

How to Make a Poseable One of a Kind Art Doll

By: Megen Nelson



Figure 1: Poseable doll made by the author

Introduction

Making dolls has been practiced all over the world for hundreds of different reasons. Some dolls are made to entertain children, others to help young girls learn how to care for babies. Some are thought to be totems for fertility and wards for ghosts. Whatever the reason, humans have loved dolls for as long as civilization has existed.

These days making dolls has become an art form as well, with literally hundreds of different methods and techniques. Dolls can change from artist to artist, and so can technique, material, and design. There is no wrong way to make a doll. Experimentation is encouraged!

Poseable dolls can be made with ball-and-joint cores, wireframe, or simple moveable limbs. These instructions provide the process of making one certain type of doll, a *Poseable Wireframe Core Clay Headed Doll*. The instructions will be split into these sections:

- 1. Gathering Reference and Inspiration**
- 2. Planning Your Doll**
- 3. Creating the Wireframe Base**
- 4. Sculpting the Head and Feet**
- 5. Adding Foam**
- 6. Furring and Stuffing**
- 7. Finishing**

These instructions are intended for beginners who have never made a doll before, and also for experienced doll makers who may be interested in a different technique. There is room in these instructions for the reader to make a different type of doll, using the same basic materials but with a different design. This is a technique, not a hard set of rules, but they can be treated both ways.

Each section includes steps relevant to the section, and may also mention alternate methods of the process. A Troubleshooting section has been provided for common issues.

NOTE!

Making an art doll is very time intensive and can get expensive, so do not expect to be finished within a few hours. Rushing the process will only lead to frustration.

Materials

All of the items mentioned in this section can be found in most craft stores or online. Remember, with art supplies, cheaper is not often better. Always research the quality of the items you are thinking to buy.

Recommended Materials	Notes
2 rolls of Armature and Sculpture Wire. <ul style="list-style-type: none">• 1 roll of 10 ft 12 gauge (thicker wire).• 1 roll of 10 ft 14 gauge (thinner wire).	Wire is measured in gauges. The thinner the wire, the larger the gauge. 12 gauge wire is strong enough to support most dolls' weight, while the 14 gauge will be used to reinforce the wire to prevent breakage.
Cheap pad of paper and colored pencils	Paper can be any kind, but paper size must be large enough to fit the full size of your project. This will be used to make cloth patterns and design your project.
SuperSculpey Polymer Clay	SuperSculpey is easy to work with, high quality, makes very fine details, cures in the oven, and can be found in most craft stores.
Clay Tools	A cheap bargain pack of either clay or woodworking tools will work.
½ yard of either : <ul style="list-style-type: none">• 1 Inch Thick Upholstery Foam OR• ½ Inch Thick Upholstery Foam	This can be found in many fabric stores. Either size will work, though the thicker the foam, the less stuffing you need.
Needle and Thread	Preferably a strong thick needle and heavy-duty thread matching the color of your chosen fur.
1 or 2 Yards of Faux Fur	Choose the fur based on your preference and quality. Choose how many yards by deciding on the size of your finished project. Most craft stores do not carry high quality furs, but many dealers can be found online.
Acrylic Paint and Small Brushes	For painting the clay parts.
Hot Glue Gun	For attaching the head and feet, and for some seam-work.
Masking Tape	Any type.
Stuffing	For filling out the doll.
Scissors and Shaving Clippers	For cutting paper and fabric, and for trimming the fur.
Pliers	For bending the Armature Wire.
Aluminum Foil	For making the core of the clay head.
Tracing Paper	For making the cloth pattern.
Light and/or Dark Colored Chalk	For drawing out patterns on faux fur.
Black Marker	For drawing out patterns on cloth.
Sewing Pins	For pinning cloth together.
Cheap Felt	For the prototype of the Fur body

Tools

Prep and Finishing



Figure 2

Clay Materials



Figure 3

Filling and Furring



Figure 4

Gathering Reference and Inspiration

These are perhaps the most important steps in the process, and that is why they are not included in the “Planning Your Doll” section. Without reference, you could get stuck, and end up giving up on your doll. Having an idea of what you would like your doll to look like can make all the difference in the final design and your desire to finish what you started.

These instructions feature a fairytale type doll, with a fox head, antlers and clawed feet, but you can make it a cat, or remove the antlers, or even make it bipedal. That will all depend upon the reference you choose.

Materials Needed:

None but the internet.

Steps	Notes
<ol style="list-style-type: none">1. Look at other dolls or animals for inspiration and ideas. See Fig. 5 for examples of types of four-legged wireframe poseable clay-headed dolls available.	Good places to look for inspiration are art websites, such as DeviantArt, Etsy, or even Google. Tip on Searching Keywords: Searching terms like “OOAK art doll,” “Poseable art doll,” or simply “art doll” will bring up hundreds of results similar to the doll being made here.
<ol style="list-style-type: none">2. With your design in mind, research the anatomical structures of the creature you want your doll to resemble, such as the skeletal and muscle structure. See Fig.6 for example.	Looking at the anatomical structure of the bones of a canine was instrumental to the creation of the finished doll in these instructions. TIP! Even if the doll you want to make is exaggerated or fantastical, knowing how bone and muscles work will make your doll more stable and better designed.
<ol style="list-style-type: none">3. Gather the reference material and save it together in an easy to find folder. You will be using it a lot.	The doll in these instructions relied heavily on reference images of fennec foxes, deer antlers, and canine anatomical diagrams.



Figure 5: Different Types of 4 legged Poseable Art Dolls

Sources: Left (c) Woodsplitter Lee on DeviantArt, Right (c) Hikigane on DeviantArt

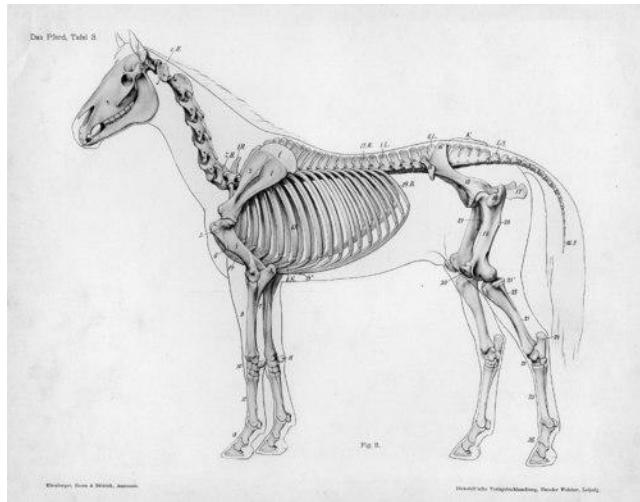


Figure 6: The skeletal structure of a horse, which can be used to plan the wireframe of a horse-like doll.

