version 1.1 updated 14/1/2023

A FINE SWEATER

A PATTERN BY YU JIE 玉杰
BASED ON THE COMIC BY KC GREEN

Important notes

This is a weird sweater and has not been test knit at any other sizes. Sizing, yardage and pretty much everything else is either based on the experiences of a single person (me) or is completely untested. You have been warned!

I have altered the neckline so the neck hole is not as large as shown in the photo. I have not knit another sweater because I'm not doing that again. So please just know the neck hole should be a more reasonable size than shown.

If anyone wants to grade this sweater so I can make it more size inclusive, please let me know.

Dimensions

Because this sweater is one giant image, the dimensions are mostly determined by your gauge. The highlighted rows are the dimensions and gauge of the sweater I knit, anything not highlighted is an extrapolation.

Please note these are the dimensions of the sweater laid out on a flat surface, not worn on the body. I suggest measuring a similar knit sweater that fits you to determine your size.

Also note: I don't recommend dramatically changing the gauge. The arm and neck hole sizing might end up wonky, and overly loose gauge can affect the integrity of the colourwork. One day if I muster the energy I may make more sizes.

horizontal gauge (st per 4")	bust
16	54" (137.2cm)
17	50.8" (129.1cm)
18	48" (121.9cm)
19	45.5" (115.5cm)
20	43.2" (109.7cm)

vertical gauge (st per 4")	length from underarm to hem	length from top of shoulder to hem
24	18" (45.7cm)	25.9" (65.7cm)
25	17.3" (43.9cm)	24.8" (63.1cm)
26	16.6" (42.2cm)	23.9" (60.7cm)
27	16" (40.5cm)	23" (58.4cm)
28	15.4" (39.2cm)	22.2" (56.3cm)
29	14.9" (37.8cm)	21.4" (54.4cm)
30	14.4" (36.6cm)	20.7" (52.6cm)

Materials

The example pictured was knit with 4.5mm needles and 10 ply (worsted) cotton yarn. You may need to use different size needles/yarn to obtain the gauge you need (see charts on previous page).

At my gauge of 18 stitches and 27 rows per 4 x 4" (10cm) square, these were the amounts of yarn I used. Please note I was VERY economical with my yarn, so even if you are knitting at the same gauge you may need require more yarn.

Yellow
Scheepjes Cahlista
Yellow Gold
340m (371.8 yds)

Orange
Scheepjes Cahlista
Tangerine
255m (278.9 yds)

Grey
Paintbox Yarns Cotton Aran
Granite Grey
170m (185.9 yds)

Light green
Scheepjes Cahlista
Willow
161.5m (176.6 yds)

Dark green
Rico Design Creative Cotton Aran
Ivy
22.1m (24.2 yds)

Light brown
Scheepjes Cahlista
Hazelnut
44.2m (48.3 yds)

Dark brown
Scheepjes Cahlista
Black Coffee
6.8m (7.4 yds)

Black
Rico Design Creative Cotton Aran
Black
73.1m (80.0 yds)

White
Scheepjes Cahlista
Bridal White
3.4m (3.7 yds)

Front/back

Cast on 112 stitches with the Italian cast on, or substitute with your favourite cast on.

Row 1: *K1tbl, P1*, repeat until end of row
Row 2: *K1, P1tbl*, repeat until end of row

Repeat rows 1 and 2 until ribbing measures 2", then work the front/back image as charted (see "charts" section)

NOTE: Knit/purl stitches are created in the row below your current row. Because of this, the last row of ribbing will just be knit stitches rather than ribbing. If you want the ribbing to extend all the way to the start of the charted image, work K1tbl, P1 for the first row of the charts.

Sleeves

First, determine your sleeve length. Normally, sleeves are just worked in pattern until they are the right length. However, since the sleeves for this sweater are fully charted images, the lengths are not adjustable. To compensate for this I have charted three different length versions of the sleeves. As a general rule, women, afab people, children and people with a negative ape index have shorter arms, while men, amab people, adults and people with a positive ape index have longer arms. Below is a chart to help you choose a sleeve size but remember, no one ever died of having too short/too long sleeves.

For all sizes: cast on 52 stitches using the Italian cast on, or substitute your favourite cast on.

Row 1: *K1tbl, P1*, repeat until end of row
Row 2: *K1, P1tbl*, repeat until end of row

Repeat rows 1 and 2 until ribbing measures 2”, then work the left/right sleeve chart in your chosen length as charted.

NOTE: Sleeve length from underarm seam to cuff is not the same as your arm length from armpit to cuff, because the underarm of the sweater doesn’t sit wedged all the way up in your armpit. Gravity will also make the sleeves longer when worn. However, the specific numbers depend on your body dimensions, gauge, yarn material etc so the numbers in this chart are approximate.

For reference, my arms are 17.5” (44.5 cm) from armpit to wrist and the sleeves I knit (19.3”) are about 4” too long for me.

vertical gauge (st per 4”)	sleeve length (s)	sleeve length (m)	sleeve length (l)
24	17” (43.3cm)	19.4” (49.2cm)	21.7” (55.1cm)
25	16.4” (41.6cm)	18.6” (47.3cm)	20.8” (52.9cm)
26	15.7” (40cm)	17.9” (45.4cm)	20.0” (50.9cm)
27	15.2” (38.5cm)	17.2” (43.8cm)	19.3” (49cm)
28	14.6” (37.1cm)	16.6” (42.2cm)	18.6” (47.3cm)
29	14.1” (35.8cm)	16.0” (40.7cm)	18” (45.6cm)
30	13.6” (34.6cm)	15.5” (39.4cm)	17.4” (44.1cm)

Embroidery

Each stitch has four corners you can work into, like so:

At some points (mainly in the smoke at the top of the sweater) the embroidered lines intersect in the centre stitch rather than at a corner. When the charted line stops in the centre of a stitch, work into the central v of the stitch (5)

Outline each panel using backstitch as charted. For the sake of completeness, I feel obligated to give a written explanation of how to do backstitch, but really you should just watch this video: https://youtu.be/SQbPtXmNBBc

Obligatory backstitch instructions

1. Place your yarn on a darning needle and insert it from the back to front side of your work, one step ahead of where you want to start.

2. Insert your needle from front to back, in the place where you want your line to start

3. Insert your needle from back to front again, where you want your line to go next

4. Insert your needle from front to back in the same place as in step 1, in order to fill in the missing section of line

Repeat steps 3 and 4 until your line is complete.

NOTE: I strongly recommend embroidering the very top row of smoke outlines on each panel AFTER having seamed the shoulders and sleeves together, but before closing up the sides. This is to ensure they line up. Doing it before closing up the sides makes it a little easier to access the wrong side of your work while embroidering.

Tips

- When embroidering, put your needle in the holes between stitches. Try not to put your needle *through* strands of yarn because this can cause your image to distort when stretched. It's particularly easy when backstitching to accidentally stick your needle through your previous stitches on the wrong side of your work, so try to avoid this

- When making vertical lines, take care not to pull your yarn too tight or it will disappear into the gap between stitches

- Try not to pull too tight in general, it can distort your work. It's best to keep your embroidery at about the same tension as your knitting

- I recommend making one backstitch for every horizontal or diagonal knit stitch, but every two vertical knit stitches. This is because each stitch is not very long vertically and vertical stitches that are too short tend to want to disappear between your knit stitches

- For diagonal stitches that go 2 stitches across and 1 up I recommend doing these in a single backstitch, because there is no good place to stop in the middle

- Finally, embroidering over knitting isn't an exact science. Don't be afraid to deviate from what I've charted if you think something else looks better!

