animal with one, continuous, flowing line. This quest for simplification will sharpen your character's personality.

1. Once a character is selected (you may want to repeat this process for several characters)- begin to explore what makes that character "visually" unique.

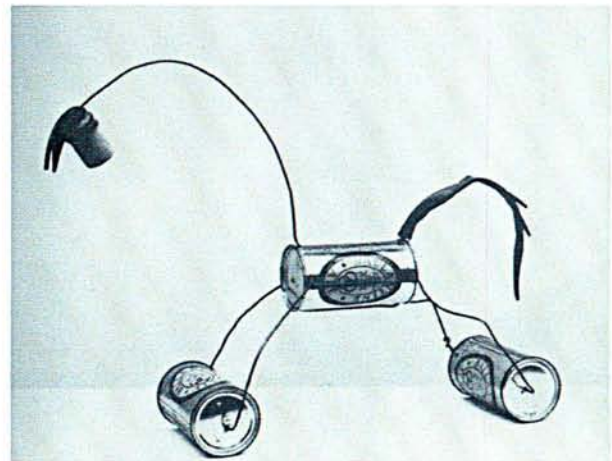
Seek its **essence**. Begin to formulate what your character or animal could look

like. Character discussion and sharing of ideas can be conducted in small groups. Work on caricature drawings- look for and emphasize dominant features.

2. Think about **gesture**- interest, personality and motion are conveyed through gesture. How does a character stand, hold its head or move? Doesn't a cowboy swagger? What posture makes a cat slink? A juggler may bend at the knees for balance as she gazes to the sky? While they both are silent, how does one clown appear loud and boisterous and another shy? These details are visual clues to communicating character. Make a series of **quick gesture drawings** taking care to capture the essence of a character. Incorporate these ideas into your annotated drawings.
3. Consider how a **costume** creates the character. This is show biz aimed at grabbing attention. Consider **texture and color**. Begin to visualize essential elements of a character; a whip for the lion tamer, sword for the sword swallower.
4. Now consider **motion and animation**. A circus is an active place. Again look to Calder- some of his characters were on wheels, some manually pushed and scooted along on corks. While some were pulled by a string, others were pushed by means of a long wire attached to the base. Consider other methods of mobility. **Experiment!** Could you recycle old toys, wheels, and rollers? Ask, the question how can I get my performer to move in character?



La Char Romain, 1928



Canasson Kodak, 1960

5. Organize and complete these working annotated drawings so you know everything about your performer and what he will perform.

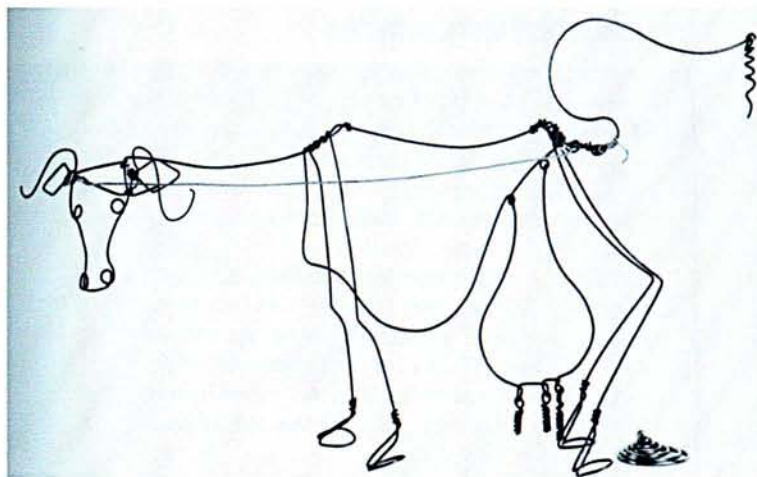
PLEASE NOTE

The process set forth above for developing your annotated drawings, can be employed as the first steps in an **additional project**:

DRAWING WITH WIRE



Wire Sculpture by Calder



Cow

Calder fabricated **two-dimensional** and **three-dimensional** wire sculptures that, for the most part, were made with a continuous piece of wire. These can be free standing, if constructed with stiff enough wire, or can be affixed to a flat surface or a base. A lighter weight wire, even old telephone wire, is colorful and easy to work. It must be noted, however, that the end product, fabricated from a lighter wire, will be more fragile.

B. CONSTRUCT THE PERFORMERS

MATERIALS

Calder's performers were hand-held and easily maneuverable. **Construction materials** included: wire, bits of fabric, both plain and exotic, small objects like a light bulb, feathers, leather, jewelry, cord, corks, buttons, painted wood and paper, metal, springs. What else could you use? What other materials would help convey the surprise, gaiety, delight, and the wonderment of the circus?

Tools include: Flexible wire (flexible but strong enough to maintain shape despite a bit of wear and tear), small pliers, glue, needle and thread.

METHOD

1. For the most part, Calder used wire to construct an internal skeleton called an **armature**. This framework established the basic structure and **gesture** of the figure, and its means of mobility. While sometimes these were attached to a small wooden base, often, they were free standing. Often support for a upright figure was created by means employing a third element, like a tail or cane. Support was also achieved by exaggerating and flattening the feet, or adding an additional horizontal wire for stability and movement.
2. Working with wire takes a bit of practice; learning to manipulate it, where to hold it to get the bend you are seeking. Spend some time practicing manipulating the wire. Practice patience.
3. “Clothes” and other costume elements were glued, wired, twisted, sown on, or impaled onto the armature.

3. IS THIS A THREE RING CIRCUS ?

While performance under the big top may be out for some of you (a tent lid of some sort, like a recycled parachute, is a wonderful tool to focus your audience), you must decide on presentation. Again use your imagination and follow through according to how elaborate you want to get with the project.

Decisions regarding setting depend upon the nature of your performance. What about a three-ring performance arena? While this idea could turn it more into a zoo than a circus, this layout facilitates a simultaneous setup for three different acts. Performances would follow one another as the spotlight shifts from arena to arena. A time break to setup the next three acts could be accomplished by scheduling another form of entertainment, like music or juggling, nearby the circus arena.

Use of a short table, narrow enough for the kids to reach across to “perform” but long enough provide multiple set-up might be a dandy stage. Performance on the floor might also be your best bet. Strategize with your audience in mind.

4. ADVERTISING, TICKETS OR INVITATIONS

Advertising, tickets or invitations create anticipation for the event to come. Create some hype! Depending upon your targeted audience, advertising could include posters, handbills, messages accompanied by music over a loud speaker, or even parades.

If performed during school, perhaps you could ask, through invitations, another class to be the audience. Calder frequently made invitations to his performances. He usually made linoleum block print. If performed after school, perhaps you could sell tickets, the funds going to some school related cause.

5. PROGRAM

You already have decided which “acts” comprise your circus. Now decide the order in which they will appear. As mentioned above, the circus setting will affect these decisions.

If there is interest, you might consider producing a written program. This would honor the performers and everyone else who has contributed to the production. As an alternative to a written program, the ringmaster or other announcer could inform the audience of such credits.

6. LIGHTS AND MUSIC AND REFRESHMENTS

Both lights and music are crucial to creating an atmosphere for the magic to begin. Lighting could be as simple as slightly darkening the room (to focus the viewer’s attention) and one person holding a light, perhaps even a flashlight, on the current performer. Use your imagination.

Music can heighten suspense and create an atmosphere of gaiety. Research circus music. Perhaps part of the class can perform it, you can recruit the school band, or get a parent to play an instrument.

Certainly every circus has something to nibble on- peanuts, popcorn, cotton candy...

Enjoy!

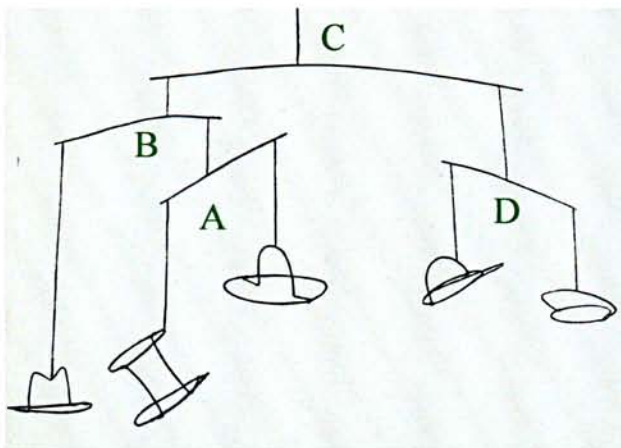
PROJECTS

INSPIRED BY **CALDER'S** MOBILES

Calder's mobiles are free flowing, moving sculptures that are suspended from above. They are uniquely different from the traditional notion of sculpture, which sits solidly on the ground and you move around. They embody Calder's lightheartedness, love of play, and fascination with motion.

It is said that Calder's idea for his mobiles sprang from visits to the studio of the Dutch painter, Piet Mondrian. While living in Paris, Calder became friends with Mondrian. Calder was intrigued with Mondrian's use of simple shapes and primary colors. Calder was inspired to see if he could make simple shapes of bright colors move.

Calder explained his process of constructing a mobile as "I begin with the smallest [and lowest level] and work up. Once I know the balance point for this first pair of discs, I anchor it by a hook to another arm, where it acts as one end of another pair of scales, and so on up. It's a kind of ascending scale of weights and counterweights."



Mobile with Hats, 1951



Calder in Paris, 1955

Take a look at Calder's Mobile with Hats. He first made the individual hat sculptures. Calder then formed a wire support and hung, from its ends, the top hat and the wide brimmed hat.(A). He then found the point of balance along the wire support and, at this point, added a

string upward.(This appears to be intentionally off balance, which adds "movement" to a still piece.) He attached this mini-mobile to one end of a second support, while attaching the businessman's hat to the other end. (B)

Calder then fabricated the main wire support (C) (at the top of the photo) and

affixed, to one end, the first three hats(A, B). He then formed the mobile component with the caps, on the right, (D), and attached it to other end of the main support. A string up from the main support is attached to the point of balance.

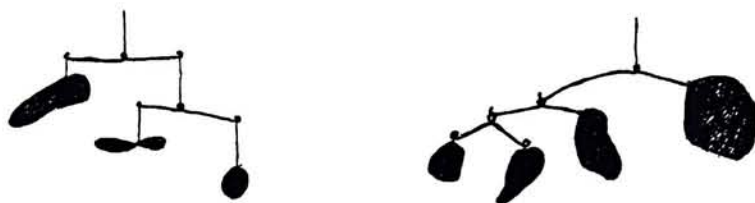
PROJECT MATERIALS

Gather a variety of weights of wire, heavy thread or lightweight fishing-line, and a variety of items to be suspended from the wire. You may use such items such as shells, small toys, painted shapes of wood or heavy cardboard...use you imagination.

Tools: Several types and sizes of pliers, a drill, scissors or other cutting tools, needles, glue.

PROJECT PROCESS

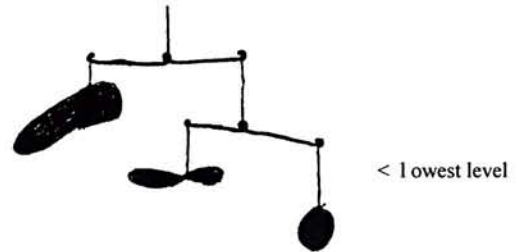
1. Decide on what it is that will be suspended from the mobile. Have a variety of options. Size and weight of these objects will affect size of the mobile. You could use small wire sculptures as objects. You could use found objects. Consider coordinating colors or shapes. Objects may or may not follow a theme of something else you are working on.
2. Figure out how the objects will be attached to the wire framework. While the objects are attached, they also need to be able to swing freely. Will you use thread or fishing-line or will they hook onto the wire support? If necessary, drill holes through objects to facilitate attachment.
3. With the objects in mind, decide on the overall framework. With smaller works Calder would often lay out the objects on a table and decide on an overall configuration. How many levels will you make? Draw out the general scheme. This is your "blueprint" or plan.



4. Experiment with the wire: as to weight and manipulation thereof. Getting the wire to bend exactly where you want it to, takes practice. If you decide to curl or loop the ends- experiment making these moves.