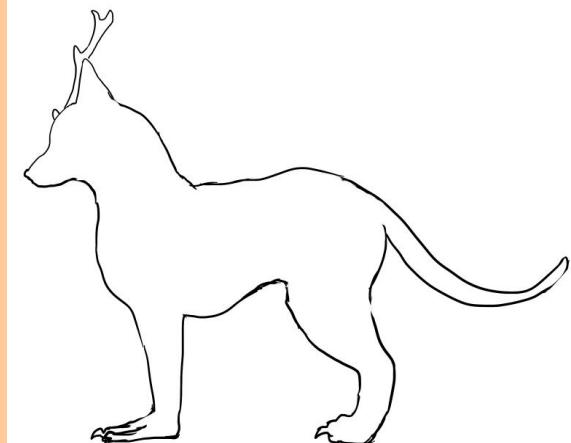
Source: Animal Anatomy for Artists by W. Ellenburger, H. Dittrich, and H. Baum

Planning Your Doll

Now that you've got all of your reference gathered, it's time to start planning your doll! Here is where all of your research comes together.

Materials Needed:

The references you gathered in the previous section.
Paper and Colored Pencils

Steps	Notes
1. Decide on the basic size you want your doll to be. The bigger it is, the easier it will be to make.	The doll made in these instructions is about 5 inches tall and 12 inches long. The size does not have to be exact. The process is rather organic.
2. Draw out a silhouette of your doll using paper and pencil at the exact size you decided on. Omit the fur for now, and focus on the underlying muscle structure.	<p>You should have something like this:</p>  <p>Figure 7</p> <p>TIP! Notice that this silhouette looks a bit like the one around the bone structure of the horse in Fig. 6. You can even trace the silhouette.</p>

3. Draw out the wireframe structure and the proportions of your doll. Include the clay parts and separate them by color.

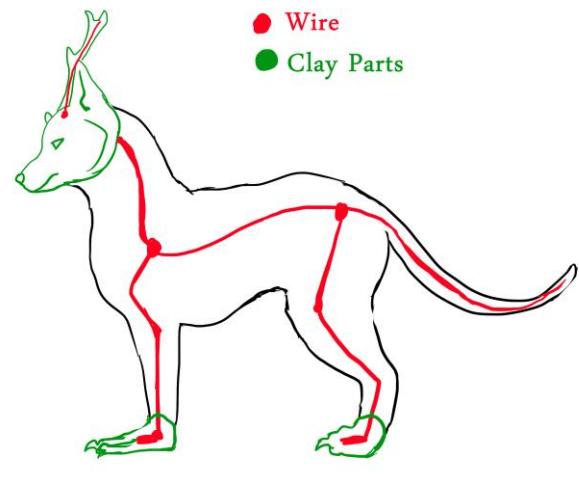


Figure 8

It's helpful to use different colors, that way you can tell at a glance what's what.

Rely on your anatomical references to help design the wireframe. The wireframe is like a very simplified skeletal structure for your doll.

4. Draw out where you will place the foam. The chest area needs the most filling out.

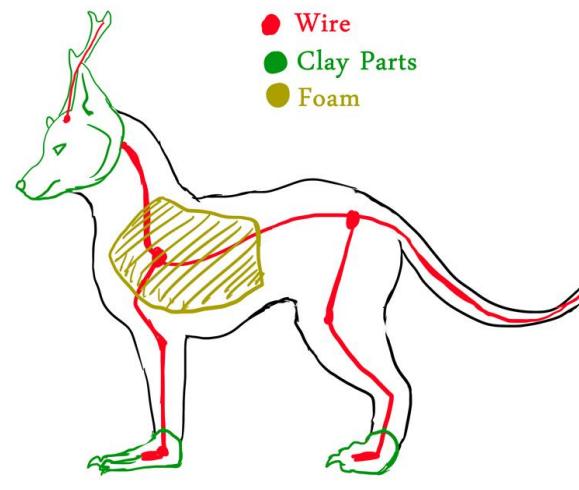


Figure 9

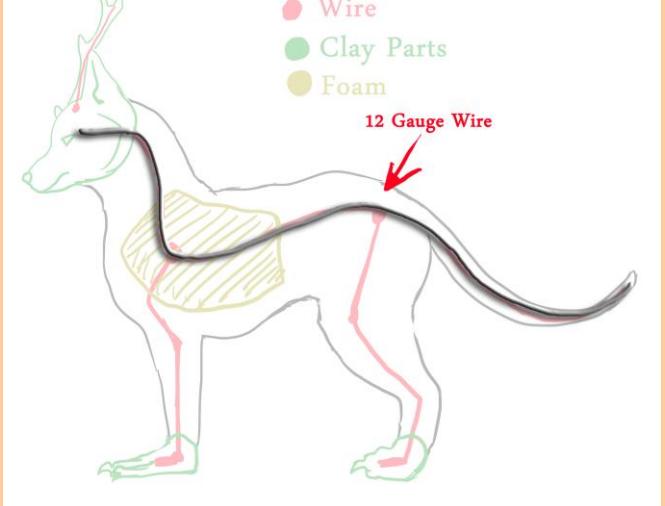
Adding the foam makes the chest area thicker and firmer.

Creating the Wireframe Base

With your doll planned out and ready to go, it's time to get started! This section will cover the creation of the wireframe base of your doll.

Materials Needed:

Your plans from the previous section
14 and 12 gauge Armature and Sculpture wire
Pliers
Masking tape

Steps	Notes
1. Take the roll of 12 Gauge Armature and Sculpture wire and cut off a length of about 2 feet.	WARNING! The wire is sharp when cut, and can hurt you.
2. Take your freshly cut 2 foot 12 gauge wire and align it along the "spine" of the doll in your plans, bending it into place.	 <p>Figure 10</p>

3. Leave about 1 inch of extra wire at the head so that you can attach the head later on.

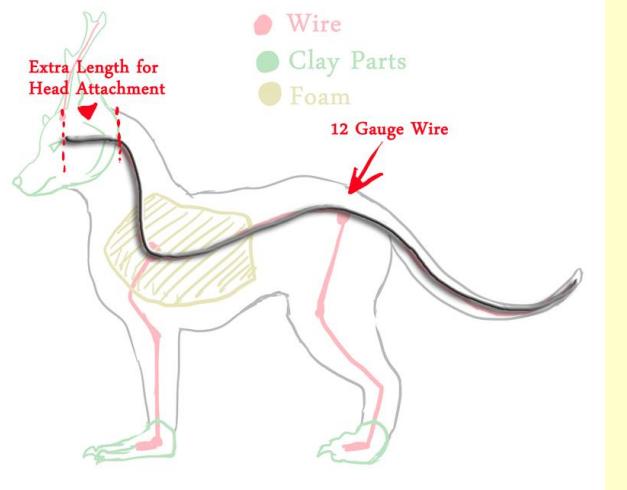


Figure 11

4. Cut off excess at the tail.
5. Cut off another 1 foot long length of 12 Gauge wire from the roll and align it to the front leg of your plans, bending it into place. Leave 2 or 3 inches at the top and bottom.