Seaming

Before you start seaming, weave in your loose ends. However, for embroidered lines that finish at the end of one panel and join with a line on another panel, you may want to leave the ends loose in case they dont line up and you want to adjust them.

When seaming along the side of a panel, insert your needle between the first and second stitches from the edge. This will give you a nice stable seam. This sweater was charted with an extra stitch on each side so you will not lose any of the image.

Berroco has a much better explanation of how to seam than I can make: https://youtu.be/4Rv3Vuuof3s

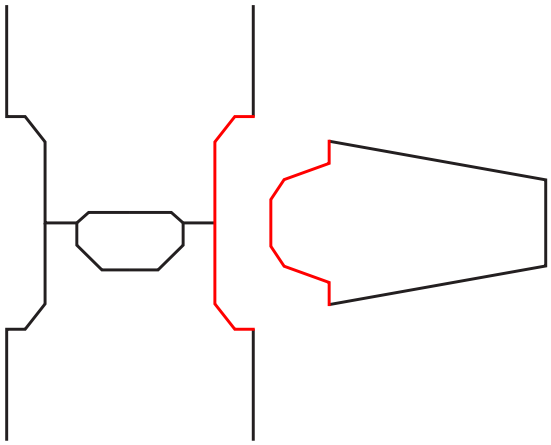
If you would prefer text and photos, here's a good rundown of seaming techniques https://brooklyntweed.com/pages/seaming-101

My attempt to explain how to seam this sweater

1. Line up the top edges of your front and back panels and seam them end-to-end

2. Line up your sleeves inside the shoulders and sew the top edge of the sleeves into the arm holes. This is the hardest part of the seaming process. I recommend the liberal use of safety pins before you start sewing to make sure everything lines up. I also recommend starting from the middle and working to one end, then returning to the middle and working to the other end. You can still complete the seam with one single length of yarn if you leave a long enough tail when starting

3. Mattress stitch along the sides of the body and sleeves to close up your sweater. Again, I recommend starting from the underarm and working to one end, then returning to the underarm and working to the other end



Basically step 2 involves sewing the red parts together. Hope that's clear enough!

Collar

NOTE: As mentioned before, I have changed the chart since knitting my sweater so that the neck hole is smaller. If you're looking at my photos thinking "gee that neck hole is way too big" fear not, it's been fixed. However, this change is UNTESTED. Just so you know.

Pick up approximately 96 stitches evenly around the neck hole, starting from the middle of the back panel. Place BOR marker.

It's ok if your count is off by a couple of stitches, just make sure it's an even number. Pick up 1 stitch for each horizontal stitch and 3 stitches for every 4 vertical stitches. For diagonal sections, wave your hands and sob hysterically. Idk I hate doing this too. Just do your best. You should have about 52 stitches from the front panel and 44 stitches from the back.

K1tbl, P1 until end of round
Repeat until ribbing measures 1" (2.5 cm) from edge
Cut your yarn, leaving a tail at least 4 times the circumference of your collar edge

Twisted sewn bind off

Because the collar is worked in twisted rib, the sewn bind off looks better when modified to be twisted. Again, I feel obligated to explain how to do this in writing, but really you should probably just watch a video.

If you don't know how to do a sewn bind off, I recommend watching this video first to familiarise yourself with the concept, and maybe also doing a trial run first with some scrap yarn: https://youtu.be/Ibn-01Ilxpg

Once you can do a sewn bind off, this video explains how to modify it for twisted ribbing: https://youtu.be/ml9fyY24Uvg

And if this all seems too complicated, just bind off however you like. Who's gonna come after you, the police?

Setup

1. Insert needle into the first stitch on your left hand needle as if to knit through the back loop and pull your yarn through. Slip the stitch (with the yarn running through it) onto your right hand needle

2. Insert needle from front to back between the first and second stitches on your left hand needle, then insert your needle into the back of the second stitch as if to purl through the back loop and pull your yarn through

3. Insert needle into the first stitch on your left hand needle as if to purl and pull your yarn through. Slip the stitch (with the yarn running through it) onto your right hand needle

4. Insert needle from back to front between the first and second stitches on your left hand needle, then pull your yarn through

5. Insert needle into the second stitch on your left hand needle as if to knit, then pull your yarn through.

Then:

1. Insert needle into the first stitch on your left hand needle as if to knit through the back loop and pull your yarn through. Slip the stitch off your needle

2. Insert needle from front to back between the first and second stitches on your left hand needle, then insert your needle into the back of the second stitch as if to purl through the back loop and pull your yarn through

3. Insert needle into the first stitch on your left hand needle as if to purl and pull your yarn through. Slip the stitch off your needle

4. Insert needle from back to front between the first and second stitches on your left hand needle, then pull your yarn through

5. Insert needle into the second stitch on your left hand needle as if to knit, then pull your yarn through

Continue steps 1-5 until you have bound off all stitches. Weave in any remaining loose ends and you're done! Lightly block and enjoy.

TECHNICAL NOTES

Because this is a very technical pattern, it comes with a lot of technical notes. You don't HAVE to pay attention to this section at all, these are just handy tips I have accumulated from my own experience of knitting this sweater. I've done my best to explain things as clearly as I can, but if something here is confusing to you it's probably confusing to other people too, so please feel free to drop me a line to ask for help or offer constructive feedback. Also, you don't have to follow my advice if you disagree with any of it or it seems too complicated. It's your own damn sweater and you can do what you like!

Manually adjusting tension

You will likely find an alternating pattern of baggy and tight stitches at vertical colour transitions. Yarnsub has a great explanation for why this happens and how to prevent it: https://yarnsub.com/articles/techniques/neater-intarsia

However, if you are like me, you might find that even following their tips, you still get this uneven tension at colour changes anyway. If this happens, your options are to either embrace this as a lovable quirk of your project, or fix the tension manually.

To fix tension manually, simply insert your needle into the vertical "bar" on the wrong side of your work that is connected to a baggy stitch, and pull the excess yarn through. Then, insert your needle into the tight stitch directly (below) the baggy stitch, and use the excess yarn to make the stitch less tight. With any luck, your tension is now more even!

Gauge and sizing

Because the entire sweater is one large image with fixed dimensions, this pattern is extremely unforgiving of inaccurate gauge. I STRONGLY recommend swatching unless you enjoy unravelling months of hard work. Even if you don't normally swatch, or have never swatched in your life. Swatch, I beg you!

I originally designed this sweater to fit a specific friend of mine, which is why it is the size that it is. I am currently pretty done with it, but if I feel the inclination one day I will make some more sizes.

You can size down by using smaller yarn/needles to achieve a tighter gauge, but if you size down a lot the neck hole might end up too small and the sleeves may no longer fit in the sleeve holes. If you feel patient, you can modify the collar and sleeve caps to fit.

If you size up significantly you can run into similar issues - the neck hole might end up too big and the sleeves may no longer fit in the sleeve holes. There are also some additional potential problems with sizing up. You may not be able to increase the yarn weight, as yarns above worsted weight don't tend to come in many colour options and you would also end up with a very hot and heavy sweater. But if you just increase needle size without increasing yarn weight, you might also have issues as the gauge is already fairly loose and going looser may cause the fabric/image to lose its integrity. If you do decide to size up this way I recommend using a worsted yarn in a lightweight material (aka no cotton/bamboo etc) as the added weight of the fabric will stretch out your stitches as well, but please do a smaller test piece first as I can't guarantee a good result.