5. Start with the lowest level of your mobile. Prepare a wire support. Look to your plan and determine the length and general shape of the first support. Cut and shape this first wire support and deal with the ends where you will attach the objects.



6. Attach thread or line to the objects and then attach these lines to the wire support. Remember that the objects are suspended and move freely with air currents. You now have created the first or lowest level. Take a look at these samples.



7. Along the wire support, use your finger or a pencil to find a precise point, of balance between the two objects. Mark this point. This is where you will connect a line to work up to the next level.

8. At this point, you might want to temporarily take the objects off the wire support.

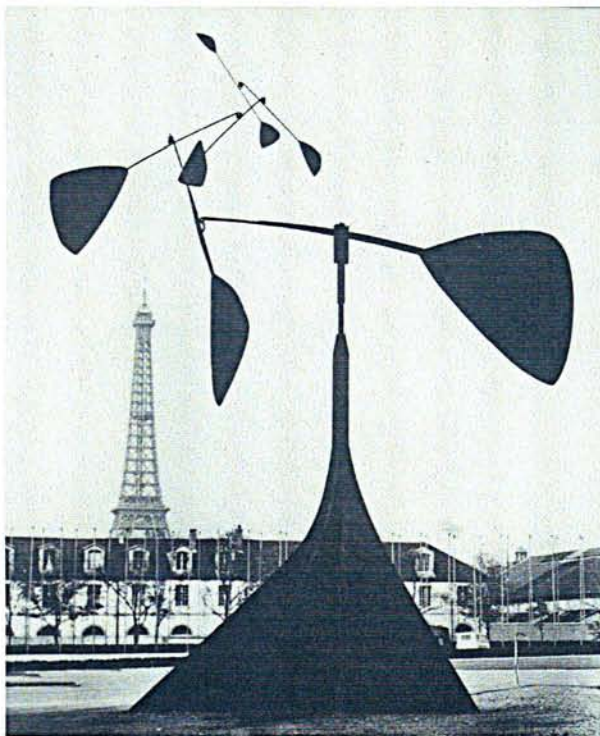
9. Bend the wire support into a loop, create a bend in the wire, or glue the line up to the next level at the balance point. To maintain the balance, you want the line to be affixed exactly at that point.



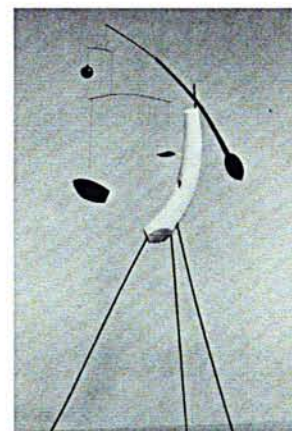
10. Replace the objects on the wire support. Place a spot of glue at the junction of wire and line to secure the objects to the support wire.

11. This first level now becomes one of the “objects” to be counter-balanced with others on the next level up. Proceed to the next level up, referring to your “blueprint” plan. Complete the process.

Calder’s mobiles were varied in makeup, scale, and their complexity. Yet they share a common thread of joy and movement. Of his mobiles, Calder said, “When everything goes right a mobile is a piece of poetry that dances with the joy of life and surprises.”



Spirale, 1958



Praying Mantis, 1936



Untitled, 1959

PROJECTS

INSPIRED FROM **CALDER'S** STABILES



Flamingo, 1974

“Stables” was the name given to sculpture that was lithe and whimsical in spirit and monumental in **scale**. This juxtaposition and marriage of these aesthetics was evidence of Calder’s genius. Stables are stationary sculptures made from steel plates cut into shapes, bent, bolted together and painted in bold colors. They are carefully **balanced**. While they are firmly affixed to the ground- it appears as if they are capable of elegant mobility at any time. Many of these high profile works populate urban squares, open spaces and public parks.

MATERIALS

Paper, pencil, card stock, cardboard, large sheets (3’ x 6’ or 4’ x 8’) of cardboard, scissors, utility knives (if age appropriate), staples, hot glue guns or other means of joining two pieces of board together.

PROCESS

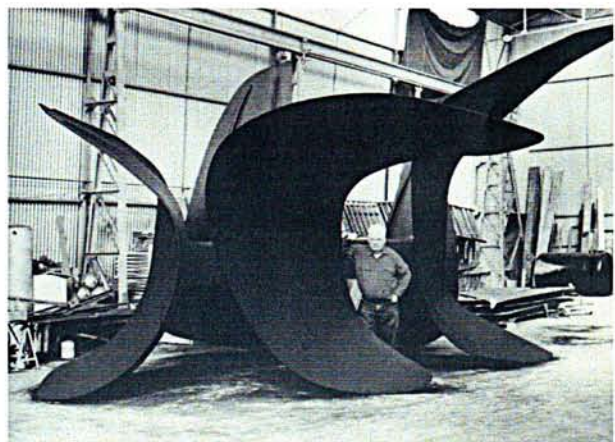
Abstract, simple shapes can be cut, folded in various fashions and then affixed to one another, painted and exhibited. One could also use the same process to produce representational portraits of animals, friends or self-portraits.

1. Begin to develop your ideas by looking at Calder’s stables. Analyze and discuss what they are comprised of, how they were formed, and how they fit into or affect their environment.
2. Begin some working drawings of ideas for your own work. Analyze: how they will be constructed, use of shapes, and how and where they will be joined? Develop several ideas and work towards constructing one or two of them.
3. Construct a model using card stock. Draw and cut various shapes. Bend and join them together. Work on balance of the piece. See how massive you can make it; yet, have it appear to be on its tiptoes, balanced and stable. In contrast, how elegant can you make you model?

4. Work with the concept of **balance**. Get in a standing position, somewhat extended, approaching out of balance. Then have someone hand something to you, to intentionally throw you off balance. Discuss what it takes to regain that balance. The same principles will apply to the stables.
5. Move onto building larger works with heavier materials. Investigate various ways of folding, scoring and manipulating your materials. Large sheets of cardboard are incredibly malleable. Score, fold, roll, tear off one side to expose the corrugated inside. Explore.
6. Experiment affixing shapes together. Are 90-degree angles more supportive than 45 degree ones? Does it help to overlap pieces? Explore and come up various options that work.
7. All the while, work with the balance. Turn the sculpture around and around; if it is large- walk around it. Sculpture is **three-dimensional** and intended to be viewed from all sides. See how it takes on **form**- or space, even though it is not solid. Also enjoy the shadows your sculpture casts. Note how it interacts with the work of others.
8. Finish the surface- paint...solids, patterns...Use your imagination.
9. If this process intrigues you – investigate the use of other materials and larger scale. When you make something that approaches or exceeds your personal size- something magical happens. It begins to assume a presence. Plywood, although does not lend itself to be shaped, can be cut into shapes and joined to produce interesting unions. I have seen such sculpture, which looked like fantastic animals, function as room dividers.



Flying Dragon, 1975



Five Wings, 1967

VOCABULARY

ABSTRACT

To abstract is to simplify. The invention of photography (in the 1830s) eliminated the need for art to record the outside world. Artists were freed to pursue work that represents an inner world of ideas and feelings.

Unfortunately, often the viewer focuses on the technical skill evidenced in a work of art and overlooks valuing the products of an original imagination. Just as it is a personal statement of the artist, abstract art demands a personal response from the viewer.

Calder loved and used simple, bold shapes, often painted with primary colors.

ARMATURE

A support, usually made from wire or metal, used by sculptors as an inner frame to help hold up a sculpture. An armature is not visible. The sculptor adds clay, wax or other materials over this support. The armature provides a framework for the sculpture just like our skeleton does for our bodies.

BALANCE

Reference to balance in composition.

Symmetrical balance refers to composition construction with objects of similar shape and weight along a central axis.

Asymmetrical balance involves elements of unequal weight and differing sizes that counterbalance each other and provide visual equilibrium.

With Calder, the balance was crucial to the work literally holding up.

CARICATURE

Cartoon-like, and often humorous, rendering of someone or something. With this form of abstraction, features are usually simplified and rendered with few lines. Dominant features are exaggerated.

COLOR

A key element and concern in contemporary art (historically, it was not a key element, but simply considered decoration). Technically, color is the sensation resulting from stimulation of the retina of the eye by light waves of certain lengths. Although there are hundreds of thousands of colors, we generally refer to **primary** colors, red, yellow, blue, and **secondary** colors, green, orange and violet. **Hue** refers to the name given the color, **saturation** to the percentage of pure hue in any color, and

tone is the amount of light value in the color. White is the presence of all light waves and black is the absence of light. In his work, Calder mainly used primary colors, and black and white. He loved red and the boldness of a simplified color scheme.

DRAWING

Rendering usually with line. While usually one draws with pencil or pen and ink on a flat surface, Calder drew with wire. Contemporary artists draw with, among other things, light.

FORM

Form in sculpture, or three-dimensional work, refers to the space the sculpture occupies. In a way, it is the 3-D shape of the work. In two-dimensional work, as in works on paper, form refers to the illusion of the three-dimensional-ness a shape takes on. An example of this is where a painting depicts a figure whose shape seems very round and almost as if it is taking up space.

GESTURE

Refers to rendering a figure in a posture or position that suggests vitality, movement, and personality.

GOUACHE

Opaque watercolor paint. Gouache is distinguished from watercolor, which is transparent.

KINETIC

Refers to movement. Calder was one of the first artists to utilize his engineering skills to create a kinetic sculpture. His sculpture moved by means of hand cranks, motors and simply by air currents.

MOBILE

The name, given by Marcel Duchamp, to describe Calder's kinetic or moving sculptures.

SCALE

Refers to the size of a work. Consider how the size of a work will impact the viewer. Consider the size of the image or work in relation to your size. What effect does this create.

Vocabulary continued

SCULPTURE

Three-dimensional artwork created by modeling, with wax or clay, carving, with wood or stone, or constructing, with a wide variety of materials. Classical sculpture, which usually stood on a pedestal, was most often made from brass (cast from wax or clay) or stone. Modern sculpture is made or assembled of anything imaginable.

TEXTURE

Texture refers to the visual and tactual surface of a work. Is it (or does it appear to be) smooth, rough, patterned, or shiny...? Consideration of texture adds a richness to an artwork and can convey a deeper meaning or feeling.

TWO-DIMENSIONAL ART

Refers to artwork on a flat surface like canvas or paper. The two dimensions are the height and width.

THREE-DIMENSIONAL ART

A solid form having height, width and depth. Usually this refers to work that you can walk around or through. This is usually a characteristic of sculpture. The term can also apply to representational painting where the artist creates the illusion of three-dimensionality.

FOOTNOTES

¹ Calder's Universe, Jean Lipman, Viking Press NY 1976, p. 265

Texture

Two-dimensional art

Refers to artwork on a flat surface like canvas or paper. Refers to height and width.

Three-dimensional art

Solid- height, width and depth. Usually work that you can walk around or through. Usually a characteristic of sculpture. The term can also apply in representational painting where the artist creates the illusion of three-dimensionality.

Footnotes

- ¹ Calder's Universe, Jean Lipman, Viking Press NY 1976, p. 265
- ² Miro and Arp. Include general description and photos of their work.
- ³ Mondrian. Include general description and photos of his work.

Ideas relating to possible Continued and Interdisciplinary Studies

Field trips- Make the study of art real. Go to see it. Walk around it. Make a list of the museums and galleries in your area. Set up a calendar of their events and shows and update it regularly. Post it in a prominent place.

Class collaboration- Several classes could come together on the circus project. Divide up responsibilities, or share in aspects of the production, as performers, production, choreography, music, advertising, and audience.

Advertising, printing,

Poster art. Propaganda as a **political** tool. Billboards.

Art History-

Classical Sculpture- characteristics, sculptors, purpose, patrons.

Public art

History -of circus; the circus today. Biography- famous performers.

Music - Research circus music.

Physics Engineering- balance-weights and counterweights. Exploration of nature of materials.

Physical Education development of fine motor skills. Working with different tools.

Reading -stories relating to the Calder, the circus, Art scene in Europe in the 1920s and 1930s. Biographies of famous performance.

Science-

Astronomy and study of universe; rotating planets. Do Calder's mobiles mirror the makeup of an atom?

