

Raccoon Sculpture Project Guide

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Follow along to create an original clay sculpture at the Learn Sculpture YouTube Channel. Join professional sculptor Vicky Oldham for live-streaming lessons online at www.YouTube.com/LearnSculpture. Imagine how fast you can advance in your knowledge and ability when you have the opportunity to benefit from another professional sculptor's 30+ years experience!



Raccoon Sculpture Project Guide.
Drawings and instructional materials by Vicky Oldham
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Why Project Guides?

It's all about learning how to master proportions. Difficulty with proportions is, hands down, the number one problem for beginning sculptors.

If a sculptor hopes to portray lifelike subjects with fidelity to accuracy and detail, depicting true-to-life proportions is essential.

Think about the times you've seen a beautifully finished sculpture with great detail, movement, and flair. It could be a large figure cast in bronze or a sculpture displayed in a fine art gallery. Unfortunately, something about it bothers you, but it's hard to tell exactly what.

Look a little closer, and you'll see that the proportions are just wrong. Commonly, the head is too large for the body. Additionally, the body may need to be deeper or longer. Feet, paws, hands, and other parts may look mismatched. If you aim to sculpt realistically, how you render proportions can make or break your work. As a beginner, getting proportions right can be really daunting. Even after a lot of practice, it's still very challenging. That's because your point of view is continuously shifting. Without reliance on measurements, every shape becomes an elastic mass, and you end up with mismatched parts. If your goal is to create stylized or impressionistic designs, you'll still need to understand managing proportions. Experienced sculptors who work in abstract or impressionistic styles still understand proportions but intentionally take creative liberty in the search for originality.

Our guides designed to help you understand these concepts by putting them into practice. Knowing how to judge proportions, helps you achieve a more satisfying result. With careful measuring and attention to detail, you may be pleasantly surprised by your efforts, especially if this is your first attempt at sculpture!

Tools and Materials

First, gather your materials. For this project, you'll need clay, sculpting tools, artist brushes, and measuring tools.

Clay: preferably oil-based clay such as plasteline. You can use any kind of clay that you like, but oil-based clay is helpful for learning because it won't dry out. Professional sculptors use clays produced by long-established companies like Chavant.com, especially those who plan to cast their work in bronze. I like Clayette by Chavant and prefer the hard styling clay. See the pages at the end of this guide for more information about clay.

Sculpting Tools: your hands are your best tools! However, several sculpture tools will enable you to create tiny details or realistic textures. Pad and hoop tools are just a few; see LearnSculpture.org for more information about sculpting tools.

Artist Brushes:

- Use small brushes for smoothing and refining fine details.
- Use a brush dry or sparingly with isopropyl alcohol, mineral oil, or Vaseline®.
- Dip the brush into a small jar of alcohol to clean off excess clay.
- Use alcohol and solvents in moderation with your clay (to avoid dissolving the clay's material composition).

Measuring Tools: may include string, tape measures, calipers, or a proportional divider. In addition to measuring patterns at actual size, a proportional divider will allow you to accurately enlarge or reduce your sculpture while maintaining the original design's proportion.

Establishing Proportions

To establish the correct proportions of your subject, it's a great idea to make sketches from reference photos that show your subject *from different angles at the same distance*.



Method for Sketching Sculpture Proportion Reference:

- Use online videos, pause them at full screen, and take screenshots.
- Open screenshots in Adobe Photoshop or other image editing software.
- Crop, copy and paste images to view them in the same workspace,
- Resize images to “match” in size. For example, if you’re working on a head study of an animal, make the side view, 3/4 view and front view so they appear as if viewed at the same distance.
- In the above example, the “matched” head sizes were printed out and their outlines were pencil-traced by hand to ensure shape and proportion accuracy. The drawings were completed by hand, without tracing to get an idea of how the forms flow into each other. You could also use a proportional divider to accurately draw the subject. By starting with some method of copying at first is helpful to ensure accuracy (unless you’re a master draftsman and can do it perfectly just by looking—some people can!) In essence, you’re making a proportion guide to help you plan your sculpture.