Estimating yardage

You can estimate the yardage required for a section of colour like so: First measure out a decent length of yarn (like a metre or so at least) and mark this point. Then, knit until you reach the marker. Count the number of stitches you have worked, then divide the length of yarn by the number of stitches to obtain a length per stitch. You can use this number to estimate how much yarn to put in a spool, or figure out if the amount you have is enough to finish a section. When counting stitches I count each row a chunk of colour occupies as half a stitch, as the "bar" between rows does take up a little bit of yarn. At the pattern gauge of 18 stitches and 27 rows per 4 x 4" square, I used 2.1-2.2cm (0.827-0.866") of yarn per stitch.

Increases

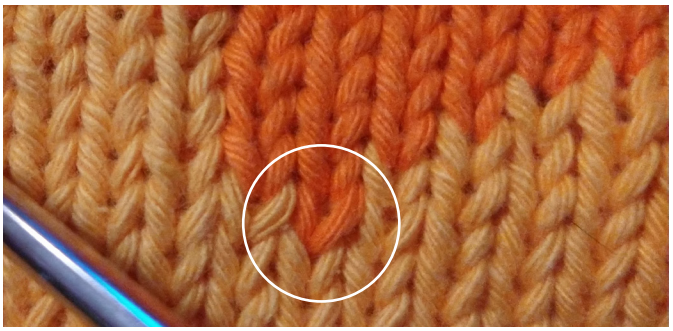
This pattern uses lifted increases for the sleeves rather than the more common M1L/M1R because lifted increases don't affect the stitches below the current row, while M1 pulls yarn from the row below and creates an extra loop from the yarn you picked up. This means that if you work a M1 increase over a colour change, it will distort your colourwork and tension at the transition. I do not recommend using M1 increases for this pattern.

Panel edges

Each panel of this sweater has an "extra" stitch on either side, which will disappear when the panels are sewn together. This is standard for seamed sweaters. Some people like to slip every second stitch on this edge for a neater finish or easier grafting, but I do not recommend doing so for this sweater. There are some areas with only 1-2 stitches of a particular colour along the edge, and working the extra stitch helps a lot to stabilise them.

Combining intarsia and stranded knitting

There are many points in this pattern where a new column of colour is introduced which is only one stitch stitch wide. When this happens, you need to not only introduce a new spool of yarn for the new colour, but also the colour next to it. For example, in the circled area below, the colour orange is being introduced, but you also need to add a new spool of yellow, because what used to be one area of yellow has now been split into two.



But having two colour transitions right next to each other can exacerbate tension issues, and having two loose ends next to each other can make the section unstable and annoying work with. Therefore, when encountering single stitch wide columns of colour, I recommend simply stranding the other colour across (like in Fair Isle knitting) until it becomes at least 2 stitches wide. This helps keep your work more stable and "together". Just make sure you don't pull your float too tight and distort your work.

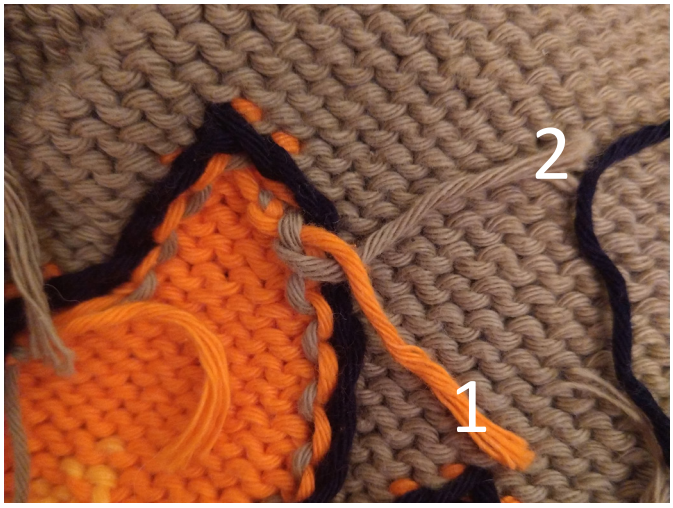
You can also use stranded knitting for sections of 2 or more stitches, to reduce the number of bobbins and amount of yarn-swapping required for complex areas. However, the more stranding you do, and the more stitches you strand across, the higher the risk of creating a garment that doesn't stretch uniformly, due to the differences between stranded and intarsia fabrics. Personally, I didn't do this and I don't recommend it, but the option exists if you need it to preserve your sanity.

Weaving in ends

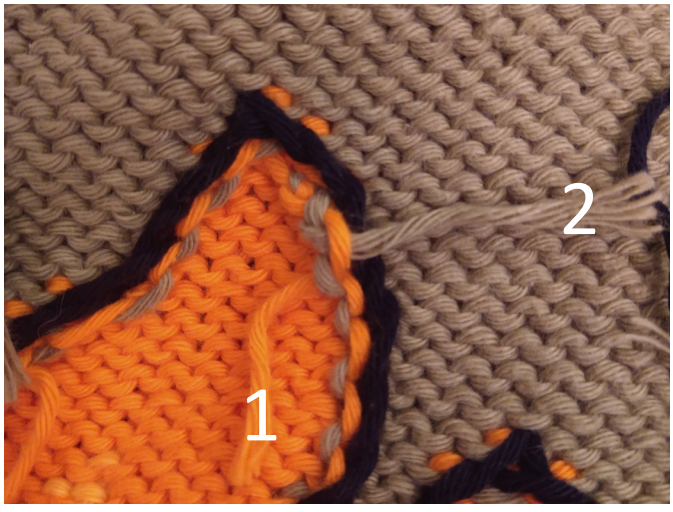
I recommend completing your embroidery before weaving in your yarn ends.

The easiest, least visible place to weave in your ends is through the “bars” between colours on the wrong side of your work. However, you will have a ton of ends, and there isn’t always a lot of space to fit everything in. Here are some tips for fitting more ends into a small area:

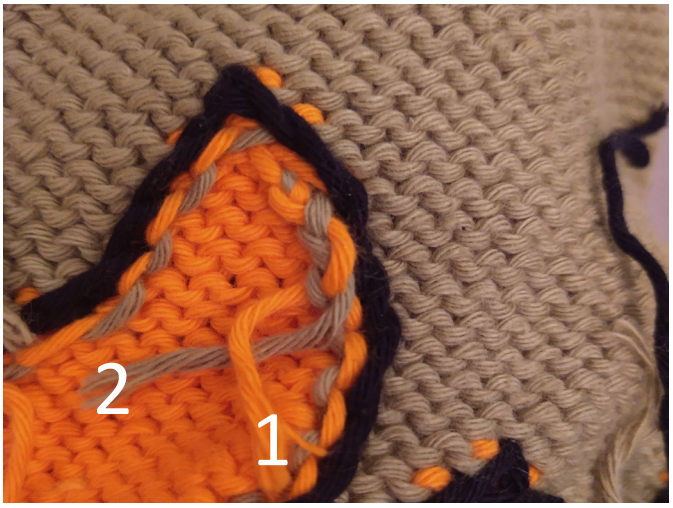
Braiding ends



You can lock multiple strands securely in place by doing this. First, place strand 1 over strand 2.



Pull strand 1 through the vertical bar at the colour change. This is a good place to tuck away loose ends beause it won’t show on the right side of your work.