Photo Credits and Questions related to the Photos

p.2 **Sword Swallow, Monsieur Loyal, Ringmaster**, photo by Marvin Schwartz, Collection of the Artist, on permanent loan to the Whitney Museum of American Art. How do you know who this is? What can he do? Why does he have a very long mustache? What is **caricature**? What is **gesture**? How did he make it?

p.2 **Ringmaster**. How did Calder mobilize the Ringmaster? You can see the wire extending to the back. Calder used this to hold onto the figure and move it. It appears he would also move the figure's arm with a string. What is this figure? How do you know that? What did he use to make the ringmaster?

p.2 Calder performing his **Circus**, 1929. Photo by Andre Kertesz.
Why would a grown man perform a circus? Why would other adults be eager to help and attend?

p.3 **Big Red**, 1959, Painted sheet metal, wire, 9'6" wide, Whitney Museum of American Art, Gift of Friends of the Whitney Museum of American Art.

Mobiles have been described as poetry. What does this mean?

p.3 Calder with **FiveWings**, Etablissements Biemont, Tours, France.1967. Photo by Mario Carrieri.

On one hand, this work is a massive; and on the other, it assumes an elegant simplicity. A number of Calder's pieces were huge in scale, monumental. The **scale** of Calder's work is interesting. Can you envision the smaller works as huge, and the larger works as small? Do you think they would impact you if they were a size?

His larger works were intended to be placed out of doors. Design safety, construction and integration with surrounding buildings were concerns. Often Calder was required to work with architects and fabricators at the foundries where the works were produced. His training as an engineer was invaluable in this regard.

p.5 **Monsieur Loyal, Ringmaster, Clown, Cowboy**, photos by Marvin Schwartz., Figures are part of **Calder's Circus**, Collection of the Artist, on permanent loan to the Whitney Museum of American Art.

Calder spent a lot of time looking and noting what made a certain thing unique. His drawing and sculptures reflect this synthesis of understanding. He captures and essence. The ringmaster, clown and the cowboy are classical examples of his genius.

p.6 **Canasson Kodak**, 1960. Film canister, tincans, wire, leather, 13.5”h. Shawn Davidson, Sache, France. **LaChar Romain**, 1928. Wood, wire, metal, 14”h. Present location unknown.

Canasson Kodak demonstrates some methods employed to mobilize his sculptures- rolling with a can and using the “spring” action of the wire. What other methods come to mind? Since these figures really don’t look like the animals- how do you know what they are? How little is needed to communicate what they are? How are these creatures **abstract** ?

p.6 **Le Char Romain**, 1928, Wood, wire, metal, 14” w. Present location unknown.

Here Calder mobilizes the piece by simply pushing, and scooting it along on the cork hooves. Notice how simply he portrays the horses. Can you think of other methods to mobilize your sculptures?

p.7 **Wire Sculpture by Calder**, 1928. Wire, 46.5” h. Sign for the Weyle Gallery exhibition. Whitney Museum of American Art, New York; gift of Howard and Jean Lipman.

p.7 **Cow**, 1929, wire, 16”h. The Museum of Modern Art, New York, gift of Edward M. M. Warburg. Is Calder **DRAWING** with the wire?

p.9 Calder with mobile sculpture, Paris, France, 1955. Photo by Agnes Varda.

p.9 **Mobile with Hats**, painted wire 40”w. Mrs. Joan Prats, Barcelona, Spain.

Here Calder incorporates small wire sculptures into a mobile. It is interesting to note the issue of balance. It appears that the central and left pairs of hats is off-balance, slightly canting. Yet, the uppermost support of perfectly horizontal. Why would Calder construct the mobile in this fashion?

p.13 **Untitled**, 1959, Painted sheet metal, rod, wire, 20’ w. Chase Manhattan Bank Art Collection, New York. Photo by Lee Boltin.

Distinguish this work from **The Praying Mantis**. His later, and more notable, mobiles are suspended from the ceiling. How does suspending work from the ceiling change its impact on the viewer? How does this differ from classical sculpture?

p.13 **The Praying Mantis**, 1936. Painted wood, rod, wire, 6’6” h. Wadsworth Atheneum, Hartford, Conn. Photo by E. Irving Blomstrann. How does this work differ from his later works? How is it similar to later works?

p.13 **Spirale**, 1958. Painted steel plate, rod. 16’5” h. UNESCO, Paris.

The freedom of the work to move, with the wind, is both surprising and joyful.

The idea of playfulness in abstract sculpture has been one of Calder's most significant contributions. Calder was very interested in the reflection and play of light on the surface of the moving pieces. How is the base of this mobile similar to or different from his later work? How does this piece relate to his stabiles? Can you tell from the picture where this piece is located?

p.11 **Flamingo**, 1974. Painted steel plate, 53' h. Federal Center Plaza, Chicago, Ill. Photo by David Leth.

Can you imagine this work as a small hand-held piece? How does it look like and differ from the bird it was named for? How was it fabricated?

Take a look at this photo. How does this piece stand out from and fit into its surroundings? How does it impact the space in which it sits?

What are issues must an artist consider when his work occupies public spaces? Discuss issues of safety, traffic flow, aesthetics, possible defacement of the work, interfacing with architects and engineers.

How do you think people react to such a huge sculpture in their plaza square? Richard Serra, a sculptor, was commissioned by the Government to build and install his Tilted Arc, 1981, in the Federal Plaza, in New York City. Tilted Arc was simply an arc of corten steel, 12' high and 120' long. It was huge and took up much of the plaza space. Although it was firmly attached to the ground, it gave many people the impression it could fall over on top of them.

In response to public objection to the piece, the Government removed and destroyed the work. Subsequent controversy raised issues regarding the politics of public space: rights of public using public space, rights of Government who purchased the work, and rights of the artist to the physical property and intellectual property.

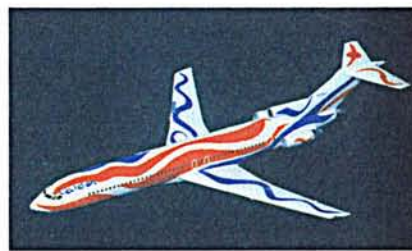
How would you feel is a piece of sculpture was placed in a public space you frequently inhabit. Explore these issues.

p.12 **Flying Dragon**, 1975. Painted steel plate, 56' long, Mobil Oil Corporation, Fairfax, Virginia. Photo by Stephen Segre.

Why are a lot of the large sculptures owned by governments or private corporation?

p. **Flying Colors of the United States**. 1975. Specially formulated aerospace paint on 727-200 jet, 153' l. Braniff International. Calder was commissioned to design the exterior painting. The plane was 153 feet long. It was painted with aerospace paint specially formulated to withstand high speed, altitude and weather. What could the colors signify? Has Calder "created" a mobile sculpture? What distinguishes this from traditional painting?

Bibliography and Resources



Flying Colors of the United States, 1975

Books

Arnason, H. Harvard, **Calder, 1898-1976**, Van Nostrand, Princeton, NJ, 1966.

Baal-Teshuva, Jack, **Calder**, Koln, Lisboa, London, New York, Tashen, 1998.

Hayes, Margaret Calder, **Three Alexander Calders: a Family Memoir**, P.S. Ericksson, Middlebury, Vt, 1977.

Lipman, Jean, **Alexander Calder and His Magic Mobiles**, New York: Hudson Hills Press in association with Whitney Museum of American Art, 1981.

Lipman, Jean, **Calder's Universe**, Viking Press, New York, in cooperation with the Whitney Museum of American Art, 1976.

Internet

<http://www.circusparade.com>

<http://world.std.com/%7Etsh/clinks.html>

<http://world.std.com/~tsh/circus.html>

Video

Calder's Circus Video -The Whitney Museum of American Art in New York sells this video of Calder and his wife performing the circus (which is on exhibit there) for \$49.95. The Whitney bookstore can be reached at: <http://www.echonyc.com/~whitney/store/fs.html>

Alexander Calder, American Masters, Dir. by Roger Sherman, A production of 13/WNET in association with Florentine Films/ Sherman Pictures.

See www.pbs.org/wnet/americanvisions/menu/.html

Reproductions of Artist's Work

Each packet will include reproductions (at least 8" x 10") of each of the works shown within the text.

Attached to the back of each reproduction will be questions (as enumerated in *Photo Credits and Questions* section) relating to the works. Questions are intended to facilitate discussion of work.

Artist Packets currently in production:

Henri Matisse
Faith Ringgold
Betye Saar
Tony Cragg
Deborah Butterfield
Andy Warhol
Cindy Sherman
Chuck Close

Artists on the TO DO List:

Roger Shimamura
Andy Goldsworthy
Diego Rivera/ Murals
Louise Nevelson
Jackson Pollack
David Hockney
Roy Lichtenstein/ Keith Haring

ARTS ALIVE

PRESENTS
AN

ARTS CURRICULUM

INSPIRED BY THE
WONDERFUL WORK OF

**DEBORAH
BUTTERFIELD
AND
HORSES**

INCLUDING

HANDS-ON ART PROJECTS

INTRODUCTION

ART/ALIVE is a series of project packets, each highlighting the life and work of an individual artist and presenting hands-on student projects based on that artist's work. These creative learning tools are visually exciting and user-friendly.

The projects are designed for large or small groups, or individuals. Step-by-step instructions facilitate undertaking the projects. Look to the reproductions of the artist's work for inspiration and a point of departure. Don't copy; create, unleash your imaginations. If you are drawn in a different direction, go for it. On a once-through, you gain an understanding of process and acquire specific skills. Repeat the projects or use them to create others. Your imagination is amazingly freed up.

Above all, cultivate, encourage, affirm, and honor individual expression. If a student flies off on a different avenue of imagination, cheer them on in their journey.

These project packets provide opportunities to learn to articulate and discuss various visual concepts, and to enhance critical thinking skills. Take time to look at and to react to the reproductions of an artist's work. Lead discussions as to what the group sees and how they respond to it. Utilize the questions that are posed to stimulate discussion. Look to the section on vocabulary. Observation and discussion sessions promote an understanding of visual concepts and build an arts vocabulary. These sessions may occur before, during and after the projects are completed.

Bibliography, resources and some ideas regarding related studies are included in each packet. Gather and utilize some of these resources to enrich the project.

I have selected these artists because I find their creative process and their work fascinating and inspiring. My selections include artists, male and female, from different races and cultures. Their work represents a variety of disciplines: painting, photography, sculpture, installation art. These are "modern" artists; many are working today. Yet, their work provides opportunities to relate to the past, connect to the here and now, and to project to the future.

Enjoy!

RA Featherston



Debra Butterfield, *Joseph*, 1988

PROJECTS

WITH

HORSES

1. What Do You See?

TAKE A LOOK, THINK AND DISCUSS

This first set of exercises precedes most any endeavor to create representational art. Look, think and discuss. Let your eye educate your hand and your mind. Prepare to be surprised. Take the time to actually **SEE** what is there, and notice how objects and what is around them interrelate. Don't let preconceived ideas of what something "is supposed to look" like, dictate what you create. Don't feel that this is unproductive, wasted time since you aren't "making" anything. It is not. These tasks are an important part of any creative process.

MATERIALS

A live horse or two

A variety of models (*Breyer* horse models are well made representations), pictures, and videos of horses.

The Visible Horse, Visible Man or Woman or other skeletal representations

Cardboard or mat board **VIEWING SQUARE**- See next page- *IN THE FRAME*

This viewing square be a useful tool in many art projects to help "see" the edges of your work, proportions, and to help determine angles of lines in your view (as they relate to the horizontal and vertical sides of the frame.)