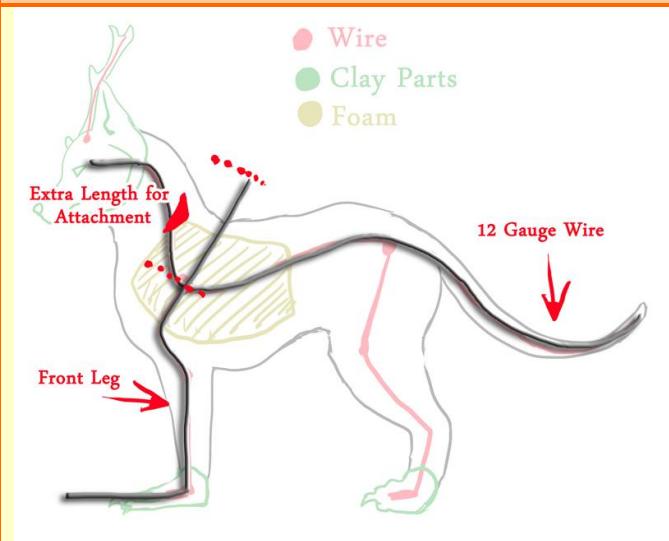


Figure 12

6. Leave the excess for now. Do not cut it, unless it reaches past the head.

7. Cut off another 1 foot long length of 12 gauge wire and align it to the back leg of your doll, bending it into place. Leave 2 or 3 inches at the top. Use pliers if need-be.

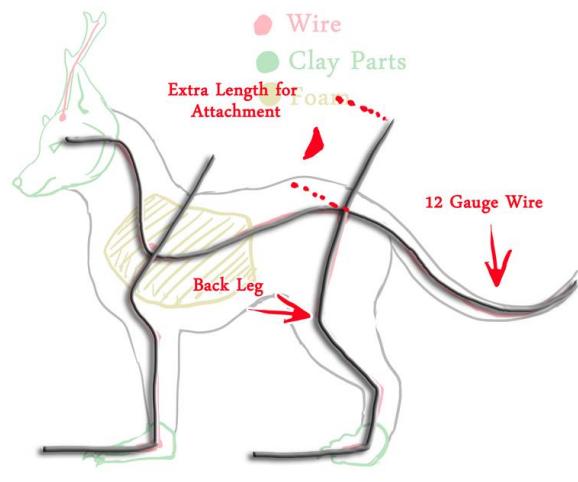


Figure 13

8. Bend the front leg wire **over** the spine, allowing about 1 inch of extra space between the leg and the spine to allow for the chest. Use pliers if need-be.



Figure 14
This allows room for the chest.

9. Using the extra 1 or 2 inches of the leg wire, wrap the top of the front leg around the spine. Use the pliers if needed.



Figure 15

10. Tape the leg into place with masking tape.



Figure 16

11. Now for the back leg. Bend the **back** leg wire **over** the spine, allowing about 1 inch of extra space.

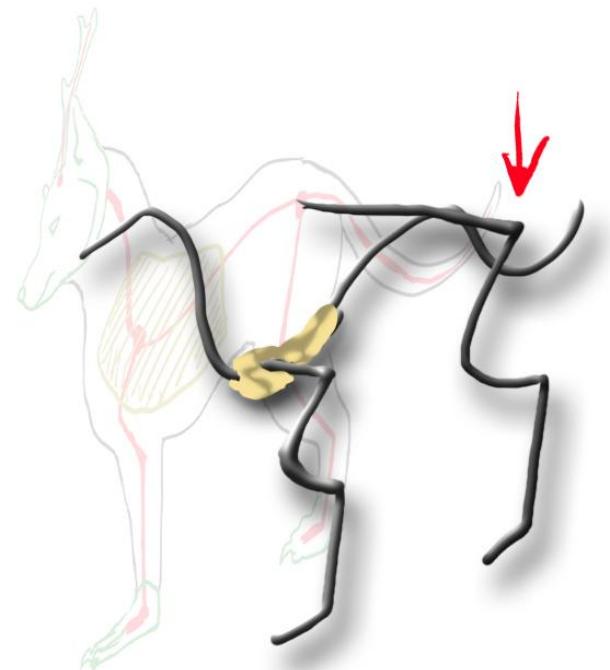


Figure 17

12. Using the extra 1 or 2 inches of the leg wire, wrap the top of the back leg around the spine. Use the pliers if needed.