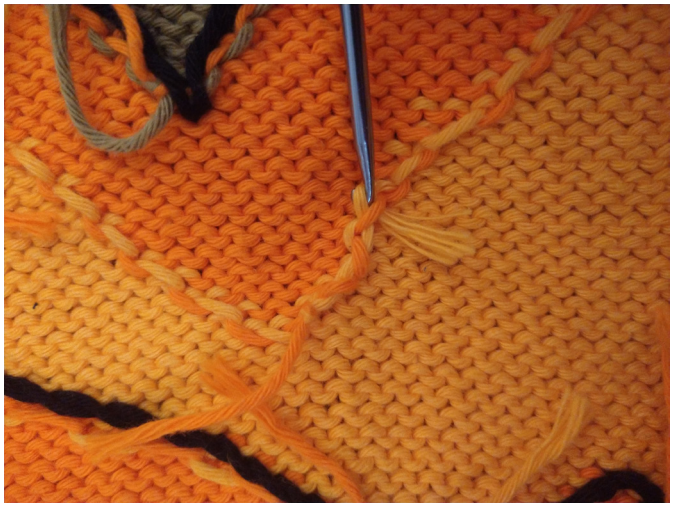


Place strand 1 over strand 2 again and pull it through the next bar.

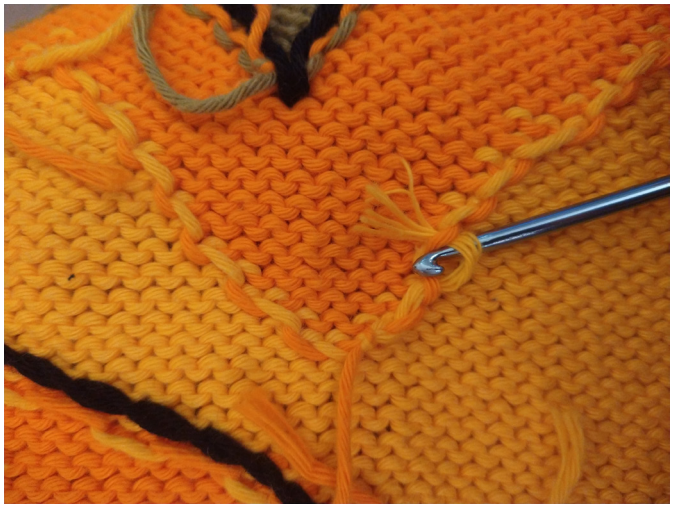
Repeat until you have both ends in a secure braid. You can also do this with 3 yarn ends.

NOTE: It’s tempting to weave your ends through the loops created by your backstitch borders, but be cautious if you do this. If you stuff too many yarn ends in them it will pull on the stitches on the right side of the work and make them smaller. I found the colour transition bars were less susceptible to distortion from tucked in ends, but you will eventually get issues from them too if you overdo it.

Tucking an end into itself



This is handy when you don't have a lot of space to weave in an end because there's another one coming from the opposite direction. Start by weaving in as normal.

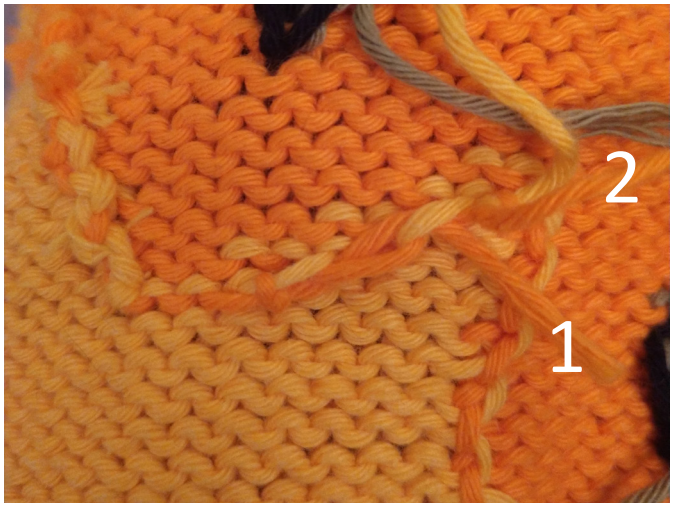


When you get about halfway, stick your hook under the last bit of yarn you wove in.

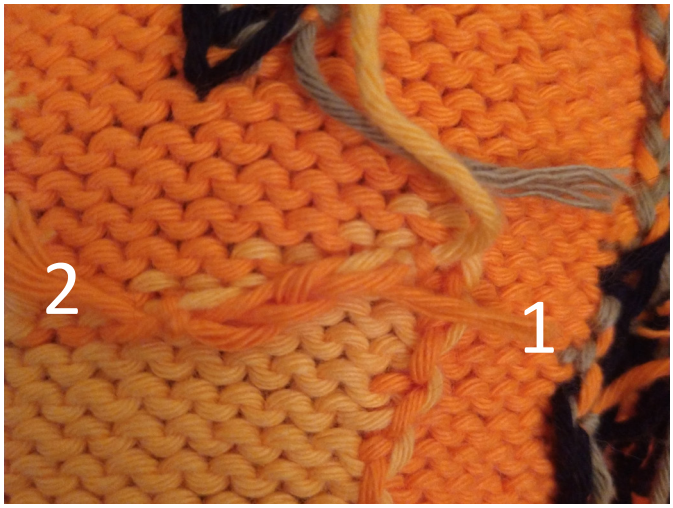
Pull your yarn end through...

... and go back the way you came, working back into the yarn end you just wove in (putting too much under the original bars can distort your stitches, so it's better to weave into the yarn ends themselves when you can).

Locking your ends in place with other ends



Sometimes the colour-change bars are spaced pretty far apart, or are too long to really hold your loose end securely. Here I've woven in strand 1, but it's pretty loose in there.



Now I've woven strand 2 into strand 1 and it's looking more secure. As you can see, there is one more strand in the vicinity and by the time I weave that one in as well, all 3 strands will be nice and snug. Sorry for the slightly subpar photography here, I didn't notice until I started putting the pattern together and I'm not pulling my ends back out to retake photos hahahahaha

Finally: You will have a LOT of ends. You won't always be able to tuck them away nicely. Just roll with it!

Securing loose ends

There's a ton of loose ends in this sweater, and any one of them could cause a disaster if it came loose. Some people are horrified by the thought of tying knots in knitting, but honestly I knotted EVERYTHING.