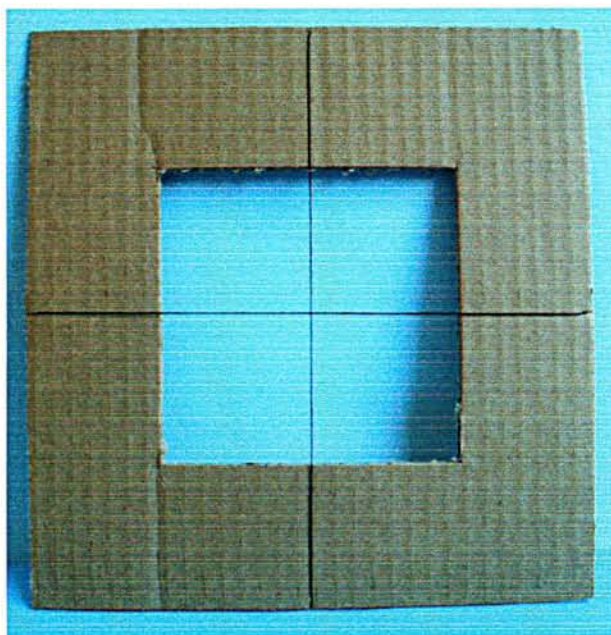
Heavy duty thread

Rectangular box, with the dimensions of approx. X x X x 2 X

WITHIN THE FRAME

Prepare a cardboard frame. Cut a hole, about 3 to 4" square out of the center of a piece of cardboard. Use a heavy-duty thread to divide the frame in four smaller squares. Either tape the thread in place, or make slits on the outer edges of the frame and pull the thread tightly into the grooves.

You will be using this after you get an initial look-feel of the horse.



PROCESS



To me, being with a horse is a magical experience. If you have to beg, borrow or rent- do your best to closely examine a LIVE horse.¹

But, if the real thing is not available, resort to models, pictures, and videos.² Breyer makes a wide variety of model horses that can be helpful in your exploration.



A. CLOSER THAN A LOOK

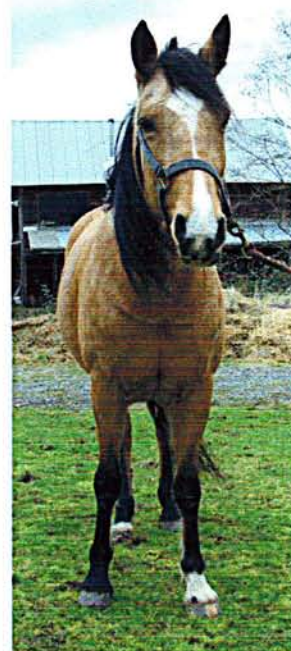
Have *you* hugged a horse today?

Put your arms around them and feel the space they occupy; feel their bodies; experience their coats; and look into their incredible eyes.

Run your hand over the horse's body. Describe your sensations and reactions to this contact. Can you see any curves or rolling lines within and throughout the body? How are parts of the body proportionate to other parts and the entire frame?



From a side view, note the roundness of its hindquarters and the shoulder area. Think in simplified shapes and describe what you see.



Notice where you can "see" and feel bone. What does this feel like? Can you see how some of the bones "describe" the shape of that part of the horse? The jaw bone is a good example of this.

Where can you see and feel muscle? What does this feel like? Does the horse tense its muscles when you touch it?

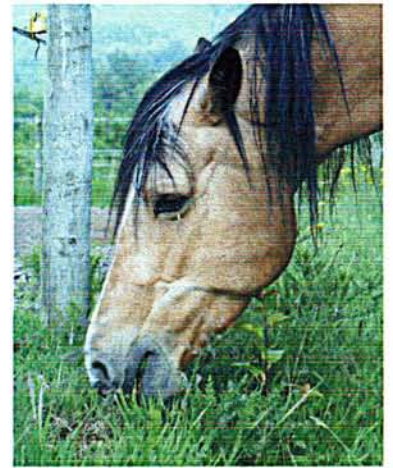
How do they stand? Do they appear to be standing in a balanced fashion, solid on the ground or ready to fall over? How do their bodies differ from yours?



Look at the horse from the side, straight on, and from the rear. What have you discovered about the horse's body? Share your observations. (Sharing these impressions can be an oral or a writing exercise.)



Take a look at the horse's head. Can you see where the bones are underneath the skin? What overall shapes can you find here? Notice where the eyes are positioned on the head? I wonder how this affects their vision? Feel their soft muzzle and note the shape of their nostrils. Where are their ears situated? Watch them turn to listen to a sound.



Feel part of the head for the presence of muscle. How does the length of the head relate to other parts of the body? Take a look at how their head is connected to the neck.



Examine the neck, especially its curves. Notice how the neck emerges from the shoulder area. In the horse here to the left, if you think of his shoulder area as a clock, the neck emerges from the 12 to 3 area. What shapes can you use to describe its head and neck. Different breeds of horses are known to have thicker or narrower necks. Notice how the shape of the neck tapers where it connects to the head.

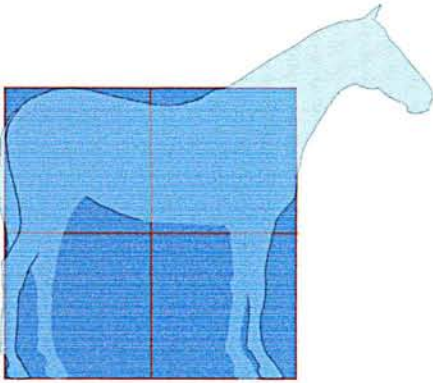


Have you noticed their legs and feet? See where their legs connect to their body. Can you see that this affects their ability to move and balance? Can you feel the hard bone in their legs? How many joints can you find? How many places does their leg bend? Notice the muscling in their legs. Look at their hooves. How do the hooves differ from those of a cow?



Take a look at their mane and tail, the long flowing hair that resembles our own hair. Notice where the mane is located; how it follows along the top line of the neck. Is their tail, free flowing hair emerging directly from their hindquarters? Or does their tail consist of a flesh covered tailbone from which the hair grows?

B. A CLOSER LOOK AT PROPORTIONS



Conformation is a term used by horse people to describe a horse's build or how they are "put together." It describes the **SYMMETRICAL PROPORTION** of individual parts to each other and the whole.

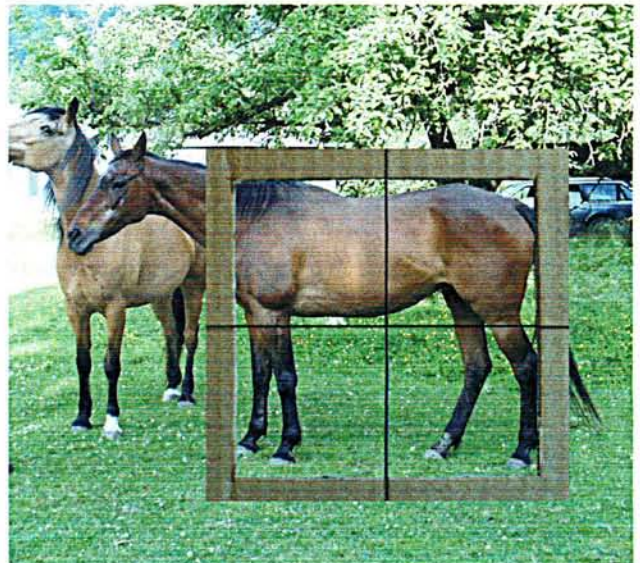
The basic confirmation of the various breeds of horses differ. At one extreme are the thoroughbreds and at the opposite extreme are draft horses.

Most horses have a confirmation that falls somewhere between the build of these two breeds. An "idealized" confirmation, where the parts of the horse are balanced to each other and in proportion with the whole, provides us with a framework to represent the horse. **Footnote aft. draft hor**

A TWO DIMENSIONAL VIEW

Hold the **cardboard viewing square** up at you eye level , peer through it and focus on the horse and a view from the side. Look at the horse from a side view, so its head is at one side and it tail is at the other side; take in a **profile** view. Notice how what is in the frame changes dramatically as you move the frame farther away from or closer to your face.

Focus in on the horse so that its body (minus the head and neck) fits in the viewing square. **Notice that the horse's body, or trunk, nearly fills the top half of the square, while the legs are slightly longer than the bottom half.** Noting these proportions will help you represent the horse.





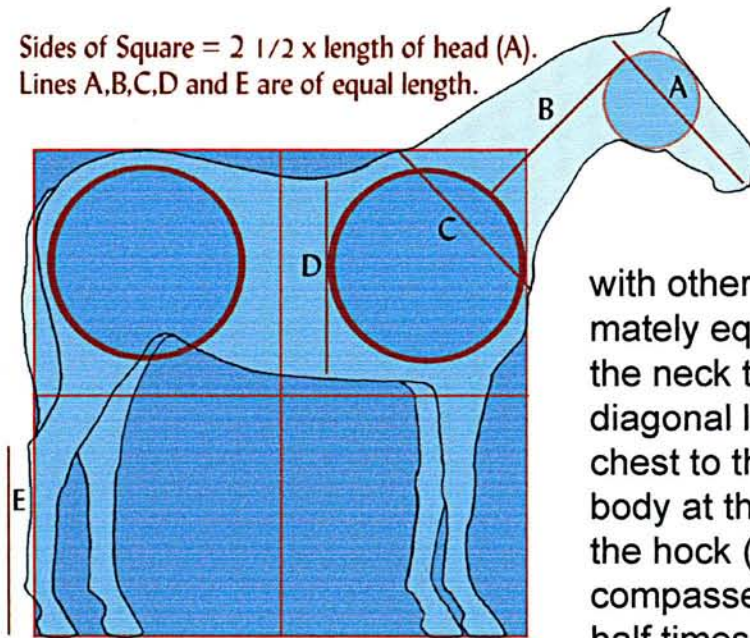
Babies also have big ears. Check these out !

Note how babies and ponies don't really fit the proportional profile we are building. Babies are born with legs that are proportionally very long. This enables them to run fast enough to keep up with the herd in a flight mode.

Ponies usually, but not always, have proportionally smaller bodies than horses. They also have shorter legs than the average horse.



Sides of Square = $2 \frac{1}{2}$ x length of head (A).
Lines A,B,C,D and E are of equal length.



This illustration indicates that there are **several measurements within the average horse that are about the same**. The length of the head (A) can be used as a "standard" to compare with other parts of the body. It is approximately equal to the length: from the base of the neck to where it meets the skull (B); of a diagonal line across the shoulder from the chest to the withers (C); of the depth of the body at the girth (D); from the ground up to the hock (E). The overall square, that encompasses the horse's body, is two and one-half times the length of the horse's head.

Also within the illustration of the horse above, **note the circles**. The shoulder and hip joints are located within the two larger circles. I use these circles as a proportional reference. The movement of the horse's legs originates from within these areas. Note also that the diameter of the larger circles is equal to the A-E segments. Also, the diameter of the circle in the jaw area is about $\frac{1}{2}$ the size of the diameter of the larger two circles.

Learning these proportions can be enormously helpful in rendering the horse, both two and three dimensionally.

A THREE DIMENSIONAL VIEW

Now let's progress from a square, two dimensional view, to a three dimensional spacial view with the **use of a rectangular box**. Walk around the horse, considering its overall shape from various views. Take the rectangular box, align it with and compare it to the horse's body.

How does the shape of the horse's body compare with the shape of the box? The top and bottom, and the sides of the horse's body are somewhat flat planes. But where the sides meet, the "corners," are really more rounded than those of a square.

