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TIPS ON MAKING MASKS AT HOME

*Troubleshooting the wild world
of online tutorials*



FORM FOLLOWS FUNCTION

*What is a mask, what is
it doing, and what do
you need?*

WHAT IS THE FUNCTION OF A MASK

As form follows function, it is important to consider what you will be using the mask for before you begin

While masks take many forms, there are some basic things to keep in mind.

- A mask is meant to prevent infection of yourself and those around you
- The most effective masks (N95) use a combination of fiber blends, fiber weaves, and *proper fit* to prevent cross-contamination of subjects
- Homemade masks are meant to flatten the curve— reduce the likelihood of infection in public spaces, and therefore have a reduced total effectiveness
- The push by officials to wear masks is an attempt to establish **sustainable public health practices** to protect those most at risk

Things a mask should not do:

- **SUFFOCATE YOU.**
- Be so uncomfortable you cannot wear it for long periods, or don't want to wear it
- Require constant adjustment and therefore much, much face touching



BEFORE YOU BEGIN

The two main rules of sewing

1. Form follows function– what you make is a reflection of what you need.
2. Start simple– complicate with comfort

Questions to ask yourself before you begin

- **What will you be using the mask for?**
 - If you are going to visit high risk folks, or you are high risk– I strongly advise that you purchase a **medical mask**
- **What is your skill level?**
 - If you cannot sew or do not have a familiarity with sewing, I would encourage you to purchase a mask from an online vendor (I have a list of resources at the end). You won't save any money making your own, and you can support local business. No shame in that game.
- **What supplies do you have and what do you need?**
 - If you are missing all supplies, again, think about ordering online. Crafting is expensive, and while it is my drug of choice, it is an investment of time and money.



WHAT DO YOU NEED TO MAKE A MASK

Or, So, you want to be a crafter

Here are the absolute necessities

- Needle
- Thread
- Iron (and an ironing board is nice)
- Fabric
- Ribbon, elastic, shoelace, or strips of fabric to attach the mask to your head
- Pins, binder clips, chip clips, Elmer's glue (or water soluble glue), or hair clips

Be flexible, have fun, and don't overthink it. You can do this.



A NOTE ON SUPPLIES

Needles

- The smaller the needle, the more uncomfortable it is to use and the harder it is to thread, but the easier it goes through fine fabrics and thick weaves
- Bigger needles are easier to thread and use, but they may leave holes in the fabric, and can be more difficult to get through layers of fabric
- I recommend an embroidery needle (size five) for a good compromise.

Thread

- You are looking for, ideally, sturdy, heat resistant thread. Most importantly though, **you are looking for something that is readily available.**
- Cotton is great because it is heat resistant, but it can be a bit fussy and break
- Poly and nylon thread are much stronger, but can melt

Note: If you are using a kit that you purchased, the thread may be very weak. This is fine, but you will want to use shorter lengths of thread as you sew, and double up

Troubleshooting:

- If your thread is getting knotted or tangled, use beeswax (or a candle or a crayon) as a lubricant/conditioner. (Just remember that colored wax may leave a stain)
- Thread breaking or fraying? It's probably too weak and the friction of the wearing it out. Use a shorter length and double up. Wax may help reduce friction.





FABRIC

*Come on, you know this
is what you all wanted to
talk about*

FABRIC: THE BORING STUFF

There are no simple answers.

- The tighter the weave, the more the layers, the better the fit, the better to filter with... not so much for breathing.
- Original patterns called for 2 layers of 600 thread count cotton with a layer of interfacing. But not one could breath, and the fit was often poor enough that air would vent through the top and sides, meaning that the filtration factors of the fabric didn't matter

Questions to ask yourself:

- **How long will you be wearing the mask?**
- **What is your risk level or that of the folks around you?**
- **What do you have available?**



FABRIC: THE COOL STUFF

Recent research published in Nano suggested that using a variety of fabrics will create an electrostatic barrier that mimics that of an N95

Pair a layer of tight weave cotton (think, nice bed sheet) with:

- 2 layers of silk (old scarf? Shirt that “shrank,” or that hideous gift you got from that one aunt for your birthday last year), **OR**
- 2 layers of chiffon (Halloween costume? Bargain bin purchase you can’t regret but also can’t wear? Old curtains?), **OR**
- One layer of flannel (that shirt you love but no longer has elbows, an old blanket)



<https://www.bostonglobe.com/2020/04/30/metro/making-your-own-mask-researchers-say-some-fabrics-can-filter-nearly-well-an-n95/>

A BRIEF NOTE ABOUT ELASTIC

Elastic is very difficult to source right now.