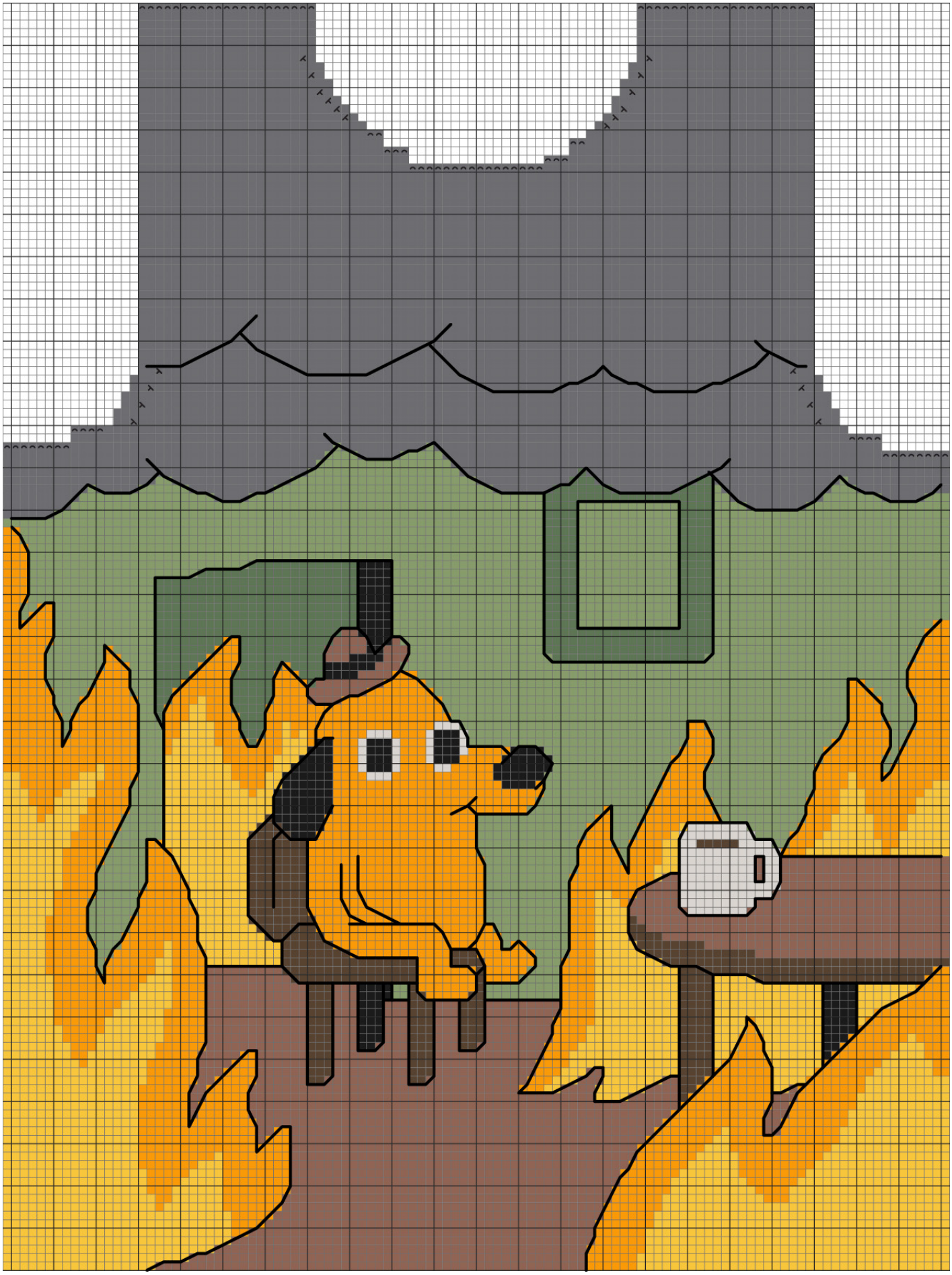
CHARTS

The key for all symbols is as follows:

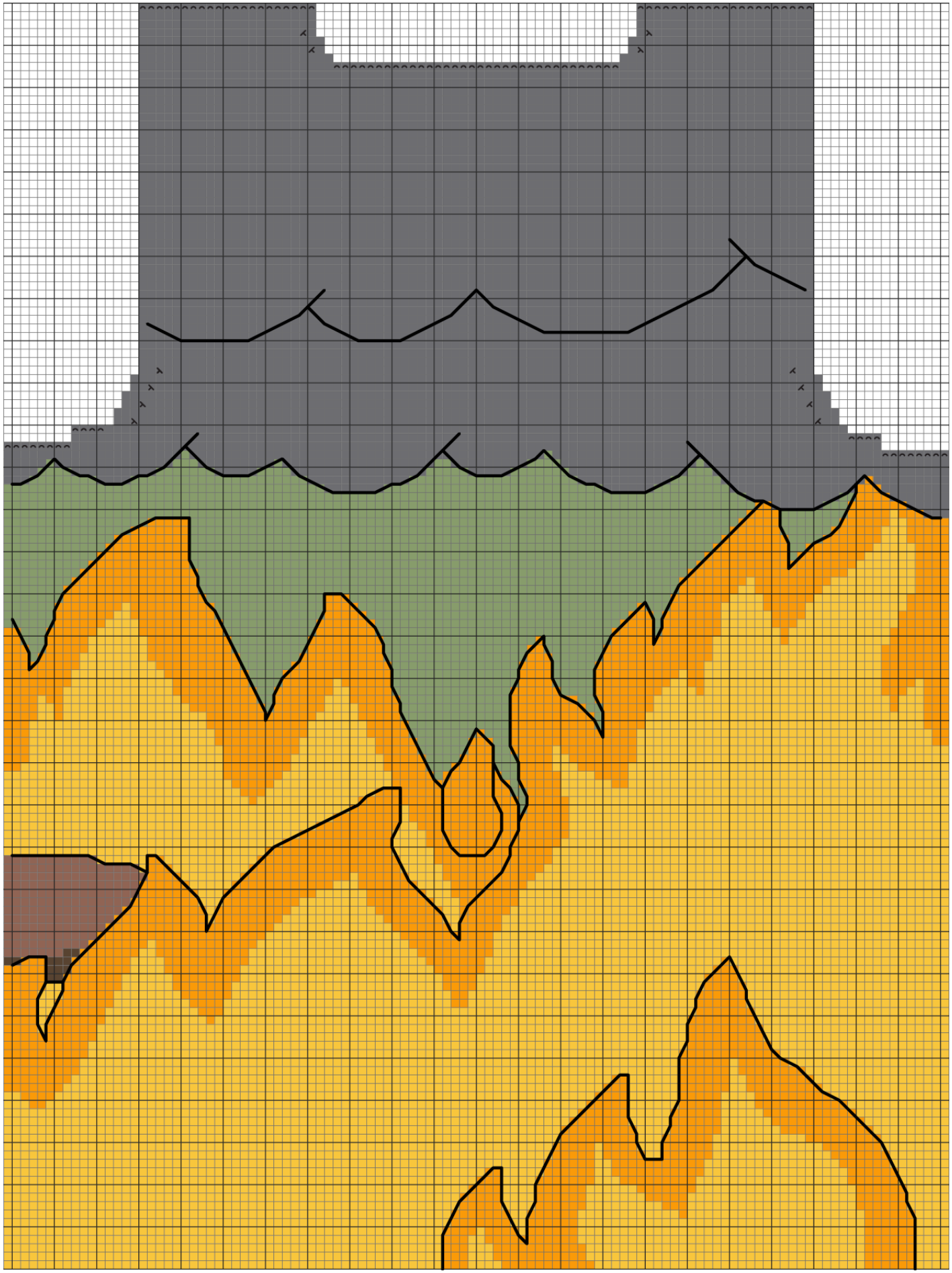
- knit on rs, purl on ws
- purl on rs, knit on ws
- k2tog
- ssk
- rli on rs, left lifted purl increase on ws
- lli on rs, right lifted purl increase on ws
- bind off

Yeah, look at all this whitespace. I have literally no idea what to do with it. Here's a picture of my cat.