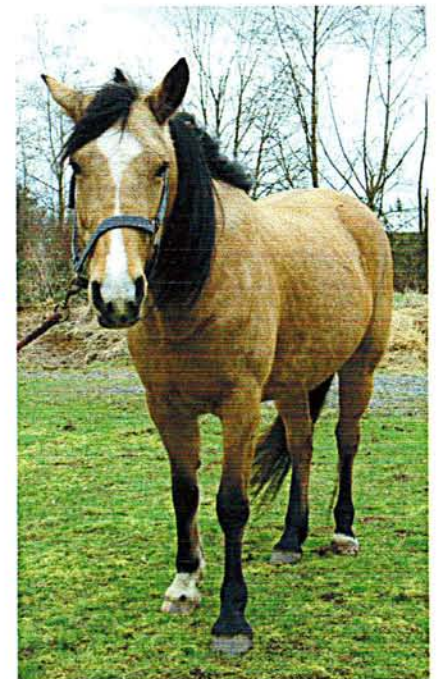
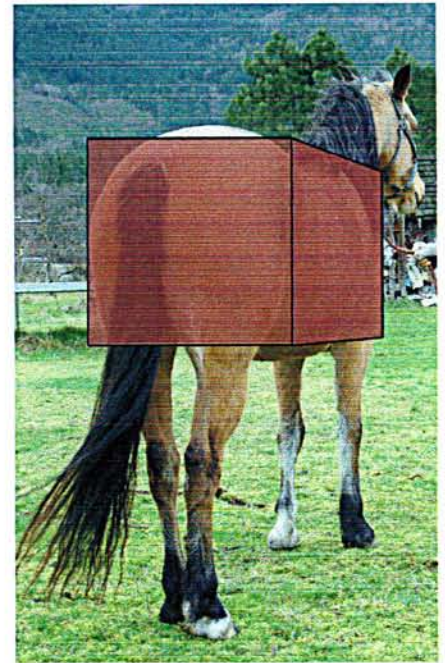


From a 45 degree view look at the horse from the front end and from the rear. Does the end of the horse farther away from you appear to look smaller? Compare this observation with the box. Discuss how the ideas of **foreshortening** and **perspective** apply here. If you can represent the box, do you think you could represent the horse's body?

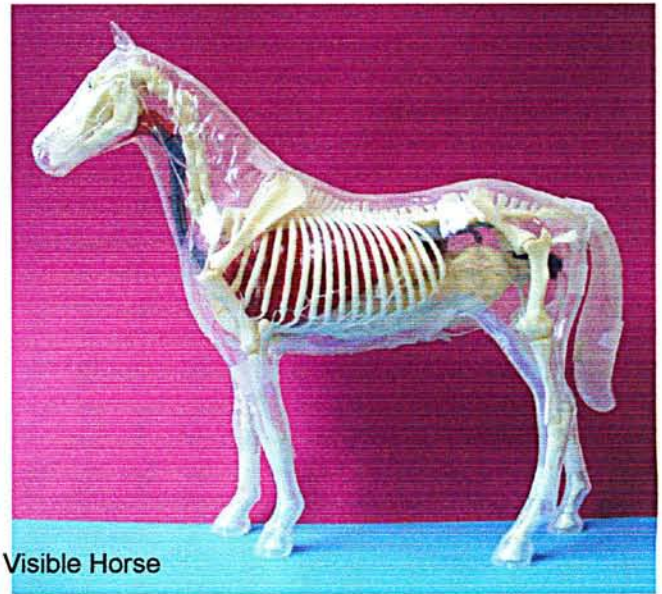
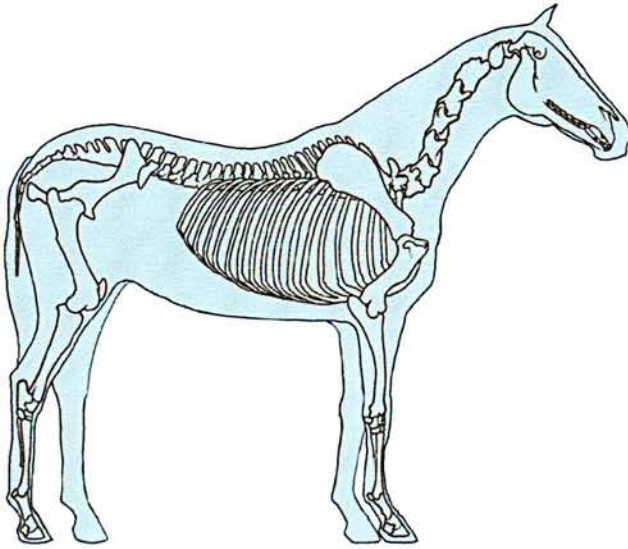
Note where the horse's body is symmetrical. Look back to the illustration on the previous page. Imagine the circles that are within the horse to be spheres.

Reassess your view of the various parts of the horse: its head, neck and legs, keeping in mind a three dimensional perspective. Look for shape and think how the different parts of the body relate to and connect with one another.

Look also for flowing, sweeping lines within the horses body: along the top line, under the belly, where the back leg emerges from the trunk, around the hindquarters, around the muzzle. Noting these rhythmic lines will help you better represent the horse.



C. CHECK OUT THE SUPPORT



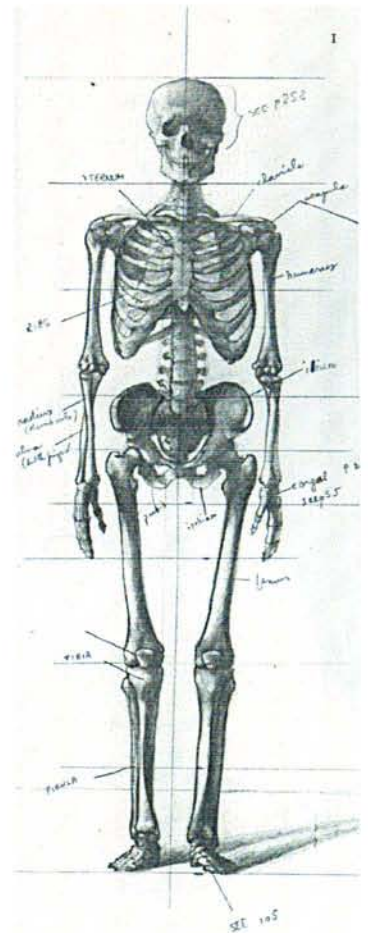
Check in with the *Visible Horse*⁶ or a representation of a horse's skeleton as you look at and feel this furry beast. Just like us, the horse is "held up" or supported by a complex system and bones and muscles. **How does the horse's skeleton compare with and differ from our own?**

Refer to the *Visible Horse* or skeleton and establish that the horse's back is composed of individual bones that can move just like our backs do. Notice that the horses "back bone" runs from the base of its skull to the end of the fleshy part of its tail.

Another look at the *Visible Horse* will show you that the horse's legs actually start at joints well within the body. The point where they emerge below the body, is actually called the elbow (in front) and the stifle (in the back).

Like us, the horse's most of the primary internal organs are encased in or surrounded by bone. The areas in the *Visible Horse* where there are no bones or internal organs are occupied primarily by muscle. What a muscle bound neck! No wonder they can pull the reins right out of your hands!

Does looking at the *Visible Horse* help you see basic shapes within the horse's body?



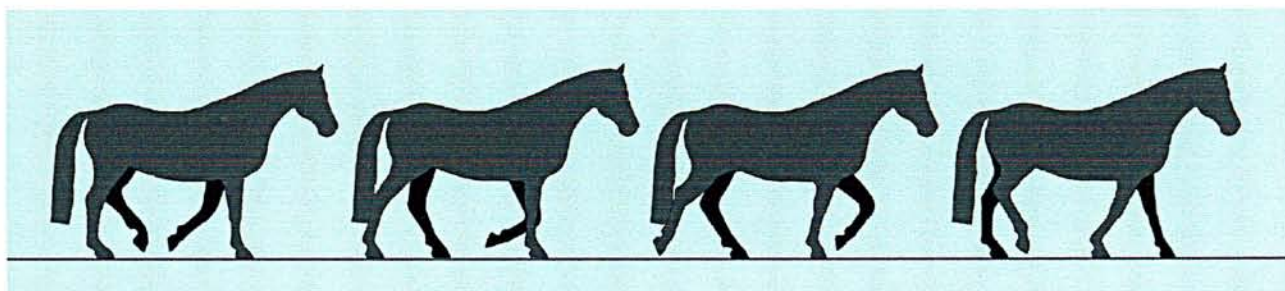
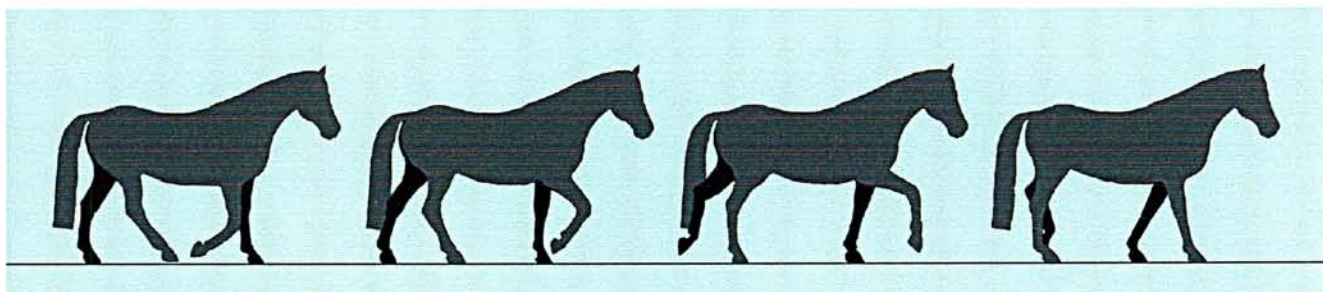
D. HORSES IN MOTION

While the horse is in motion watch how they move their bodies. If you understand HOW they move, it is much easier to capture movement and **gesture** in your artwork. How do horses travel at the different gaits of walk, trot and



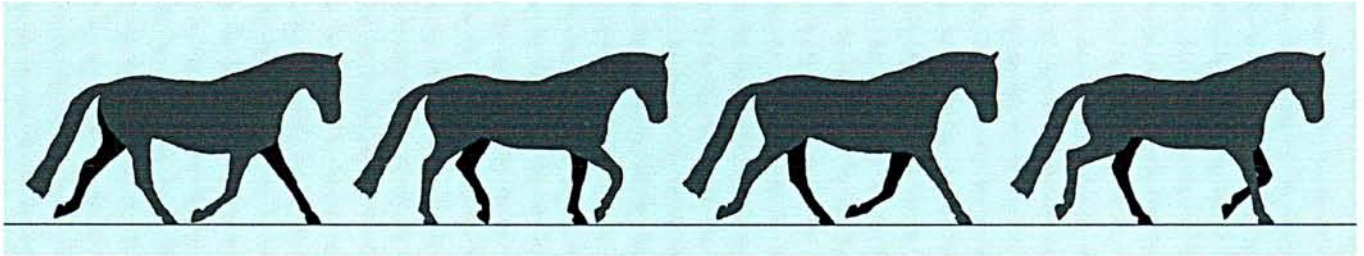
canter? Let's take a closer look. Note here that my model is a Morgan- who is slightly heavier set and thicker necked than the average horse.

When a horse **WALKS**, he/she moves forward, one foot at a time. Each foot -fall can be distinctly heard and is generally of equal length. The movement creates a four beat rhythm. From start to finish there are eight movements.

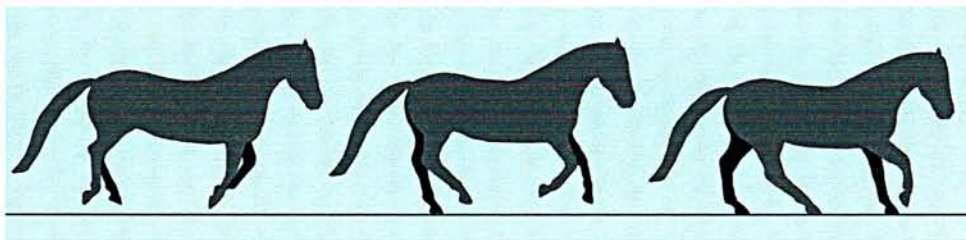
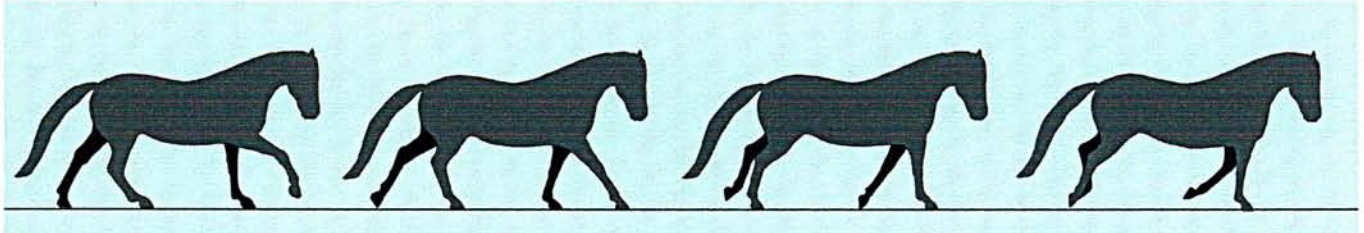


The **TROT** has a two-beat rhythm. The horse's legs move in diagonal pairs, separated by a moment of suspension. In some horse's this moment of suspension is not noticeable; in others it is very obvious and looks like the horse is floating. It was once believed that at least one of the horse's feet stayed on the ground in the trot.