Sketches to Print and Measure on the Following Pages:

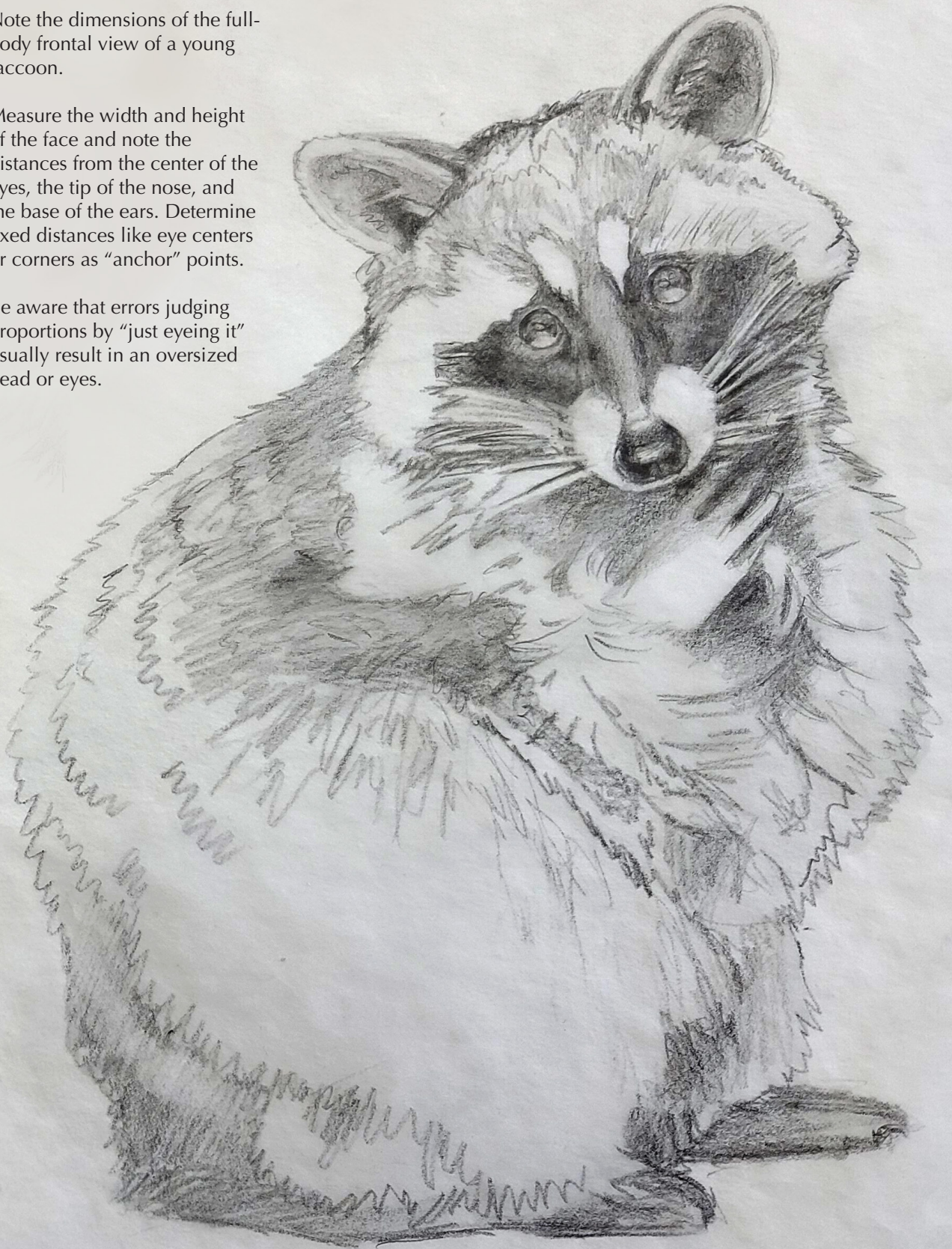
Photos or sketches of your subject from different angles help to establish a sculpture's proportions. In the following pages, you'll find sketches of a raccoon from various angles (as if seen at the same distance) intended to serve as a measuring guide for a smaller-than-life-size sculpture.

