

*Gestures*TM



Make a mold of your hand and then make a permanent cast of it. Paint it with the enclosed bronze paint or leave it white and seal it with the enclosed gloss paint.



MOLDING & CASTING

MOLD-IT™ GESTURES™

Read directions thoroughly before starting.

Mold-It Gestures is a fascinating, educational, and creative introduction to the mold-making process. Learn how and why paleontologists and archaeologists use mold making to duplicate precious, rare fossils and artifacts. Learn about the different kinds of molds and molding materials. With this kit, make a *Seamless Mold* of your hand. Once the mold is made, make a permanent cast from the mold. Give the cast to a friend.

MATERIALS PROVIDED

- Information about various types of molds. Instructions on how to make a seamless mold.
- Molding material (Mold-It) to make a mold of an object.
- Casting material (PerfectCast) to cast the object that was molded. To cast additional pieces, PerfectCast is available from your local retailer.
- Bronze paint, gloss sealer and paint brush.
- Molding bucket

MATERIALS NEEDED

- Newspaper to absorb excess molding and casting material.
- Larger than ½ gallon bowl to mix the Mold-It and PerfectCast material.
- Measuring cup to measure water.
- Whisk to mix Mold-It and PerfectCast.
- Watch or clock with second hand.

INSTRUCTIONS

See pages 4 - 7

Adult supervision suggested

WARNING: Don't place hand in casting material (PerfectCast) while it is hardening. Don't pour excess material into drain or toilet bowl. Dispose of excess material in garbage.

Mold Making

WHO MAKES MOLDS AND WHY

Natural history museums, educational institutions, and others who search for real fossils have good reason to duplicate their finds. Many fossil finds are rare and in some cases represent one-of-a-kind fossils. In other cases, they may represent the best or most complete specimens in the world. Many fossils are fragile and can't be shipped around the world without risk of damage. The only way to allow study by paleontologists around the world is to provide them with exact copies of original fossils along with copies of journals and photographs of excavation sites.

Experienced mold makers have developed techniques that enable them to make molds of fragile fossils without fear of damage. Casts can then be made from the molds and finished to look exactly like the originals. In fact, paleontologists can take partially complete fossils and, with other fossil fragments, sculpt what the original would have looked like by "filling in the blanks." The sale of these fossil replicas helps finance searches for more fossils as well as providing other paleontologists an inexpensive source of fossil material for study. Many museums use these copies of real fossils in their displays to the public.

TYPES OF MOLDS

There are three popular materials used to make molds: silicone, latex, and material like Mold-It which is included in this kit. The novice mold maker should learn the basics of mold making using kits like the Eyewitness Mold-It Gestures Kit or making latex molds as taught in the book *Mold Making* by Skullduggery.

This Cast & Paint kit contains Mold-It, a powder that, when mixed with water, hardens within a few minutes. This type of mold material is generally used by dentists. It is not used professionally for making molds of items from which many casts will be made. It is perfect for a kit like Mold-It Gestures because it is easy to use, requires little time to make a mold, is easy to clean up and is non toxic. Another advantage of this material is that it is flexible, even an original with small undercuts (any cavity or depression that may hinder the removal of an original from the mold) can be demolded (removing cast from mold) without damage to the mold or cast.

The mold made from Mold-It is excellent for beginners. However, this molding material disintegrates quickly. To make a mold that lasts, it is necessary to work with other molding materials used to make more permanent molds.

Latex and silicone are two popular materials. They are strong and pick up exceptional detail. Latex rubber is a fast-drying water-based product that cleans up quickly and easily. It is a nontoxic, one-part system that requires no measuring and no mixing. Just brush latex on a well-prepared original, and soon

you will have a long-lasting, professional mold. Latex may be used on originals made of metal, clay, plaster, wood, plastic or glass; no special treatment is necessary for most surfaces.

Silicone is a two-part mold-making material that can be used to produce a mold in 24 hours. Silicone is most often used on high-volume production molds but is not necessary for most applications. In order to use silicone properly, a gas extractor system is required. Without gas extraction, air bubbles will remain in the mixture and will appear on the underside of the item being molded. When casts are made from molds that have not been gas extracted, small half-spheres will appear on the surface of the castings where the bubbles settled in the mold. Many of the techniques used in making latex molds are also used in making silicone molds.

There are two basic mold designs. The simplest and easiest of the two is the Seamless Mold (SM). This particular mold is appropriate if your original has no undercuts and has a wide, flat base that gets narrower the closer you get to the top (a cone-shape). Although there is a side of the item that is not covered by molding material (generally the base), there are no seams in the mold.

The second type of mold is the Seam Line Mold (SLM). This type of mold is appropriate for more intricate originals. It allows for undercuts and other obstacles inherent in more complicated originals. It also allows molds to be made that encompass all sides of the original. These molds will have seams wherever there is a protrusion that can't be pulled out of a seamless mold or whenever a mold is made of all surfaces of an item (no base).

An SLM cannot be made with the Mold-It material. Mold-It material is appropriate for one-piece SM molds only.

INSTRUCTIONS

Find an area with a flat, level, stable working surface, such as a counter-top, desktop or table. Make sure the surface is waterproof; some excess water may spill out of your container. Place newspaper or some other absorbent covering on your work surface.

IMPORTANT!!!

Mold-It (package with blue lettering) sets (hardens) in 3½ minutes from the time it is added to water. Pay attention and adhere to the times in the instructions. Hot weather may reduce the time it takes Mold-It to set. Do not use well water with Mold-It, use city or distilled water.