A 19th century photographer, Eadweard Muybridge, set up a series of still cameras and documented the movements within the gaits (trot, canter) of the horse. Below the trot is pictured in four movements.

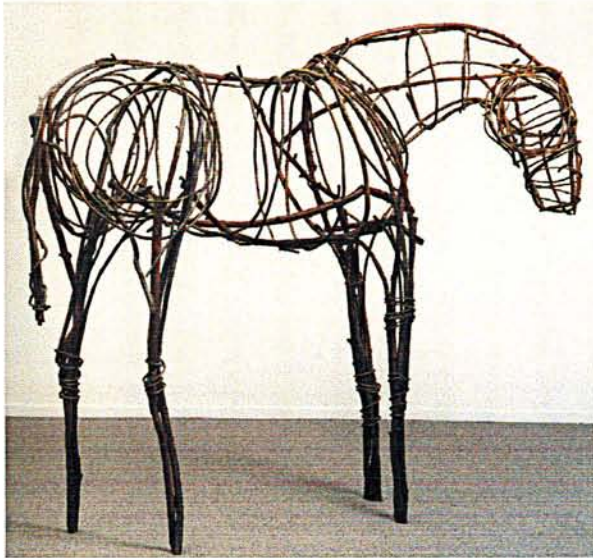


The **CANTER** is a three beat gait with a moment of suspension. The canter begins with a hind leg coming forward, then the opposite side hind leg and the same side foreleg simultaneously, then the opposite side foreleg, then a moment of suspension before the next stride begins.



The gallop is similar to the canter; but in the gallop, the horse covers more ground with a longer stride.

Look for sweeping lines within the movement of the horse's body: along its top line, under its chin and neck, along its belly, and through the movement of the legs. These rhythmic lines flow with the movement, expanding the contracting. Think of how your hand movement flows when you write with cursive script. Create that kind of flow as you view, draw or sculpt the horse.



2. DAILY WARM-UPS

I like to begin **each** class with some warm-up exercises. These help you to focus on your activity and improve your hand to eye coordination. The emphasis is on internalizing the proportions and capturing the gesture. Notice line quality and how it can enliven your drawings.

MATERIALS

Drawing implement: hard (pencil, charcoal...) or soft (paint).

Frequently vary the materials- to maintain interest and increase experience different media. While you will find your favorites- experimenting with others is invaluable.

Paper.

You can use a variety of papers, but newsprint works just fine.

I have found that some of the work produced in this exercise is exquisite.

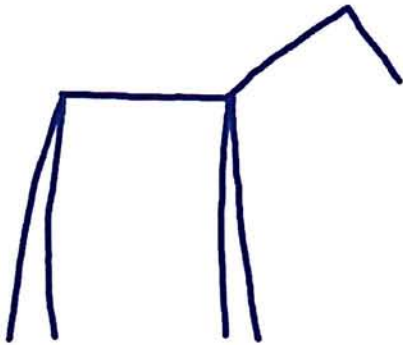
Models

Photos, reproductions, posters, models-Breyers, the real thing. You need up to 10 models in 10 different poses.

A. PRE- RACE : CREATE YOUR OWN HORSE- FIRST A SIDE VIEW

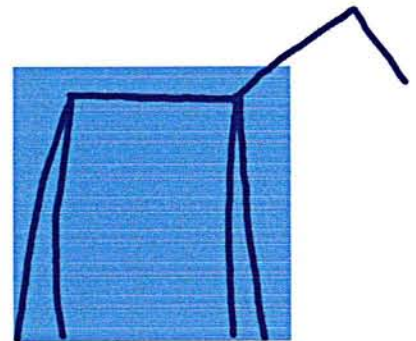
You will create a stick figure. Yes, I said stick figure. You will start with the most elemental one you can imagine. Then you will refine it to enable you to capture its **form**, gesture and movement.

Finally, through a series of exercises you will manipulate the figure. Remember all your experience with LOOKING at the horse and at the *Visible Horse*.

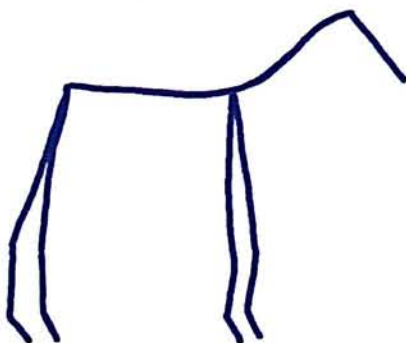


Begin (each person) by drawing what I would call a crude stick figure. This would consist of very few, straight lines. These lines correspond to the bones in the skeleton. This (together with the muscles) supports the horse. This may get some laughs; make it fun.

Remember what you saw through the viewing square. Draw a square very lightly on your paper. (You could actually use the cardboard square itself as a template.) Using this square as a guide to begin to establish **proportions** within the body, draw your stick figure. Think about where and how the neck and head emerge from the body. Also consider the proportionate lengths of the head and neck. Don't draw it, but remember how the body is proportionate to the legs.

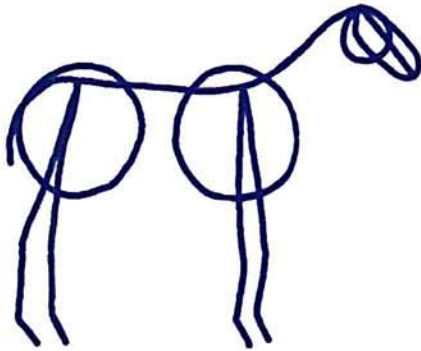


Note that the above stick figures have excellent posture- no slouches there! But actually, they look rather frozen. You- yourself: freeze NOW, for a moment, and note your own posture. Are you: bent at the hips, elbows, or knees? fingers curled? head tilted? Articulate and share your responses. These are **gestures** and they indicate movement, vitality and individuality.



Take three. Again, ever so lightly draw the square as a guide and redraw your stick figure. This time, refine the figure further by allowing parts to bend a bit where they can. Bones are hard and do not move. But focus on the joints, that is where the movement occurs. Also remember that the backbone and neck are comprised of many small bones that are connected together. Now your stick figure can move and change shape.

Draw the able-to-bend-its-bones stick figure once again. But this time we will incorporate the circles in the shoulder, hindquarter and head. Also play with the idea of a jelly bean shape for the head.



You have just created your own drawing tool. Keep it in front of you to refer to. Name it if you wish. (Go to Resources for a list of names of famous horses.) You will be using it throughout these exercises. Note that you want be familiar enough with drawing this- just like you can easily draw a human stick figure or write the alphabet.

B. OFF TO THE DAILY RACES

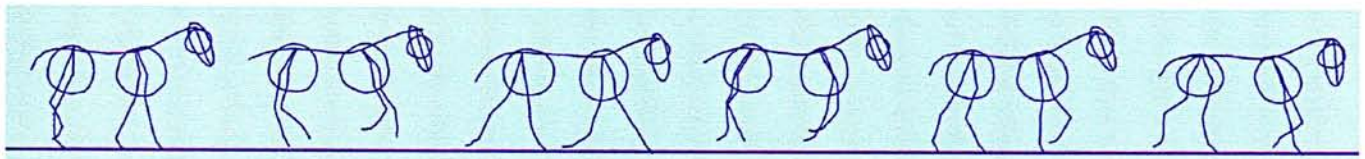
Now that we have created the stick figure, let's proceed to manipulate it!

Set up areas with drawing implements, paper and model horses or photographs. Make sure everyone has a clear view of the models or whatever you will be drawing from. **Stay with a profile- two dimensional view.** You may find yourself naturally expanding and that's fine. But for now concentrate on the profile.

Several of these sketches can be drawn on a page. Also, use the back of the page. I would work in a space no smaller than one-half of an 8.5" x 11" sheet. These are working sketches, not finished works. Use papers of different dimensions. Long narrow sheets are fun to work with. Inquire into whether a local printing shop has a recycle bin.

Do a series of 10 QUICK renderings of different horse poses. Time the drawings- give about 15 seconds to 1 minute per drawing. Vary the times within each session. Use a watch. Students will be drawing the "able-to-bend stick figure with circles.

Make it fun by interjecting some racing lingo: "Horses are in the starting gates".. "And we're off".... "Down the backstretch" "Over the finish line". Break



between drawings to set up the next pose.

We are not trying to produce “finished” work. In fact, we are totally ignoring the context of our figure. Our goal is to grow comfortable with rendering the proportions of the stick figure, focus on gesture, to learn how horses move; and perhaps most of all to **DO**, instead of think. I suspect you will be surprised at how interesting some of these drawings will be.

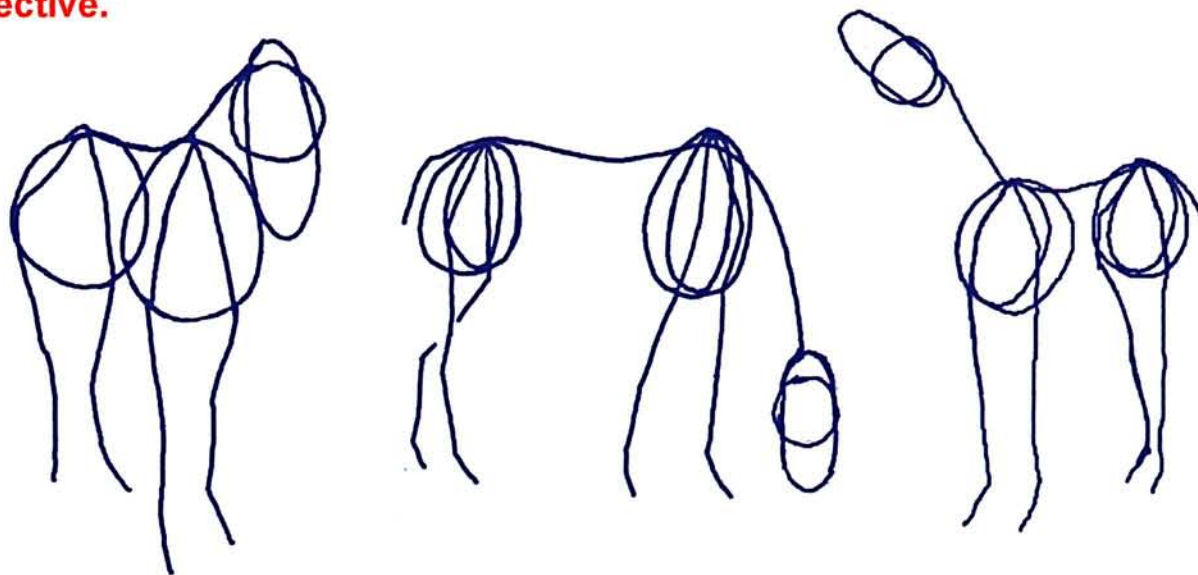
Stay with a profile- two dimensional view. Once you are comfortable with the profile you can expand to a more three dimensional view. This shift may occur within this exercise, if so, go with it.

Take some time to look at your work and the work of others. Discuss what you like and don't and why. *Is your horse figure maintaining its proportions? Take this opportunity to notice the quality of the lines, and the expression they create.*

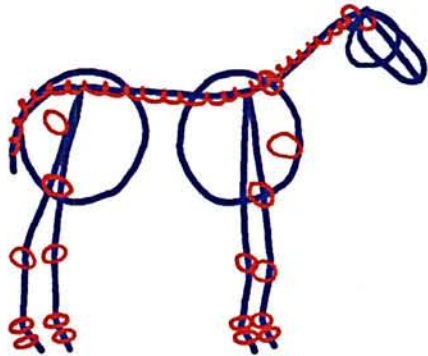
This is the **BASIC WARM-UP EXERCISE**. Repeat this exercise, often.