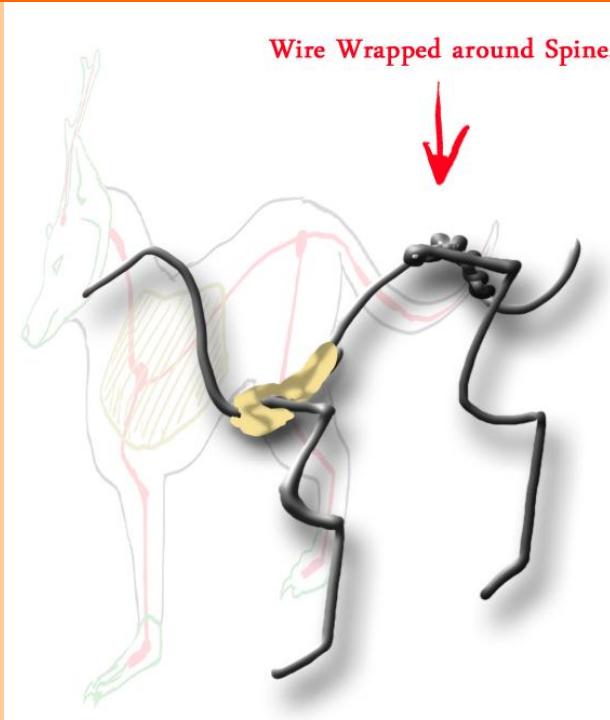


Figure 18

13. Tape the leg into place with masking tape.

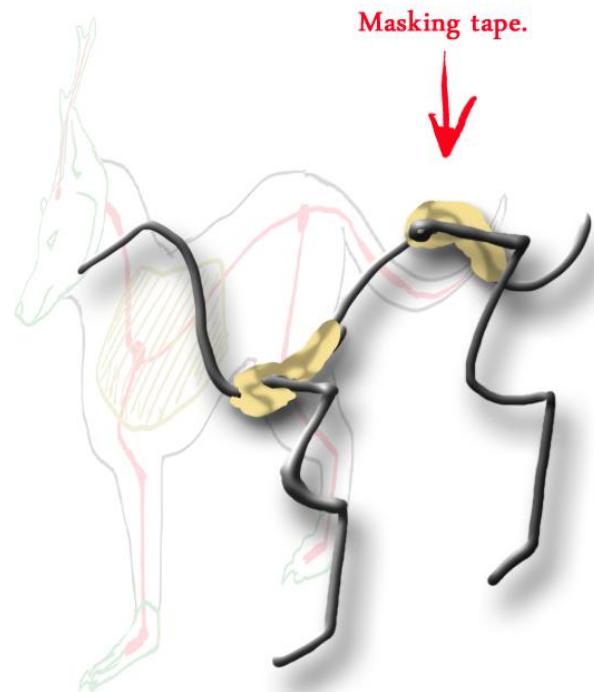


Figure 19

14. Repeat the process for the second front and back legs.



Figure 20
CHECK!

When finished attaching the legs, you should have something like this.

15. Now use the 14 gauge Armature wire and begin to reinforce the skeleton by wrapping the thinner wire around the thicker wire. Make sure the entire skeleton is covered.



Figure 21
CHECK!

Wrap the skeleton securely and thoroughly. You can't use too much wire in reinforcing.

16. When the neck can support at least 2 pounds of weight, and the skeleton can easily stand on its own, your wire framework is finished.

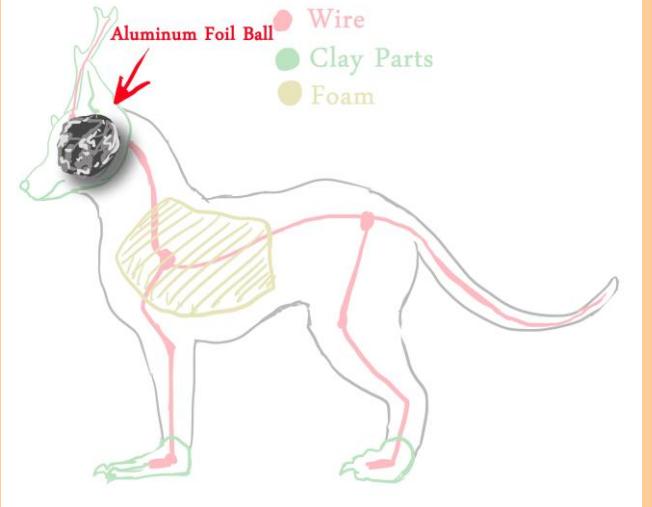
Sculpting the Head and Feet

This section covers the very basics of sculpting with SuperSculpey clay. This is an enormous subject in and of itself, and further research into the craft can only be beneficial. This is just a general summary of the sculpting process.

There are hundreds of ways to sculpt a subject, just as there are hundreds of ways to draw a picture. Keep in mind that this is only one technique.

Materials Needed:

Your plans from the previous section
The references you gathered in the first section
A Box of SuperSculpey Clay
Clay or Woodworking Tools
14 gauge Armature Wire
Aluminum Foil
Hot Glue Gun

Steps	Notes
1. Take a 6 inch wide length of aluminum foil from the roll and crush it into a ball. This will be the core of the clay head of your doll.	
2. Set the ball on the dolls head on your plans. The ball must be big enough to fit in the "brain" area. If it is too small, add more foil. If it's too big, tear some away.	 <p>Figure 22</p>

3. Once you have the right size, begin covering the aluminum ball with a $\frac{1}{4}$ inch layer of SuperSculpey. This provides the base for the clay head.

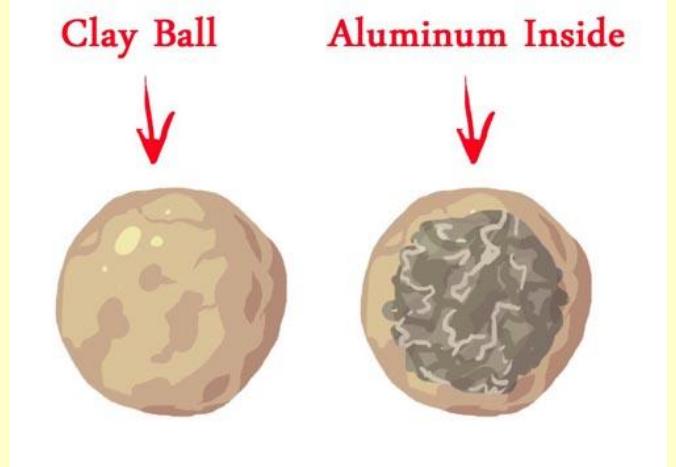


Figure 23

When no aluminum foil can be seen, you are finished. Try to make the layer as even as possible.

4. Using your references as guides, begin layering on lumps of clay, denoting the underlying muscle structure. It does not have to be perfect. **DO NOT BEGIN DETAILING.**

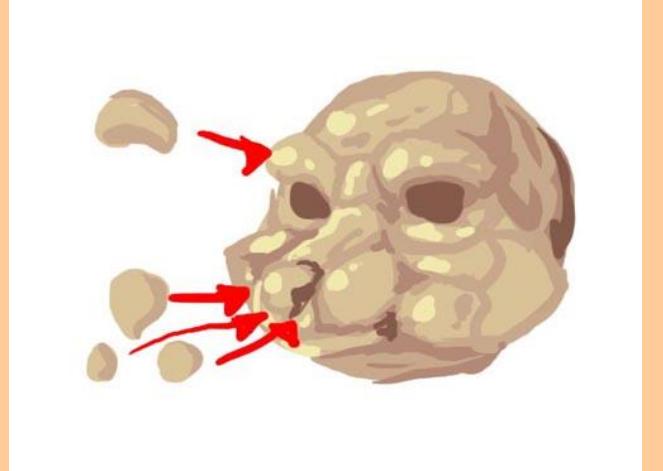


Figure 24

This process is like the “rough sketch.” Features can be moved and shifted around in this stage. Do not be afraid of making mistakes, because you can fix them. Use the clay tools and your fingers to help smooth down the lumps.

RELY ON REFERENCES HEAVILY!

5. To reinforce the longer horns, use a piece of 14 gauge wire about the length you want the horns to be, and cover the wire with a layer of clay.



Figure 25

NOTE ABOUT "FRAGILE" PIECES

SuperSculpey is strong, but it is not the strongest polymer clay when it comes to small protruding pieces. Mixing SuperSculpey with Kato polyclay, a stronger brand, will strengthen these smaller parts. But this is not required.