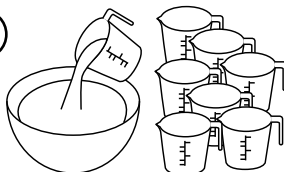
MOLDING INSTRUCTIONS

①



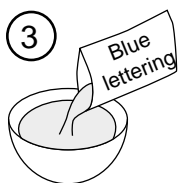
Items you will need: Measuring cup, whisk, large mixing bowl (larger than 1/2 gallon), and newspaper.

②



Place newspaper on your working surface to absorb any excess molding or casting material. Carefully measure 8 cups of cool tap water into your large mixing bowl. **Do not use well water.**

③

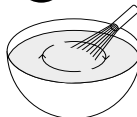


Pour entire contents of bag of Mold-It molding material (the bag with the blue lettering) into the large mixing bowl while whisking.



Start timing now!

④



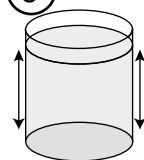
Mix Mold-It molding material and water vigorously with a whisk for 90 seconds. Be careful not to add air to the mixture. Remove all large lumps. Small lumps are OK.

⑤



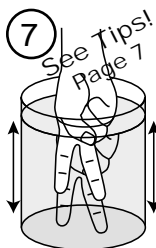
Pour mixed molding material into molding bucket.

⑥



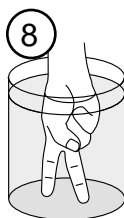
Bang bucket on the work surface for 20 seconds to release any air bubbles trapped in the mixture.

⑦



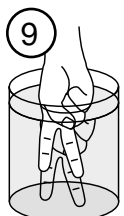
Form your gesture with your hand and slowly insert it into the bucket of molding material. Move your hand up and down in the bucket several times to totally coat your hand.

⑧



Hold your hand very steady for 2 minutes. Don't touch the bottom or the sides of the bucket. The material will become firm. Keep your hand in the bucket for an additional 5 minutes.

⑨



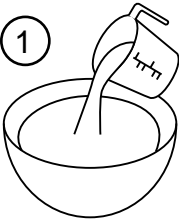
Gently rock your wrist back and forth to break the seal. Slowly wiggle your hand and fingers. Once the seal is broken you will feel and hear a soft suction sound. Your hand should slide out easily.

⑩

Clean your mixing bowl and whisk by peeling the molding material and discard it in the trash. Do not dump into the sink.

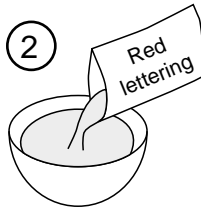
CASTING INSTRUCTIONS

1



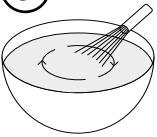
Carefully measure 9 ounces of cool tap water into your large mixing bowl.

2



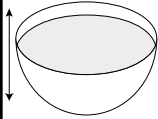
Pour entire contents of the bag of PerfectCast casting material (the bag with the red lettering) into the large mixing bowl.

3



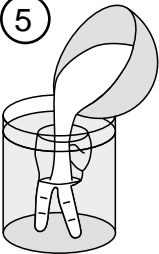
Mix the PerfectCast casting material and water with the whisk for 2 minutes.

4



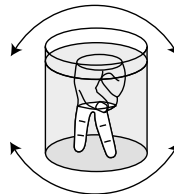
Bang the PerfectCast mixture on the table to release trapped air bubbles. Take your time as the PerfectCast will not set for many minutes.

5



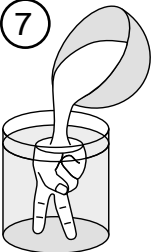
Pour PerfectCast mixture into the mold about halfway to the top. Do not fill to the top until you complete step 6.

6



Gently tip and rotate the half-filled mold to dislodge any air bubbles that may have been trapped.

7



Pour the remaining PerfectCast mixture into the mold until it is filled to the top.

8



Gently tap the container on the table to release any remaining air bubbles. **DO NOT BANG THE CONTAINER.**

9

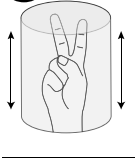
Discard excess PerfectCast material in the trash. **DO NOT DISPOSE IN THE SINK OR TOILET BOWL.** Wash your mixing bowl and whisk immediately, before it hardens.

10

Let the PerfectCast casting material dry for at least one hour.

DEMOLDING AND FINISHING

1



Turn the molding bucket upside down and gently bang the bucket in an up and down motion until the mold releases from the bucket.

2



Carefully peel away the Mold-It to expose the customized Gesture cast. Take your time removing the Mold-It from all the nooks and crannies. Use a toothpick or paper clip for the smaller areas.

3



Wait a few more hours before painting to allow the cast to thoroughly dry. Paint the cast with either the bronze paint, the gloss sealer, or leave the cast as it is.

TIPS FOR A BETTER CAST

1

Make sure that any fingers not pointed down, curl around and touch the palm of your hand. If any finger tips are pointed up, you are likely to trap air in the mold and the tips of the fingers will not be filled with casting material.

2

The most delicate parts of the mold are the fingernails. When pulling your hand out of the mold, make sure that you keep the tips of the fingers straight with as little pressure as possible on the fingernails. For best results, cut fingernails short.

3

A mold in which the top (opening of the mold) is smaller than other parts of the mold may result in a mold that tears. If you are molding a hand, the wrist is smaller than the hand. Therefore, when molding the hand, keep part of the back of the hand out of the mixture in order to make a larger opening.

4

Wet your hand prior to inserting it into the Mold-It bucket. This will provide a cleaner release from the finished mold.

BIBLIOGRAPHY

Skullduggery, Inc. (1994), *Mold Making*, Skullduggery, Inc., USA

Download other Kit brochures at: <http://skullduggery.com>

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