C. YOUR HORSE FROM OTHER VIEWS

Once you are comfortable with the profile figure, create one that represents three dimensionality. Keep the same general proportions. Note that the circles turn into spheres. Remember all that we learned from looking at the horse: like the shape of the head and neck and where the legs connect with the body. With a change of position, some parts appear to be shorter. Think **perspective**.



RELATED EXERCISES:



1. **Where are the JOINTS?** Take a previous session's stick figure drawings and use them as the basis for another project. With a different colored writing implement, **go over each stick figure and indicate which parts move:** the joints (the spine can be drawn as a spring.) This helps the artist to begin to see how his/her figure can move. You could also end up a daily drawing session applying this exercise to a single drawing to remind a student where the movement occurs.

2. **Draw, superimpose, the stick horse over each picture.**

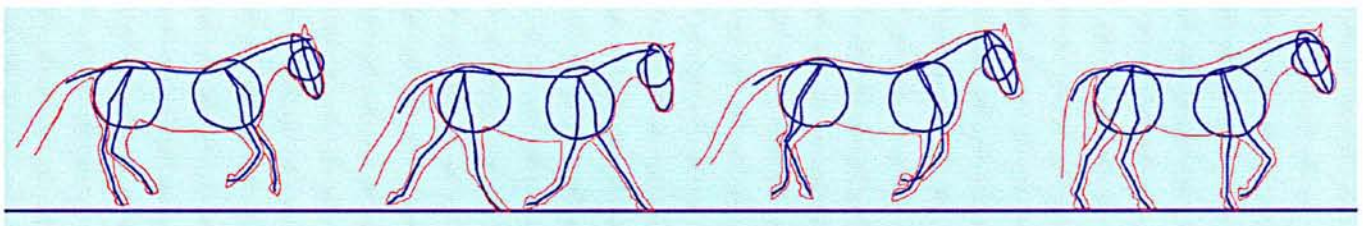
Provide pictures of horses: cutouts from magazines, outlines, copies from books, illustrations. To be able to reuse, and not "consume" the horse pictures, use a piece of plastic or transparency film as an overlay and draw with an erasable marker. Again do this in a format of short timed exercise.



3. **Put Some Meat on Those Bones- and Maybe a Tail, Too.**

Use some of the quick sketches that you made in "Off to the Races" as the foundation for more developed drawings.

Expand the working time to a couple of minutes for each sketch. Work with sweeping, flowing lines. Seek some line variation, perhaps wider, bolder lines underneath the belly or for the curve of a neck. See how easily an active, and gestural drawing evolves from the stick figures.



4. More of a Finished Drawing

When the Meat on Those Bones exercise becomes easy and flowing, it is natural to go on to **produce more finished drawings**.

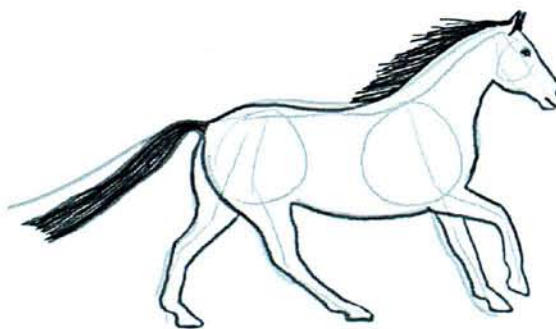
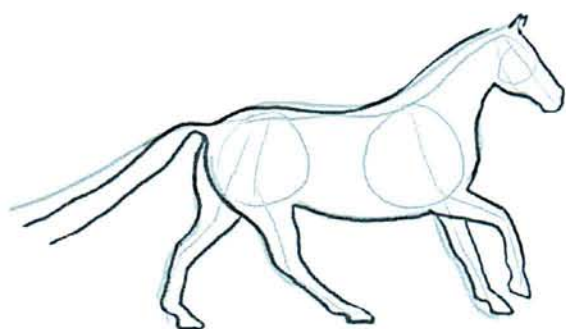


Begin by lightly drawing an initial stick and gestural drawings: dark enough to see and guide you, but light enough to fade into the drawing as it progresses. (As here pictured- it is darker than needed- but done so you can really see it.) Remember it was the gesture that gave the figure a sense of life and potential for movement.



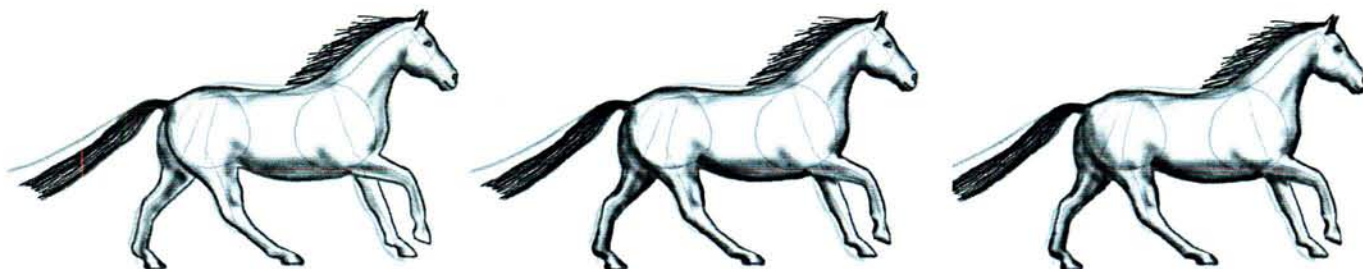
Begin the “add the meat to the bones” process- with some bold flowing lines that capture the movement.

Refine and complete the flowing lines that outline the horse: the top line, under the head, neck and belly, the tail. Outline the legs and head. Add tail and mane and other detail, like the eyes. (This could be done later.)



Indicate **form** with areas of shading; the illusion of form is created with the use of light and dark areas. Transition your thinking from two to three dimensional space. Transform the circles in the shoulder and hindquarters into spheres. Within the figure continue to draw gesture, searching for shapes created by the bone and muscle structures.

Note how simply shading in mainly the underneath portions of the horse's body, dramatically creates an illusion of three dimensionality, sense of reality. Here is an example of how the shading is initiated, refined and refined, again.



As a way to get you thinking in terms of how light helps you define shape, you might try a simple exercise of observing and then drawing a single rounded object, like a ball or a piece of fruit. Place the object in a dramatic lighting situation. Note that where the light shines most directly on the object, the object appears the lightest and brightest. And where the light cannot reach, i.e. underneath, it is dark. The areas in between are transition shades between light and dark. (Note that if the object is composed of sides- that are flat planes (as in a cube), the light within each plane appears to be about the same; but each different plane of the object will appear to be various shades of light to dark.)

Well, back to horses... additional observations: While in the walk, the horse's posture has a vertical feel; while in the trot it has a more diagonal look/feel; and in the canter and gallop (a very fast and more extended canter) the horse in some strides is more dramatically curled up and in the air, in other strides, is more extended, and at times looks like it is falling forward. While in the fastest gallop, the legs on same side no more than 90 degrees apart.

Another tip to creating a realistic scene with multiple horses is to make sure they are in different poses. While they all may be doing the same thing, like grazing, or galloping off, make sure each assumes a variation of this posture. For example, remember learning that within the trot there is a series of different steps comprising this stride?

5. Note Cards

As a supplemental exercise, select some of the images from the exercises and reproduce them onto better papers to make note cards.

3-D WIRE PROJECT

Using a light weight, easy to manipulate wire, wrap and weave a horse figure.

MATERIALS

Wire.

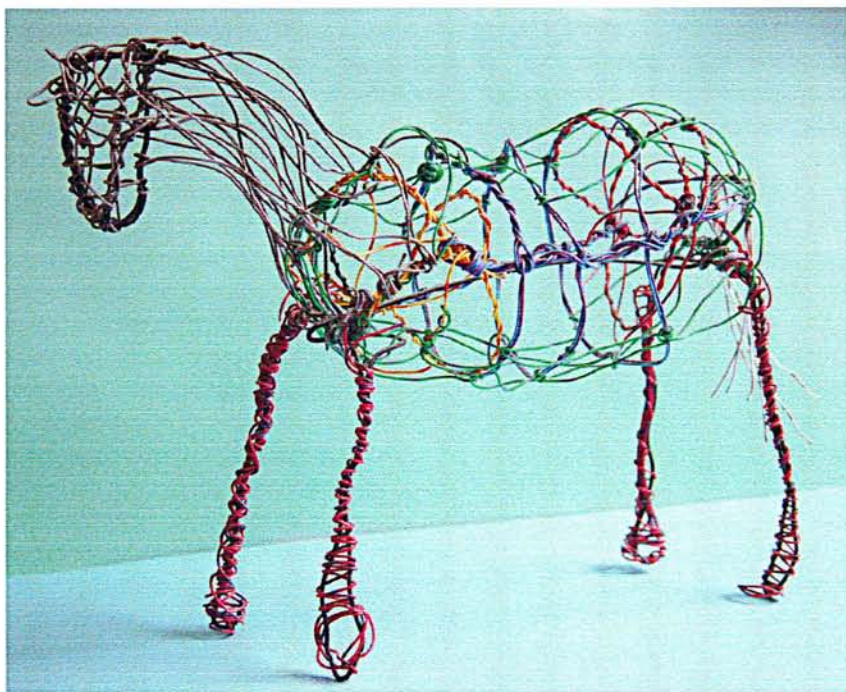
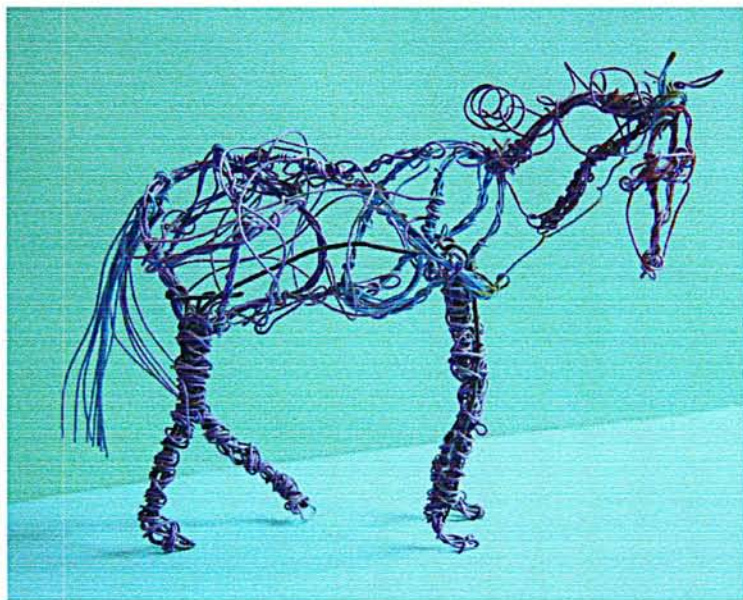
Lightweight, easy to manipulate. Recycled telephone wire is colorful, easy to manipulate and is already cut into manageable lengths.

Pliers, or wire cutters.

PROCESS

Begin by **deciding what pose or posture** your figure will assume. Is it in an upright, alert to danger pose; head down and eating pose; walking, trotting or cantering; lying down? A few quick sketches may help you figure this out.

Construct an armature, or a support base, not unlike a skeleton. This framework establishes the basic structure and gesture of the figure. The sculpture hangs from and is supported by the armature. This can be made with a heavier weight wire or with the wire you will use in the entire figure.

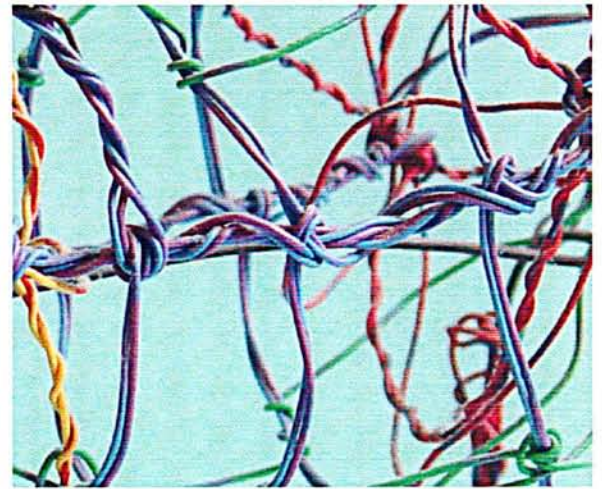


The sculpture hangs from and is supported by the armature. This can be made with a heavier weight wire or with the wire you will use in the entire figure.