For best results, print out the sketches and keep them by your work table to measure key distances as you work. Make your own sketches, too, starting with some form of tracing from a photo (to ensure accuracy of proportions) and then completing the sketch by direct observation. A lot of detail emerges in the planning stages that will save you time and give you better results as you proceed to the clay modeling stage.

Note the dimensions of the full-body frontal view of a young raccoon.

Measure the width and height of the face and note the distances from the center of the eyes, the tip of the nose, and the base of the ears. Determine fixed distances like eye centers or corners as "anchor" points.

Be aware that errors judging proportions by "just eyeing it" usually result in an oversized head or eyes.



Raccoon Sketch by Vicky Oldham

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Measure the length from the nose tip to the center of the eyes at this angle.

Measure the width and height of the ears, and the distance from the base of the ears to the tip of the nose or center of the eye.

Do the same measurements in reverse on the other side of the head.



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Measure the length from the nose tip to the center of the eyes and tip of nose at this angle.

Measure the width and height of the ears, and the distance from the base of the ears to the tip of the nose or center of the eye.

Also, measure the depth of the head, from top to bottom and ears to nose tip. Note and measure placement of ears from this angle.

Do the same measurements in reverse on the other side of the head.



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Measure the length from the nose tip to the center of the eyes at this angle.

Measure the width and height of the ears, and the distance from the base of the ears to the tip of the nose or center of the eye.

Do the same measurements in reverse on the other side of the head.



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Raccoon Design Ideas



Raccoons with corn - design ideas generated by Adobe Firefly.

Using AI to Suggest Poses

Design ideas may be generated using artificial intelligence programs like Adobe Firefly (<https://firefly.adobe.com/>). The raccoon poses were generated using the text prompt: "A raccoon sitting up holding Indian corn." A reference photo of a raccoon was uploaded to Firefly to encourage the rendering of a realistic-looking animal. AI may help generate ideas that have not occurred to you before. It's not intended to replace your creativity but to inspire your own original ideas. Think of using AI as a "thought partner."



More About Sculpture Clay



Clayette is the type of oil-based we have enjoyed using for projects at Learn Sculpture. It is a product of Chavant, a company which makes a variety of sculpting and modeling clays, not only for fine artists, but also for specialized industrial designers (makers of automobiles and other commercial products).

You can use several types of modeling material to learn how to sculpt. Each type of clay has advantages and disadvantages.

Oil-based Clay: Also known as modeling clay or plasticine, our original sculpture models use this clay, as shown in the videos. Since it is not water-based clay, it will not dry out or crack and stays workable virtually forever. The only reason to cover it is to keep the dust off between working sessions. A plastic storage bag or box is all you need to protect your clay and sculpture in progress.

Plasticine clay is excellent for those interested in learning how to sculpt due to its ease of use and ability to capture subtle detail, combined with its self-supporting qualities. Plasticine is also the top choice of professional sculptors who require maximum flexibility during creation and wish to reproduce their works in a more permanent medium later on (like bronze, resin, pewter, or marble). The sculptor often begins the process with soft clay to work out the general design flow on a small scale. A miniature sculpture study is known as a “maquette.” Then, using firmer clay, a fully detailed sculpture is made. If the sculptor plans to produce work in a monument-suitable medium such as bronze, mold-making proceeds on the clay. Often, mold-making requires the expert help of a reputable foundry. The foundry can also enlarge the piece to life-size and beyond for casting in bronze.

Polymer Clay: Another non-water-based clay is polymer clay, like Sculpey®. This clay is usually baked hard in the oven and painted for permanent display after completing your sculpture. Many successful doll makers also use it. The disadvantage of polymer clay is that it may not be suitable for every sculpture design and may crack under too much weight or stress.

Water-based Clay: Many sculptors prefer using earthenware, terracotta, porcelain, and other water-based clays. Refined detail is possible with water-based clay as well. However, once the clay begins to dry out, it is challenging to avoid cracks (which can ruin the design). The clay may also not be changed once it starts to harden (the “leather hard” stage). Firing in a kiln may be necessary to attain permanency, but fired sculpture may be further decorated and re-fired with various glazes.