6. Leave a $\frac{1}{2}$ inch length of the wire at the bottom of the horn so that you can attach it to the head.



Figure 26

7. When the head looks even on all sides (front, back, both left and right sides, and below) you can begin detailing. Use a toothpick or the needle clay tool to make the texture of fur, using your reference as a guide.



Figure 27
When detailing fur, look closely at your references to see how the hairs lay on the face of the animal you are creating. Try to follow those patterns as you texture the clay.

NOTE ABOUT FINGERS AND PRESSURE

SuperSculpey can hold its shape very well as long as you keep light pressure on your fingers. Setting the head down will not hurt it. If some of the details get lost as you hold the head, it's very easy to redo them.

8. When you are finished texturing the head, set it aside in a cool, dark place and begin the feet.



Figure 28

9. Take four 4 inch long sections of 14 Gauge wire and bend them into L shapes, with the bottom of the L reaching into the middle of the foot on your plans.

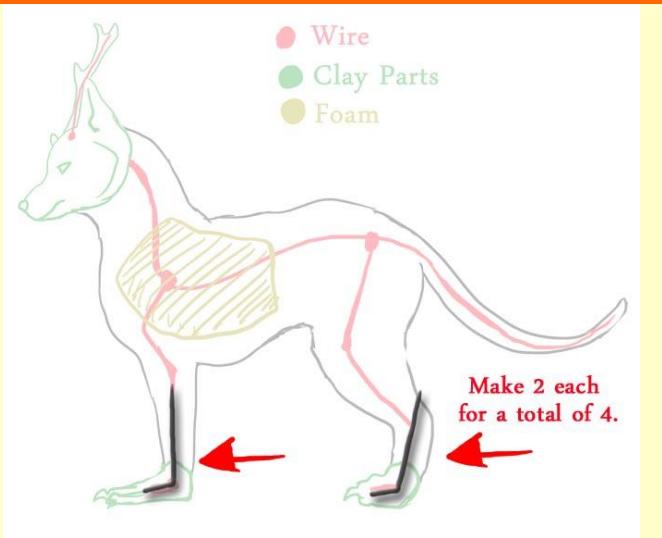


Figure 29

10. Reinforce this wire just like you reinforced the skeleton.

11. Begin layering the clay on the bottom line of the L shape to make a base for your clay to stick to. Leave at least 2 inches of free wire above the foot.



Figure 30

12. Using your references, begin building the underlying muscle structure of the feet.



Figure 31

Again, rely on your references and anatomical diagrams to do this.

13. Begin texturing the feet just like you did the head.



Figure 32

Pay attention to the way the hairs move on the feet.

14. When both the head and feet are finished, cut a hole in the back of the head and attach it to the neck of the skeleton.

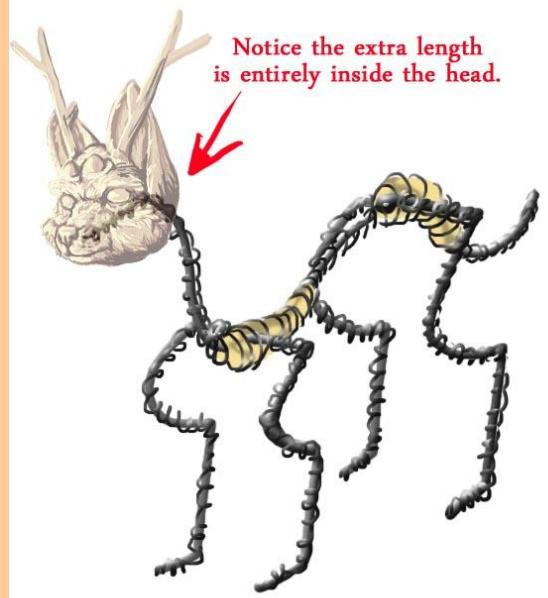


Figure 34

15. If the skeleton cannot support its weight, reinforce it more, until it can.

Bending the neck backwards can also help balance the head.

16. Cut off the bottom of ONE of the front feet of the skeleton.

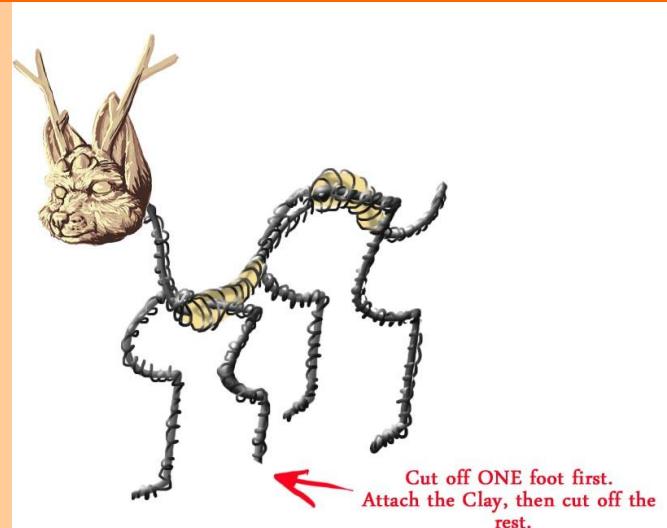


Figure 35

17. Attach the corresponding clay foot by wrapping the extra wire around the leg's skeleton. Repeat the process for the rest of the feet. Make sure the doll is able to balance on its own.

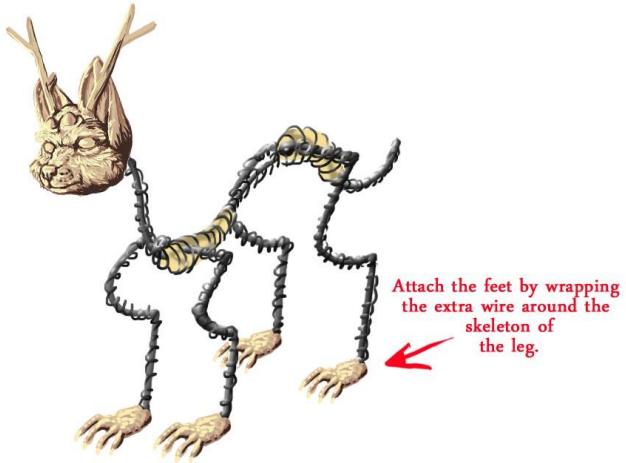


Figure 36

18. Place your skeleton on a baking tray covered with a sheet of aluminum foil.

19. Follow the baking instructions on the SuperSculpey box and bake your clay pieces.

20. When the clay is finished curing, wait for it to cool, and then use hot glue on the attachments to help reinforce them.