- I managed to pull enough for three masks off of Moleskein journals that I had laying around
- Use elastic from dresses or shirts (though it may not look great)
- Think about using ribbon or strips of fabric (bias tape in a pinch) to tie the mask behind your head
- Get creative– I made a mask holder using 2 inch elastic and some Velcro.

Keep in mind certain restriction:

- Elastic isn't great if you wear hearing aids or wear glasses
- Ribbon isn't great if you have long hair



LAST NOTE BEFORE YOU BEGIN

Always make a dry run to ensure that measurements and patterns fit your face

- I have a big head (no jokes please, lol) and so most patterns or measurements are too small for me.
- Make a mock-up from fabric you don't like just to test the fit.
- Measure twice, cut once
- Iron your fabric before you cut the pattern to ensure proper sizing

HAVE FUN AND ACCEPT THAT THIS TAKES TIME AND EXPERIENCE. THIS ISN'T SUPPOSED TO SUCK.





FITTED VS. PLEATED

The great debate

FITTED VERSUS PLEATED MASK

Fitted

- Fitted masks use a pattern to create a slightly cone (or codpiece, unfortunately) shape that covers your face
 - **Advantages:** NO PLEATS, use a running stitch and are VERY QUICK to put together, don't touch your mouth all the time
 - **Disadvantages:** May require more precise fitting and fussing with the pattern, you will need to print or draw out the pattern



Pleated

- Pleated masks use a simple rectangle pattern to form a mask to unfolds to fit your face
 - **Advantages:** Super simple pattern, can fit a bit more comfortably, look slightly less like the Shredder Mask from the Ninja Turtles
 - **Disadvantages:** PLEATS AND ALL THE FRESH HECK THAT COMES WITH THEM, touch your mouth a bit more.



An abstract, colorful background with a dark overlay. The colors include red, yellow, green, blue, and purple, with a cracked, marbled texture. A semi-transparent dark grey rectangle is overlaid on the bottom half of the image.

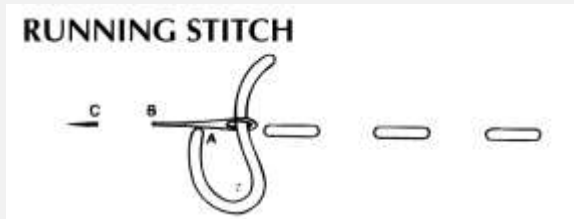
HOW TO MASK A MASK

Yeah, I finally got there.

TWO THINGS YOU SHOULD KNOW

Running Stitch

- This is the basic stitch that you use to put two pieces of fabric together.



- Find a tutorial [HERE](#)

Pressing your seams and turning

- In order to get the most out of your sewing, you should iron your fabric before you cut, and press your seams as you TURN (or flip) the fabric inside out

- How to Press seams: [HERE](#)
- How to turn fabric: [HERE](#)
 - Note: this tutorial is how to turn a narrow tube of fabric, which you could also use to make FACE TIES

PLEATS AND HOW TO GET AROUND THEM

- The more fabric you use, the harder it is to get fabric through the layers, which makes pleats very difficult.
- **DO NOT HURT YOURSELF.** If you are having trouble getting a needle through fabric, use an old leather belt or piece of leather to push the needle through.
- When measuring pleats, don't get too upset if they aren't perfect.
- **Tutorial:** [HERE](#)



RESOURCES

If you are looking for notions (supplies) or fabric– **try local quilt shops!** A lot of them deliver faster than big stores, and they can help you find fun fabric, get set up with notions, and are wonderfully kind people!

Youtube is your friend! There are a ton of resources out there on the internet on learning how to sew.

I will be posting a PDF that will be annotated with comments later today. Please let me know if you have any questions!

Also, remember– HAVE FUN WITH THIS. This is supposed to be FUN!



THANK YOU

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