Wax: Some sculptors prefer to make their original sculptures in wax. Cool wax may be extremely hard compared to plasticine and often requires heated tools to join forms together. The advantage of wax is its readiness for use in the “lost wax” process when casting in a metal material (like bronze). However, wax does not offer the same degree of flexibility if you hope to make significant changes before mold making.

Armature: An armature is a framework (usually metal or wood) inside the clay to give a sculpture extra strength and support. None of the clay models in our videos require any armature (or internal support), partly because they are small and compact. Although the armature may support weak areas of the sculpture, it also restricts the ability to make any significant changes. Armature also makes sculpture reproduction more difficult because cutting through metal may be required to dissect the piece for mold making.

Work Area: Your work area can be super simple and doesn’t require much space. Remember that your oil-based clay could make marks on some surfaces, so placing your clay and sculpture on a firm base is a good idea. You can also use things on hand, such as a tile or tray. Even a paper plate can be helpful to keep clay off your table. In the later stages of your sculpture, a turn table (or lazy susan) makes a good base that allows you to rotate your sculpture 360 degrees as you work.

Lighting: It’s a good idea to have an adjustable desk lamp to position over your work area. Controlled lighting with good contrast will help you balance and refine your clay model’s details. A fluorescent, daylight-spectrum bulb, at least 100 watts, is recommended.

Softening Plasticine (oil-based) Clay: If you want to quickly soften a small amount of oil based clay, you can use a small, adjustable desk lamp with a 75-watt incandescent spotlight bulb. Keep the light bulb at least 8 - 10 inches away from the clay so there's no chance of accidental melting, and stay nearby to monitor it as it warms. Place aluminum foil under the clay during the warming process.

A plate warmer or slow cooker set on low may also be used to warm lots of clay at once. To keep the workspace neat, clay can be enclosed in aluminum foil or other heat-resistant containers as it warms to soften. Just be careful not to get the clay too hot since it can liquify at high temperatures.

Tools: There are many kinds of tools available for working in clay, but the three categories of tools most recommended are wire hoop tools, flat spatula-like tools, and brushes.

Visit LearnSculpture.Org for more information about the clay and tools used in Charles Oldham's sculpture videos.

What To Do Next...

Once your clay sculpture is finished, photograph it (please do!...see below), crush it in your hands to make a new sculpture, or—take it to the next level by making a mold on it.

If you have used oil-based modeling clay and want to display your sculpture, you most certainly can, but it will be vulnerable to damage unless protected under a protective display. Since this type of clay's purpose is primarily to design the sculpture and is not usually considered a finished product, the next step is to consider making a mold.

A mold will allow you to cast your clay sculpture in a more permanent material, such as hydrostone or hydrocal (plaster of Paris) resin, ceramic, or bronze. Better yet, it will allow you to reproduce your sculpture, resulting in multiple copies. There are many choices for moldmaking techniques depending on the material used, but the simplest method involves pouring silicone rubber over properly sectioned parts of your sculpture. When the rubber mold cures, liquid casting material is poured into the mold. The casting material solidifies, and when the mold is removed and cleaned, the result is the final sculpture, or the "cast."

Since most beginning sculptors lack knowledge about mold making, consider taking your clay sculpture to a bronze foundry for an estimate by experienced mold makers. Besides bronze, many shops can help you reproduce your work in plaster or hydrocal for further refinement or as a finished product if you prefer to avoid

metal casting (which is very expensive!). There are also experienced ceramic mold makers (although today, more challenging to find) to help you create works in terracotta or porcelain.

Photograph Your Work!

Photographing your work provides a record of your progress and allows you to create a portfolio that you can post online or use in other presentations. Photographing a sculpture is reasonably straightforward. For example, focus an adjustable lamp about 20 inches above the sculpture, away from a wall or other object (to prevent casting sharp shadows behind it). Avoid using a built-in camera flash. By positioning the light above and using no flash, you can precisely control how the sculpture looks in your final picture. If you have one, a tripod will also prevent any blur in the final image. If you don't have a tripod, hold the camera as still as possible and ensure enough ambient light in the room, in addition to your adjustable lamp positioned over the sculpture.

Send Us Your Pictures!

Send photos of your finished sculpture for posting at LearnSculpture.org.

Email to:

learnsculpture@gmail.com. We look forward to seeing your work!