Remember what you have done with the stick figures. Remember proportions. From the very beginning and throughout the process, look to create a three dimensional roundness or **form**. Turn your sculpture often, looking at it from different viewpoints .

of view.

Weave a web of wire, as you build up the form. To strengthen the integrity of the whole, where you cross a wire that is already a part of the sculpture, wrap your working wire around it and continue around the form. (As the buildup of wire becomes dense, you may only need to wrap around one of every several wires you cross.) Build up the form, like a spider weaves its web.

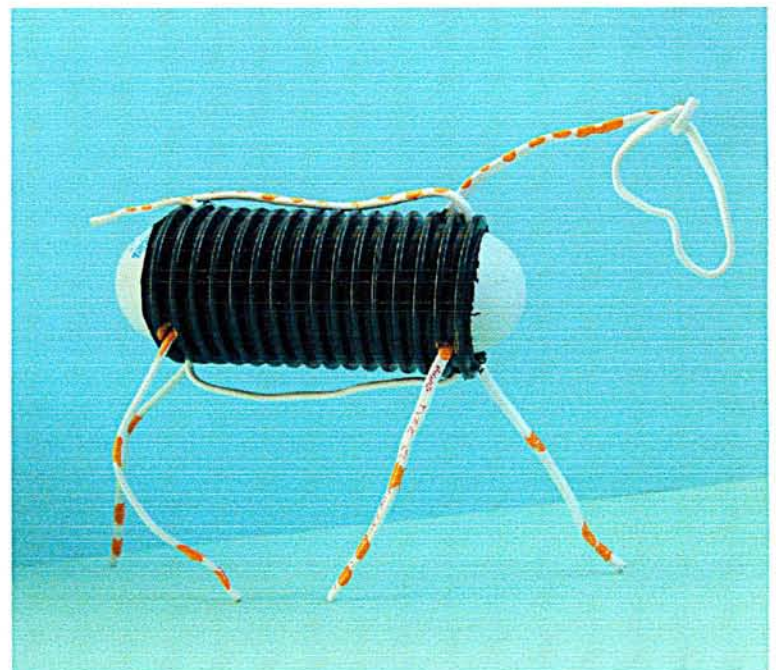


Take care to maintain the overall three dimensional form of the piece. Remember to continually rotate your sculpture. If the wire is easily malleable, you periodically may have to reform its overall shape.

A JOINT (AS IN CONNECTED) PROJECT

This is a three dimensional project where you construct a learning tool, a horse which consists of flexible round pipe as the body and plastic coated wire for the head and neck, frame of the body and tail, and the legs.

The locations of the joints are a key element in the process of understanding motion and gesture. This figure can be manipulated and posed.



MATERIALS

Flexible round pipe, cut to a length dimension that is about twice as long as its diameter. At the hardware store I found a flexible pipe called a bilge hose. This hose was 1.5" in diameter and I cut it into 3 pieces. This hose costs about \$1.80 a foot, but is substantially cheaper by the roll.

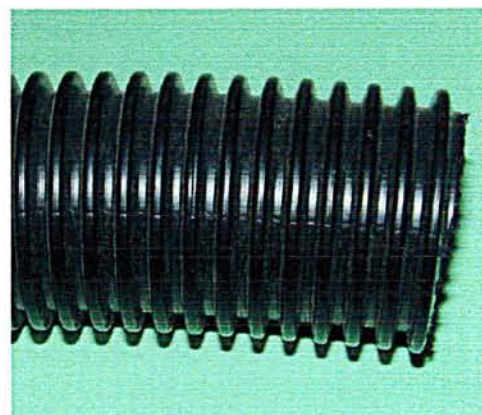
Ping-pong balls- 2 per horse (you can also buy these in bulk- try a games store)

Wire - easily malleable, yet stiff enough to hold its form. Experiment to see what works for you. I found a 14 too stiff. I used an 18-2 strand of electrical wire. (this ran me .09 cents a foot.)

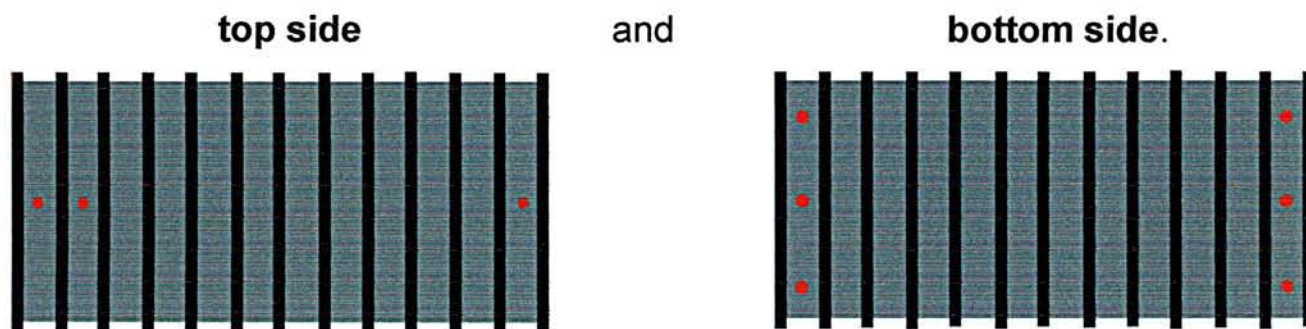
Drill and drill bit that is the size of the wire.

PROCESS

Cut the pipe to lengths that are approximately equivalent to 2x the diameter of the pipe. One piece will function as the horse's body. It's flexibility will hopefully reinforce the fact that the pliable backbone runs throughout the horse's body.

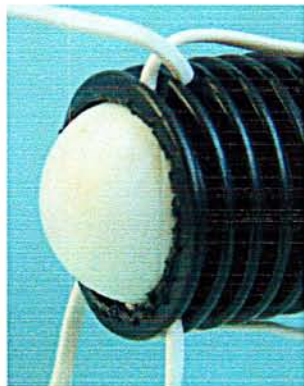
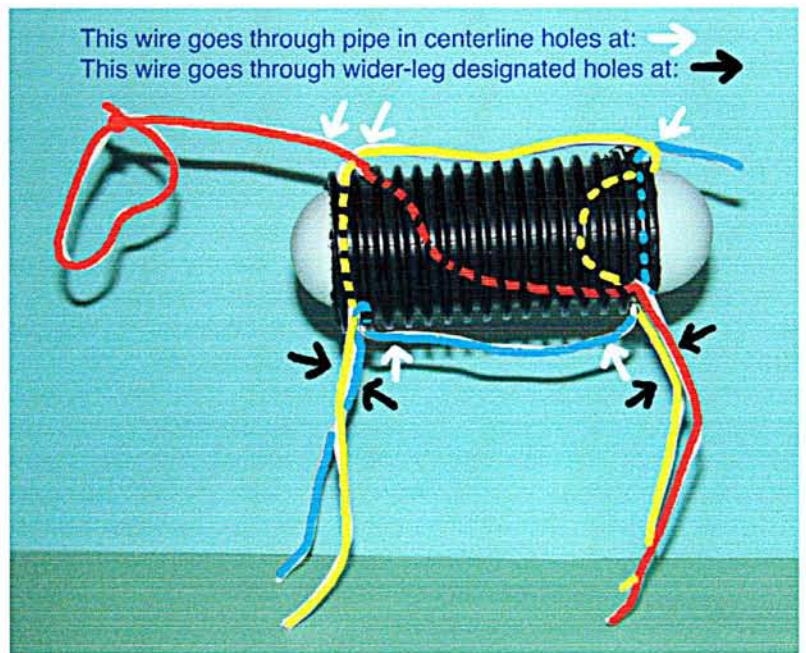


Drill holes (corresponding in size to the diameter of the wire) in the pipe: where you designate the:



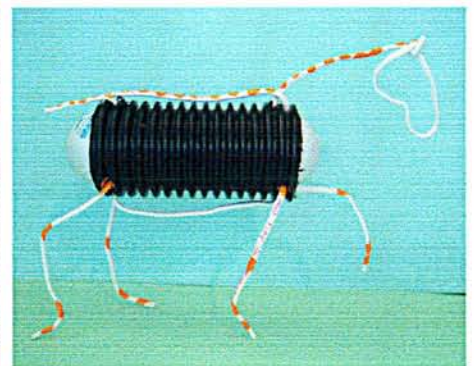
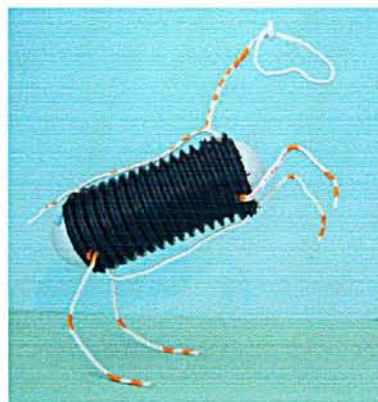
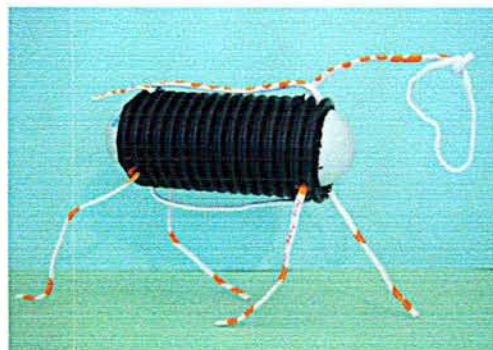
Wire for the back and tail, underbelly, the head and neck, and the legs will be threaded through these holes. The holes in the top and corresponding center holes in the bottom of the pipe run along the center of the horse. These accommodate wires for the back and tail, underbelly, and the head and neck. The remaining four holes on the bottom correspond to the placement of the legs.

The diagram here to the right shows one way to put the wires together for this project. Each color represents a different piece of wire. If you use another approach, make sure the legs are independent of one another, such that when you move one, another does not also move. Leave the wire longer than you think you may need it on each end. You can always cut it- but cannot make it longer later. Note that the over all length of the material used to make the legs, especially the back ones will actually be longer- since they are naturally always "bent".



Begin with the wires that do not go through the ping pong balls. The ping pong balls (which will block the opening) will eventually fit into both ends of the pipe- and will protrude about 1/2 way out of each end. I cut a hole in opposite ends of each ball and threaded the wire into the pipe, through the ball and out the other side of the pipe. If the pipe and balls are close in size- you may have to gently finesse this step.

Use paint and mark where the joints are located. Remember to bent the figure only where the joints are located. Now have fun manipulating the figure. Try you Daily Warm-Up with this figure!



BIBLIOGRAPHY AND RESOURCES

BOOKS:

ELLENBERGER, W., BAUM, H., DITTRICH, H., *An Atlas of Animal Anatomy for Artists*. New York: Dover Publications, Inc., 1949.
8 animals in detail. 7 additional.

HAMM, JACK, *How to Draw Animals*. New York: Perigee Books, Putnam Publishing Group, 1969.

LORISTON-CLARKE, JENNIE, *The Complete Guide of Dressage*. Philadelphia, PA: Running Press, 1987.

MACLAY, ELSIE, (text and poems), *The Art of Bev Doolittle*. New York: Bantam Books, 1990.

PERARD, VICTOR, revised by COOK, GLADYS EMERSON, *Drawing Horses*. New York: Pitman Publishing Corp., 1956.

This short book is to the point with many excellent illustrations. Emphasis on movement.

ROALF, PEGGY, *Looking At Paintings- Horses*. London: Belitha Press ,1992.

SMITH, FRANK, *How to Draw Horses & Ponies*. New York: RGA Publishing Group, Inc., 1986.

TAYLOR, BASIL, *Stubbs*, London: Phaidon Press Limited, 1971.