## So you wanna sew for action figures? Cool! Here's a quick tutorial to get you started:

First! Figure out what the size you're sewing for is:


Those are the most common sizes in Marvel Legends action figures. Even when a 'new' mold gets rolled out, like Pizza Spiderman or Reaper, it tends to replace a body of similar shape/size. If you recognize the mold as one of the figures you're trying to sew for, great! Sewing for another brand of figure, or not sure what size you need? Just pull out your measuring tape (or a piece of string to measure the figure and a ruler to measure the string) and take some measurements (in cm ). Check them against this table to see what size your figure is 'most' like:

|  | Spidey | BuckyCap | Cap/Reaper | Hyperion |
| :--- | :---: | :---: | :---: | :---: |
| Shoulder Width | 5.5 | 6.2 | 6.5 | 8 |
| Torso Length | 6.5 | 6.5 | 6.75 | 7.5 |
| Chest Girth | 8 | 9.25 | 10.2 | 12 |
| Waist Girth | 5.75 | 6.75 | 7.75 | 8.5 |
| Height (to shoulder) | 13.4 | 14 | 14.3 | 14.5 |
| Arm Girth | 3.5 | 3.75 | 4.5 | 5 |
| Arm Length | 4.5 | 4.75 | 5.2 | 5 |
| Leg Girth | 4.75 | 5.25 | 6 | 6.5 |
| Inseam | 6.75 | 7.25 | 7.5 | 7.25 |

As a general rule for a well-tailored miniature pattern, if the measurement is within .5 cm , great, 1 cm might fit, $>1 \mathrm{~cm}$, won't fit (unless the clothes are spandex or something like that). So most clothes that are designed to fit the BuckyCap mold will not just fit figures similar to Bucky Cap, but they'll also fit Cap/Reaper and Spidey too, if you tweak them in the places that have the biggest difference, like chest girth, since other measurements are still pretty darn close.

But what about Hyperion and other figures well beyond 1 cm ? It might still work, if you run your numbers. Hyperion's chest is a massive 12, and BuckyCap is 9.25 . About $130 \%$ bigger. Shoulder width is also $130 \%$ bigger. Waist? $126 \%$. Arm Girth? $1.33 \%$. The numbers aren't all the same, but they're all pretty similar. That means that if
you wanted to dress Hyperion with a pattern designed for BuckyCap you could, if you printed it out at $130 \%$ enlargement. The biggest difference is that while Hyperion is bigger, he's not much taller, so sleeve and pant leg length would be taken in a little bit more than usual when you hem cuffs. That's it. Pretty easy!


Remember, you're taking a 3D measurement. Measure it the way the fabric will cover it.

## Does this mean that one pattern will fit EVERYBODY?

Nope! Here are the draw backs:
Figures with unique body shapes (say, more than a $5 \%$ difference in scaled up/down measurements). A humanoid male pattern is not going to work so great on a lizard man. Still, the numbers will help you out: If a figure is similar in all measurements except one or two, you can use the numbers to know where and how much to adjust by. Example: Ninja Turtles are pretty similar to a standard humanoid action figure except for the shell backs. If you're trying to make a coat or shirt for them, all you need to do is take out the back in the torso area by the same amount their back width is wider than a regular figure to accommodate the hump.

Scaling also starts to fail after a certain point (usually about 150\%) so you can't use a pattern for a $6^{\prime \prime}$ figure on a 2' statue or $6^{\prime}$ person and have it look right. Fabric behaves differently in miniature, and there is a limit to the amount of detail you can include that gradually changes as the size increases/decreases before the pattern needs to be redesigned to account for that.

## Ok, great! Now how do I sew?

Uh, you take a needle...
Joking! A stitch is a stitch. A 15- or 30- minute tutorial on youtube that covers a how to hand or machine sew a straight stitch and knot it off to start/finish is all you need to get started. If you have access to a sewing machine, read the instruction manual on the basic functions.

Miniature sewing is not very complicated sewing, you just have to be precise, which is why sizing and scaling are so important.

And if you ever get stuck, I'm happy to answer questions through my pattern shop or Facebook