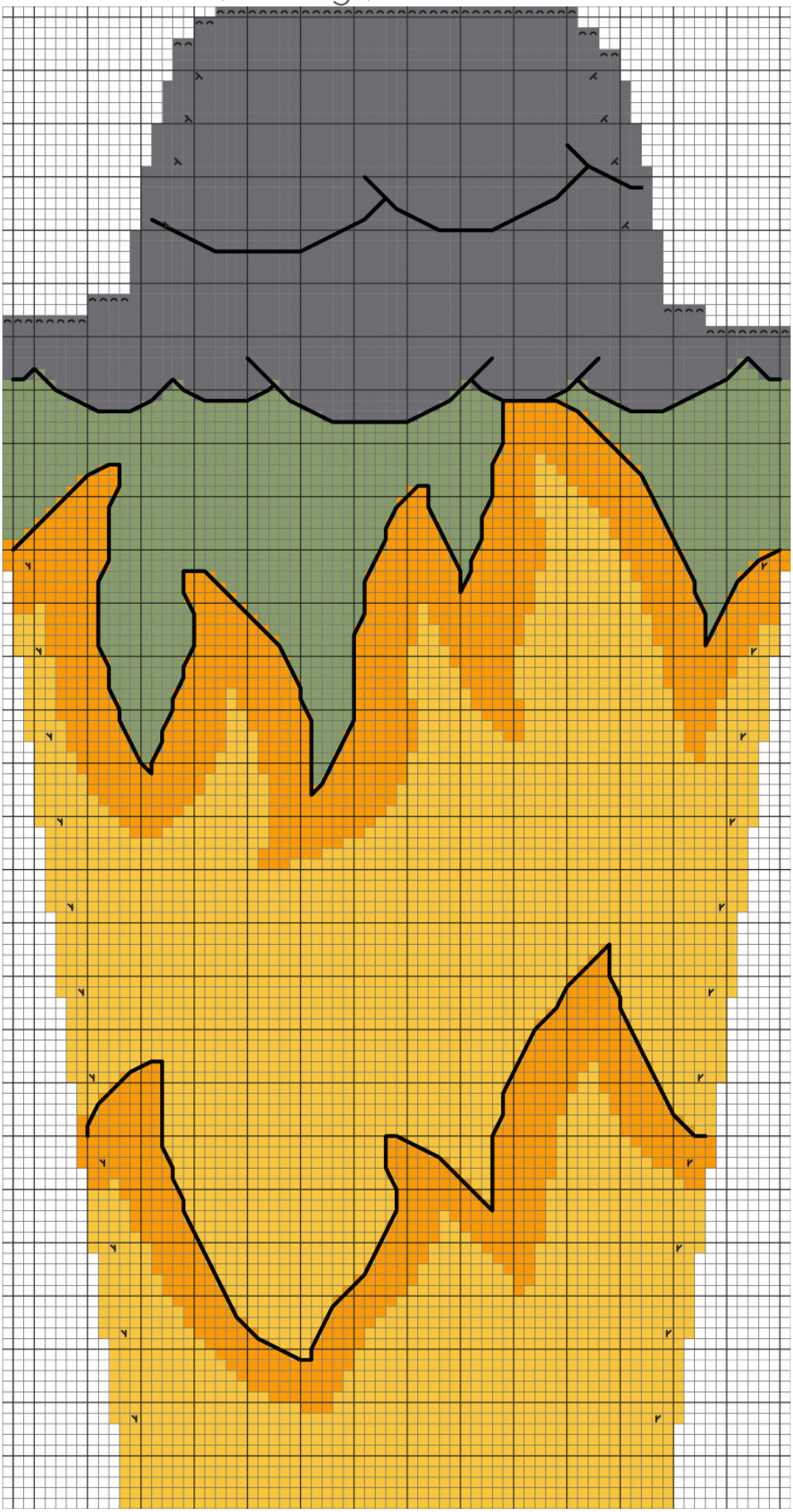
Front



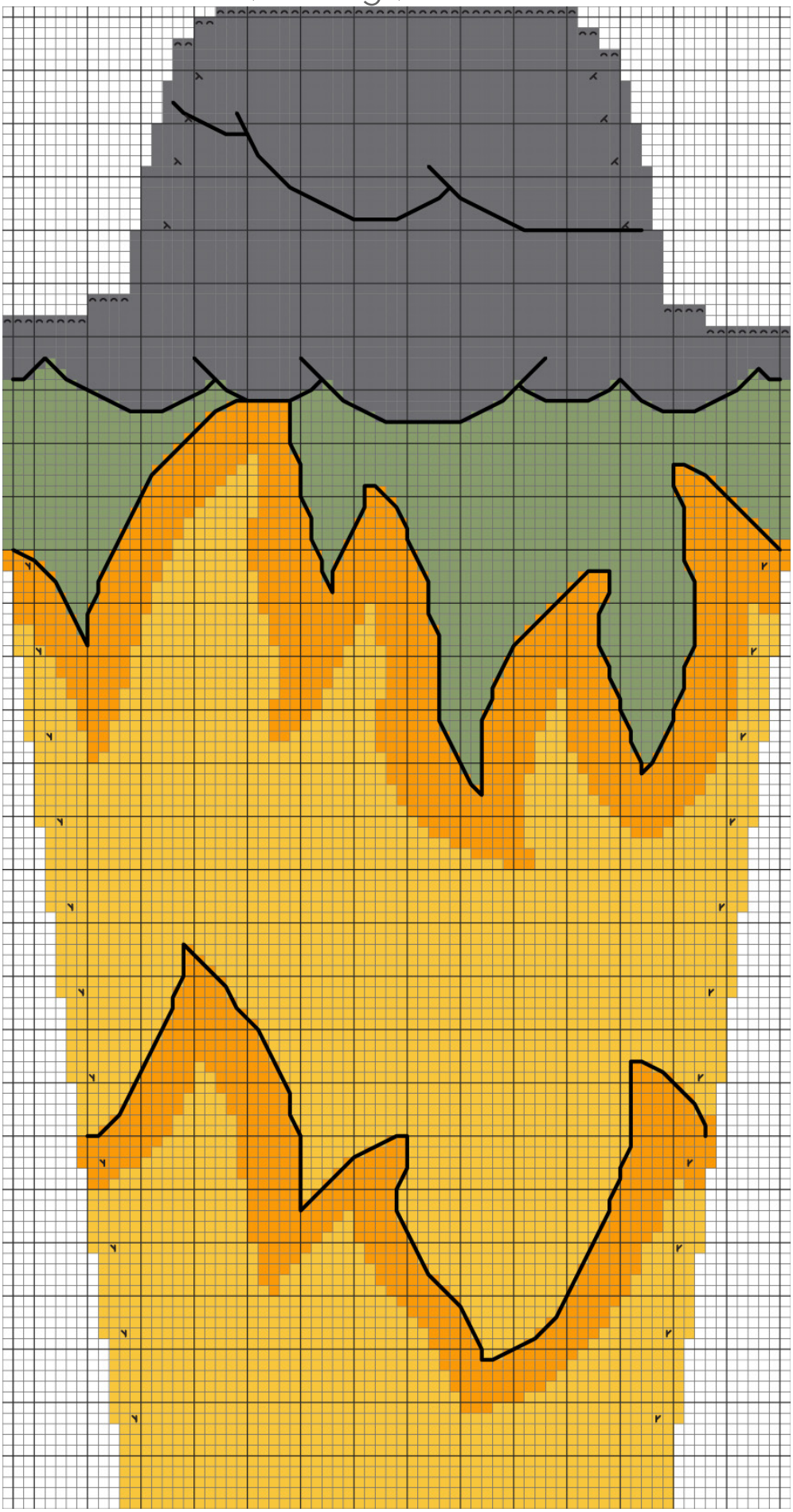
Back