Hot Glue where the arrows point.

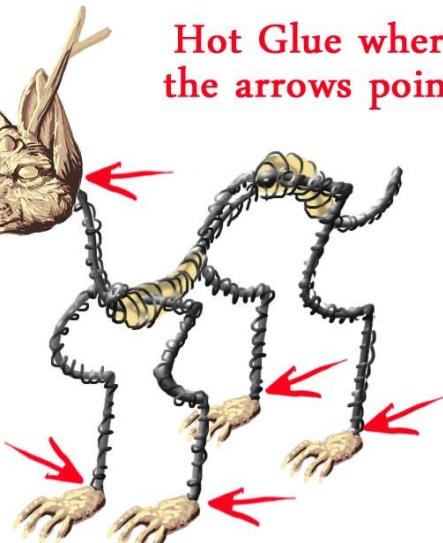


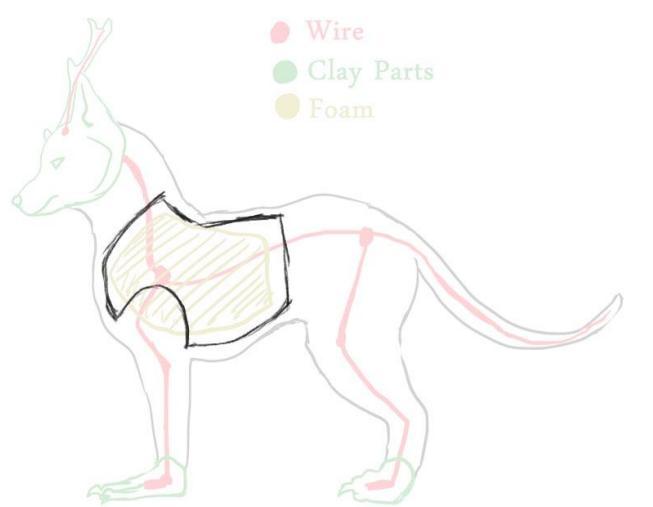
Figure 37

Adding Foam

This section covers adding foam parts to your doll. Adding foam helps the doll keep its shape and firmness. Dolls can also be made without foam parts. Experiment with the results and see which you like better.

Materials Needed:

Your plans
Needle and Thread
Upholstery Foam
Hot Glue Gun
Tracing Paper
Black Marker
Sewing Pins.
Scissors
Stuffing

Steps	Notes
1. Take your plans and use tracing paper to draw out $\frac{1}{2}$ of the chest piece. Leave about $\frac{1}{2}$ of extra to allow sewing.	 <p>Figure 38</p>
2. Cut out the drawing on the tracing paper and lay it on a corner of a sheet of upholstery foam.	
3. Trace the tracing paper shape with a marker.	The lines won't show, so don't worry about them.
4. Repeat step 3 to make 2 shapes.	

5. Cut out both foam shapes.



Figure 39

6. Pin the shapes together and make sure they fit in the chest area, leaving some space inside for filling.

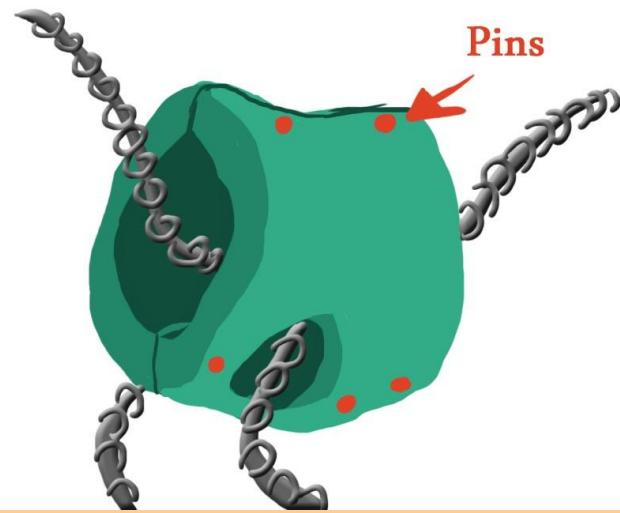


Figure 40

7. Roughly sew the shapes together along the spine.

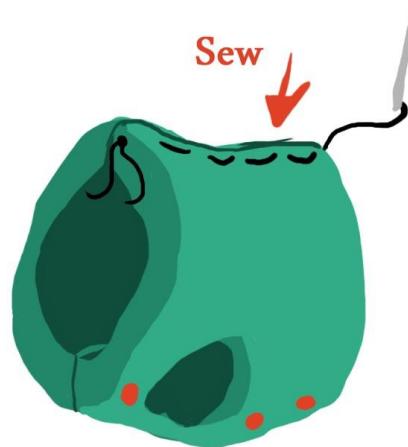


Figure 41

8. Hot glue the inside seam of the foam spine.

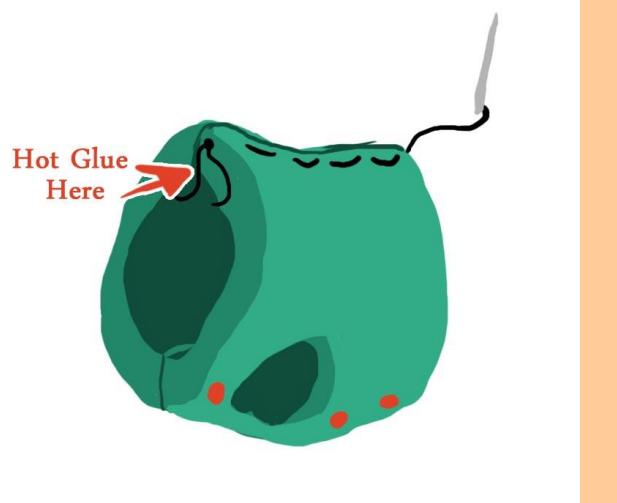


Figure 42

9. Place the chest on the skeleton and pin the belly seam together.



Figure 43

10. Roughly sew the belly seam.

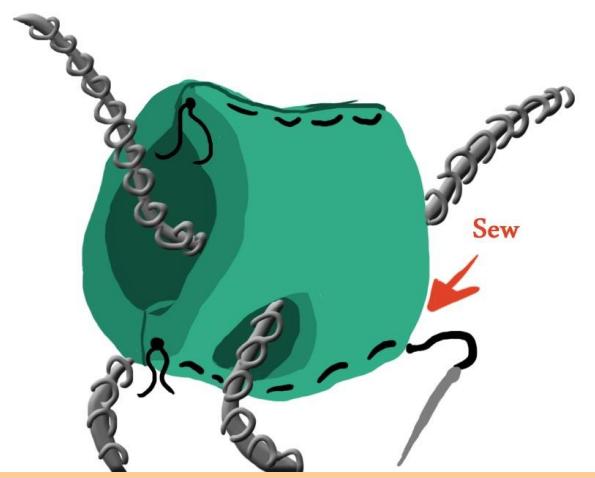


Figure 44

11. Hot glue the inside.



Figure 45

12. When the glue is dry, stuff the empty cavity with stuffing until it is firm.

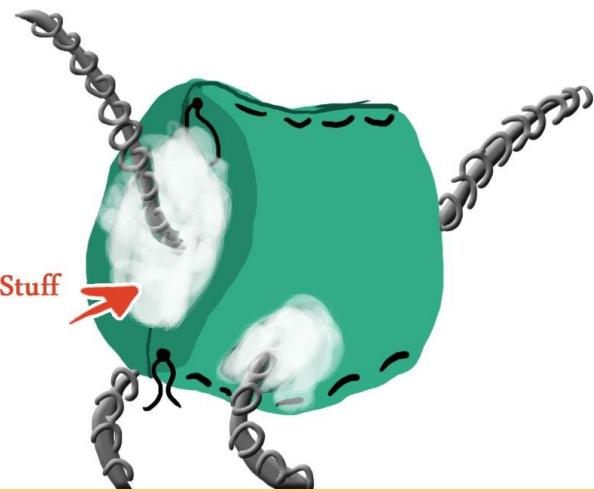


Figure 46

Furring and Stuffing

This section is a very brief overview of making an original sewing pattern and stuffing your doll. This subject, just like all the others in the creation of a doll, is enormous. Further research into the craft is encouraged.

Materials Needed:

Your plans
Needle and Thread
Faux Fur
Hot Glue Gun
Tracing Paper
Black Marker
Sewing Pins.
Scissors
Stuffing
Cheap paper
Cheap Felt
Chalk (light and/or dark)

Steps

1. Take your plans and use tracing paper to draw out the basic pattern of stitching on your doll. You should have 4 separate pieces: Neck, Body, Front Leg, and Back Leg. The tail will come later.

Notes

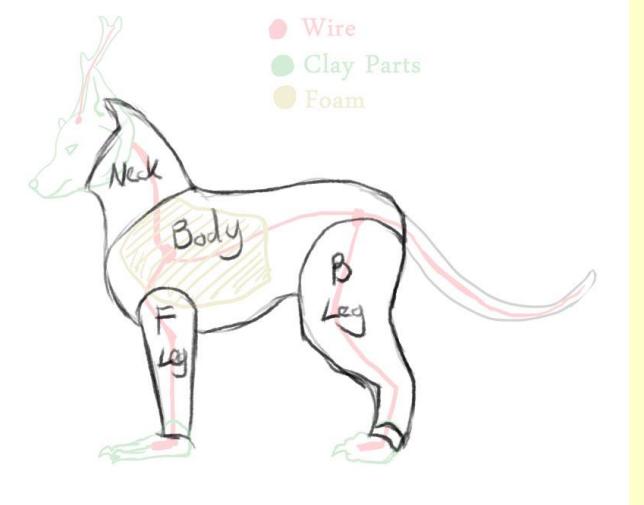


Figure 47
Label the pieces.

2. Draw out an estimate of the cloth you will need to cover $\frac{1}{2}$ of your doll, allowing for at least $\frac{1}{2}$ inch of seam allowance.



Figure 48

3. Trace your patterns onto a sheet or two of cheap paper.

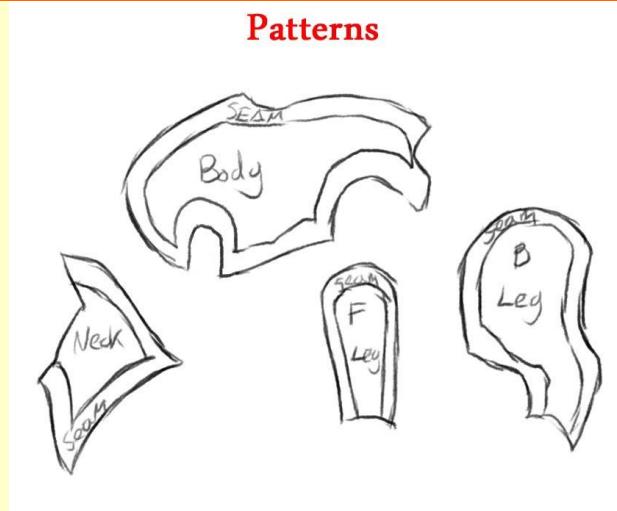


Figure 49

4. Modify the inside of the legs account for the body.



Modified

5. Create a connecting piece for the belly similar to Fig.

Figure 50

Belly



6. You should have 13 separate pieces drawn out.
- 2 pieces for the neck.
 - 2 pieces for the body.
 - 2 for the right front leg.
 - 2 for the left front leg.
 - 2 for the back right leg.
 - 2 for the left back leg.
 - 1 for the belly

Figure 51

13 Pieces

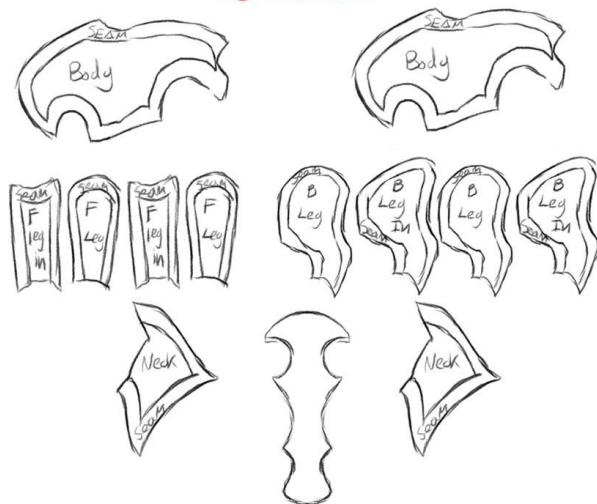


Figure 52

7. Cut out all 13 of your paper pieces.

8. Pin all of the pieces together and adjust where needed.

Pin Paper Together

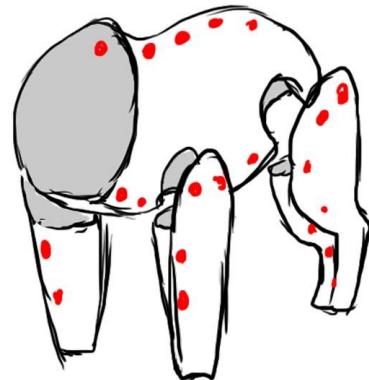


Figure 53

This is a hit and miss process. Draw and redraw until you've got something that works.