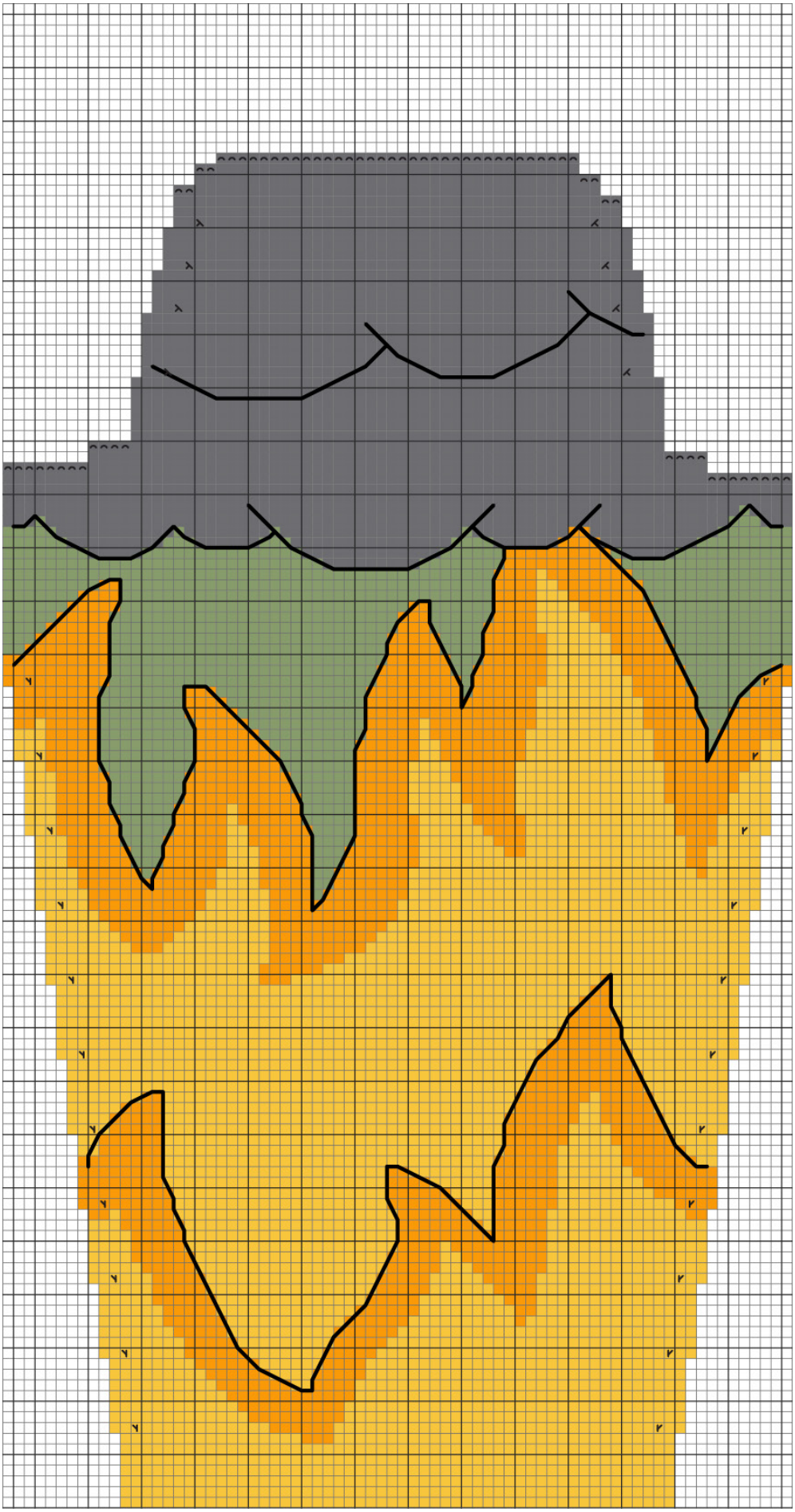
Left sleeve (long)



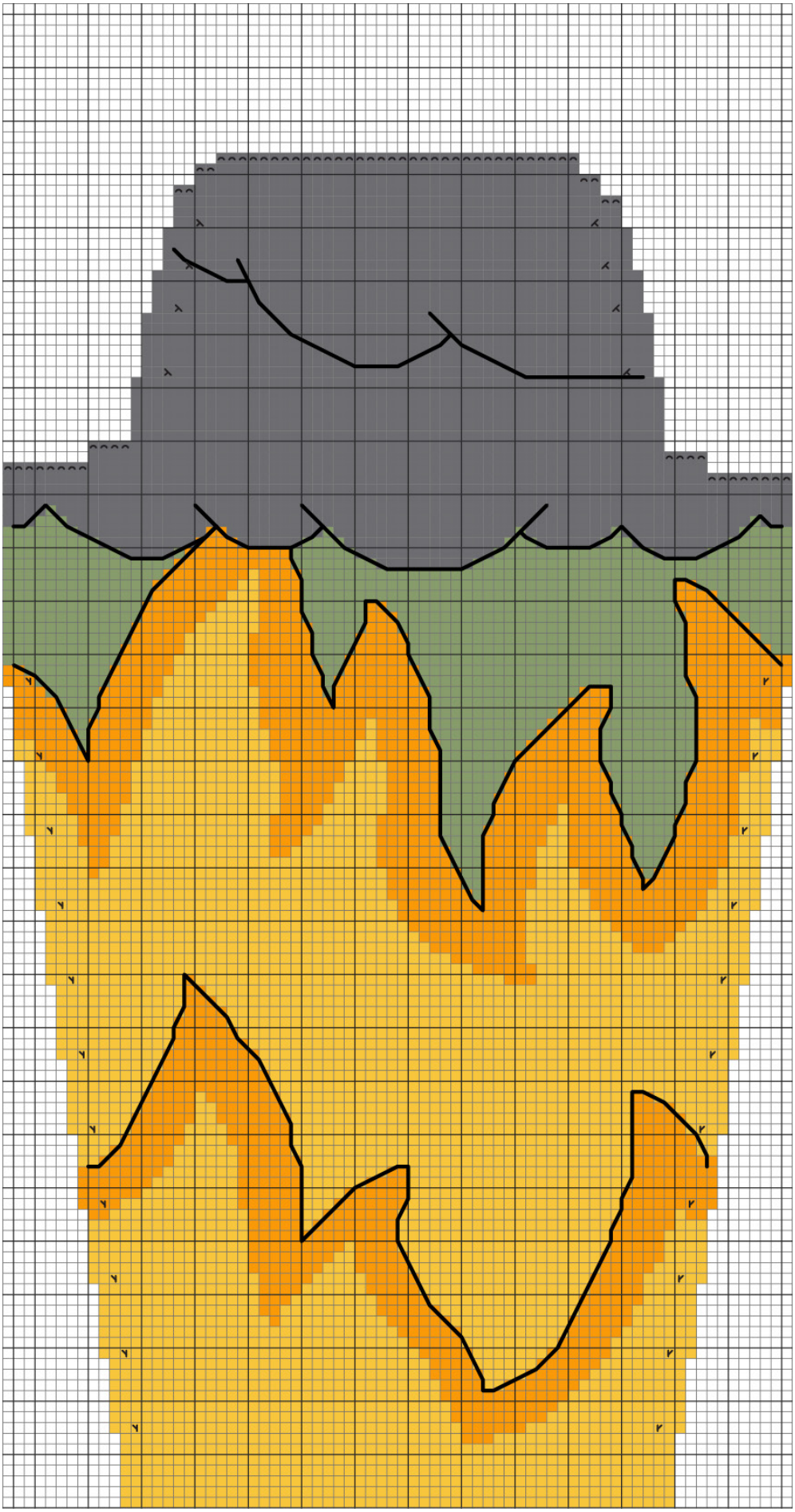
Right sleeve (long)