9. When the paper patterns fit together, trace them all out onto some cheap felt.

10. Cut out each of the patterns just like you cut them from the paper.

11. Pin the felt together around the skeleton, making sure everything fits.

Pin Felt Together

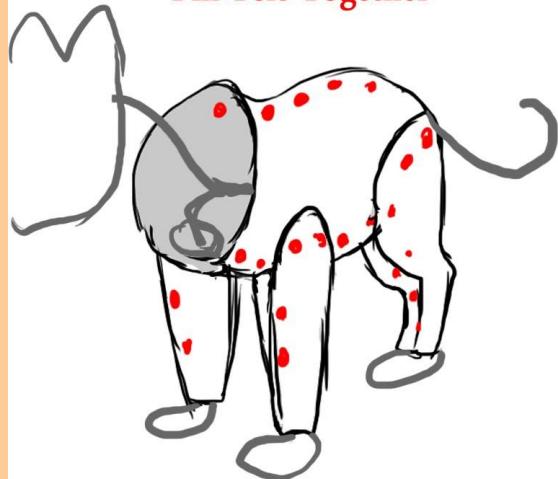


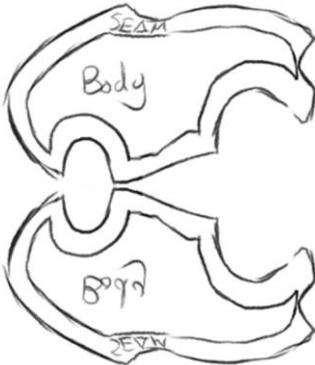
Figure 54

12. Take the felt off the skeleton and adjust where needed.

13. Begin sewing the felt together with needle and

ALTERNATE METHOD

If you have a sewing machine, you can use that. It

thread.	will cut down on time.
14. Stuff the felt to make sure the body looks like you want it to.	
15. Adjust the patterns where needed.	
16. When you are satisfied with the paper and felt pattern, it is time to move on to the faux fur.	
17. REMEMBER! when you trace your patterns onto the faux fur, you have to mirror them.	<p>Mirror the Pieces</p> 
	That way the fur will always be on the outside.
18. Trace all 12 pieces onto the reverse side of the faux fur you bought using light colored chalk for dark colors, and dark colored chalk for light colors.	Try to use as little of the faux fur if you can, to save for future projects.
19. Pin the neck pieces to the body pieces.	

20. Turn the fur inside out so that the fur is inside.

Fur on the Inside

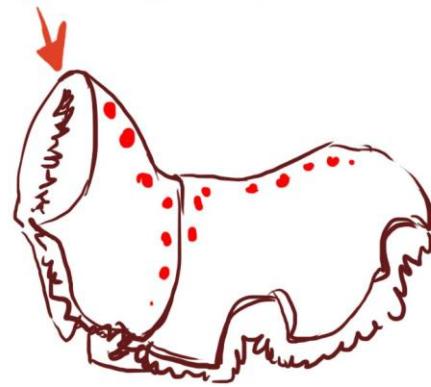
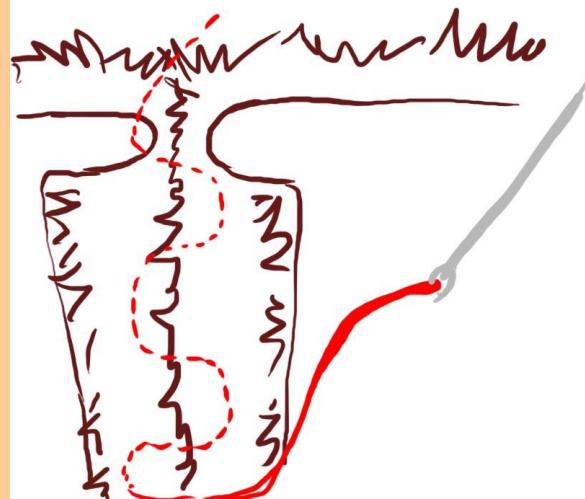


Figure 56

21. Sew along the spine and attach the neck halfway.
 22. Pin all four legs together.
 23. Pin them to the body.
 24. Sew the legs to the **BODY**.
 25. Carefully turn the patterns fur-side out.
 26. Carefully put the furred pattern onto the skeleton.
 27. Use a ladder stitch to sew the chest and legs together.

Ladder Stitch



28. Begin filling the doll with stuffing at the neck and belly until it is firm.

Poke the stuffing down into the legs to fill them out.

29. Sew up the remainder of the doll.

30. Hot glue the fur to the clay

parts.	
31. Cut out a 1 wide long strip of faux fur that matches the length of the tail.	
32. Wrap this strip to the tail and hot glue it into place.	<p>WARNING!</p> <p>Avoid getting hot glue on the fur, as this will make it stiff.</p>

Finishing

Applaud yourself for getting this far! You're nearly there! Now you just have to add the finishing touches.

This section will describe the finishing of the doll, giving it those last touch ups that make it look its best.

Materials Needed:

References
Paint
Paint brushes
Clippers
Scissors

Steps	Notes
1. Choose a paint and paint the clay pieces, denoting the eyes, nose, etc. Use your references if you need them.	ALTERNATE METHOD! If you have an airbrush, airbrushing details over the fur can help make the doll stand out even more.
2. Use the clippers and scissors to trim down some of the fur, especially on the legs. This will give the doll a more finished appearance.	
3. Pose the doll, and you're finished!	

Troubleshooting

“My clay burned!”

Don’t panic! As long as your clay isn’t a black smoldering coal, everything is okay. Burning is expected on the thinner pieces of clay.

“I got hot glue in the faux fur!”

Cut it out as best you can without leaving a hole in the fur.

“My wire snapped while I was working with it.”

Don’t worry, you can reattach it using extra wire and masking tape.

“A clay piece broke after it cured.”

You can glue it back together and repaint it to hide the crack.

“I crushed my soft head by mistake!”

Oops! Well, looks like you’ll have to start over!

“A seam ripped!”

Use a ladder stitch and close it as best you can.

Sources

1. Poseable doll examples from **Fig. 5** by Woodsplitter Lee on Deviantart
<http://wood-splitter-lee.deviantart.com/>
2. Poseable doll example from **Fig. 5** by Hikigane on Deviantart
<http://hikigane.deviantart.com/>
3. Horse skeletal diagram in **Fig. 6** taken from the book “Animal Anatomy for Artists” by W. Ellenberger, H Dittrich, and H. Baum, Edited by Lewis S. Brown. Published by Dover, ISBN: 0-486-2008 2-5

All other illustrations and artwork done by the author.