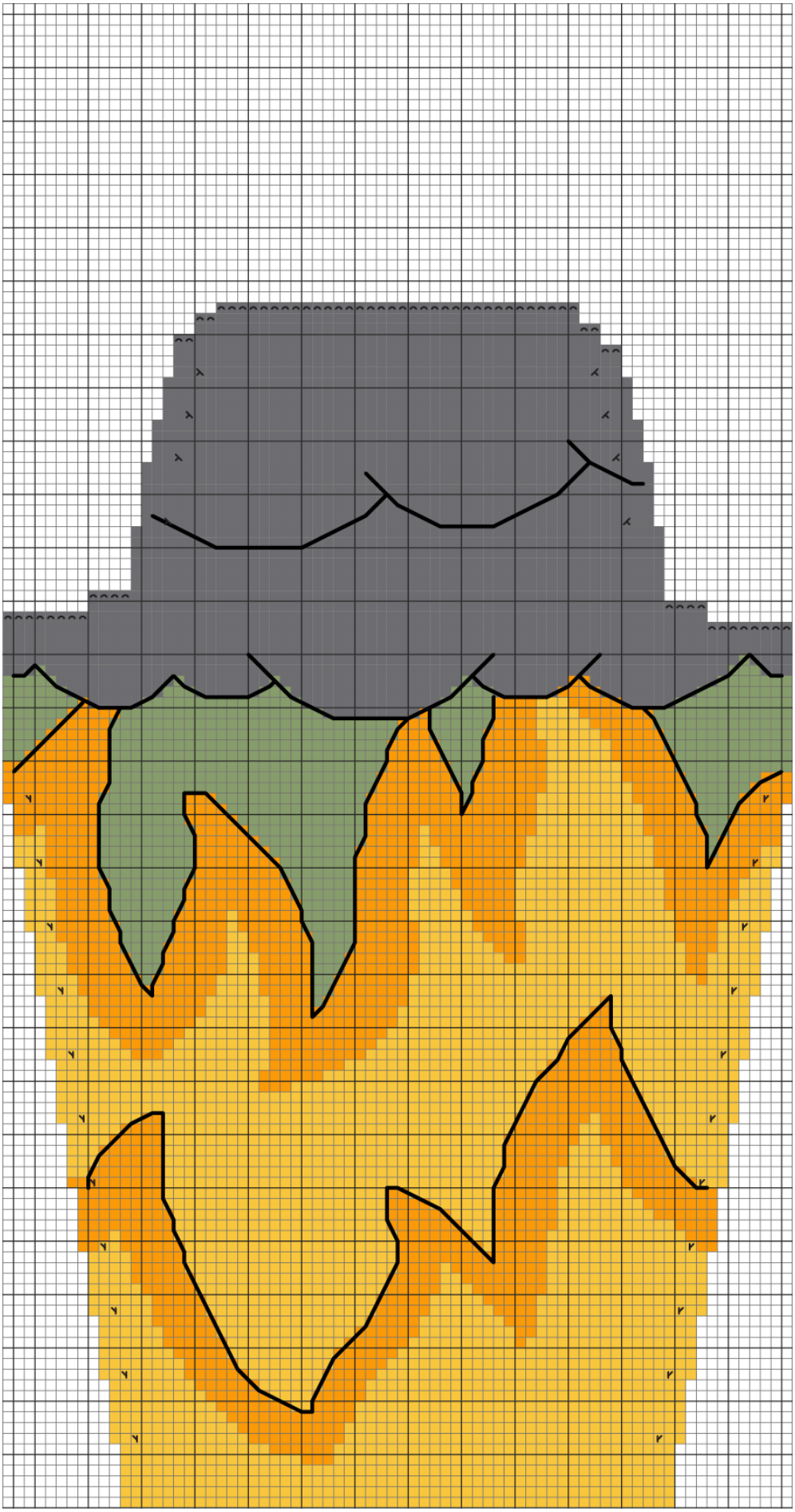
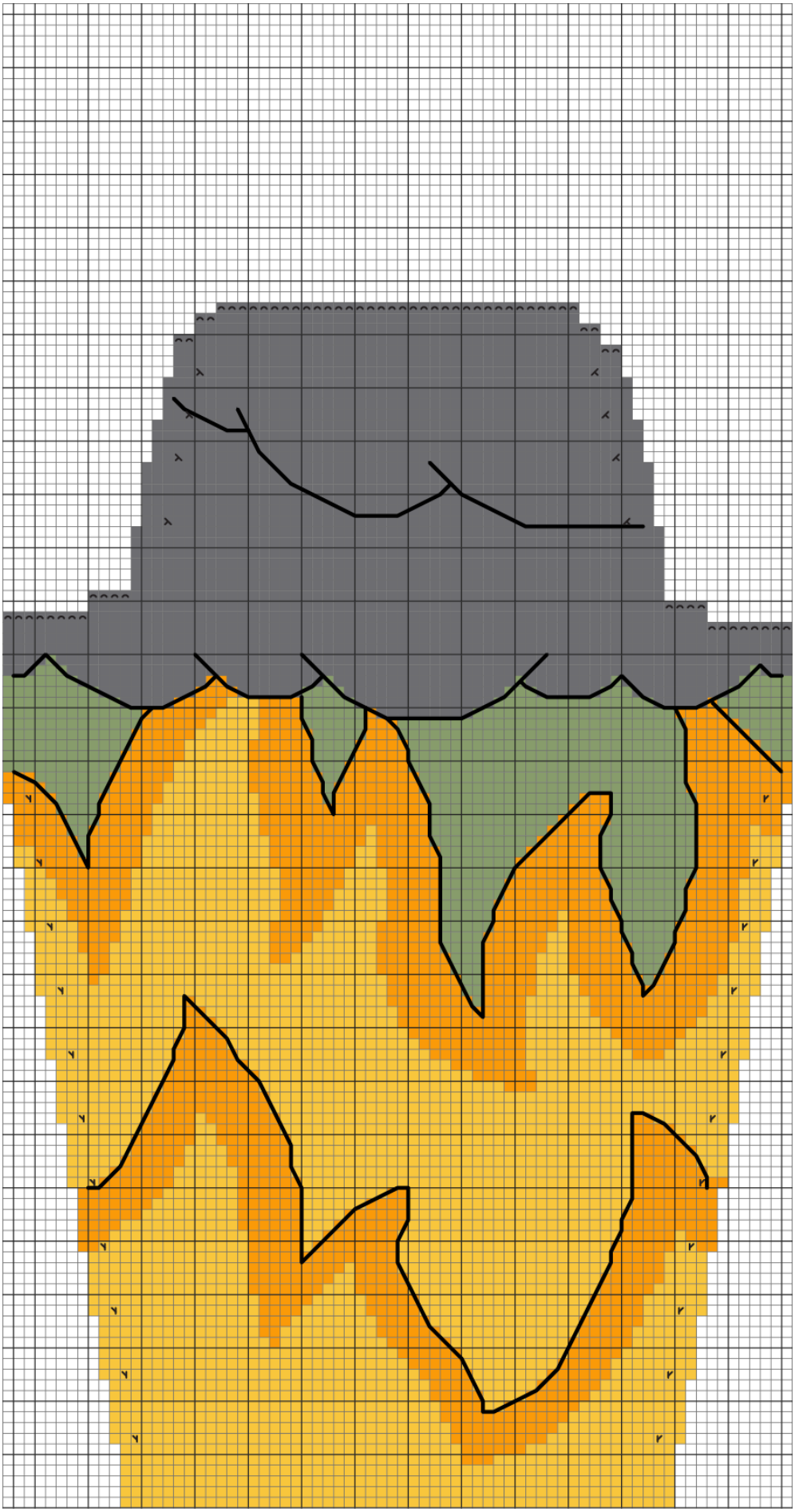
Left sleeve (medium)



Right sleeve (medium)



Left sleeve (short)



Right sleeve (short)