



NICU Preemie Hat

Nelson Knits

a Meta Porcella Nelson pattern

This pattern is designed with specifications requested by the medical and nursing staff of London's St. George's Hospital Trust neonatal unit for their most vulnerable premature babies. Hats knit to these instructions carry their approval. The pattern is given to you freely, so freely share it with others, but please give credit where it is due and do not claim it as your own. As with most patterns, I have borrowed ideas from many knitters, and put my own twist to a fairly simple design. I hope you enjoy knitting these hats for the at-risk children in your own community.

Recommended needles: Double pointed needles US size 1 for small or US 2 for medium and large/ 2.25mm, 2.75mm

The hat is knitted in the round, no seaming, but at the point where the opening on the forehead is made, you will be knitting several rows front and back, i.e., turn the work, as though for short rows or working flat. The entire hat is rib knit (k1,p1) unless otherwise stated.

Gauge: 30 sts to 4in/10cm

Abbreviations:

BO bind off
Cm. centimeters
CO. cast on
In. Inches
K. Knit
K2tog. Knit 2 together
M1l make 1 left
N needle



Yarn:

The yarn choice is crucial for elasticity and softness. Choose the softest **sock weight yarn** you can (knitting gauge around 30 stitches to 10cm/4 in). Machine washability is another consideration, even though the hat will be worn by only one child. Look for high merino wool content blended with a bit of polyester. A bamboo/poly blend is another good choice.

Sizes:

- Small: 25cm/10in circumference. Approx. 5 ½ - 6 ½ cm / 2 ¼ - 2 ½ in of height before starting crown.
- Medium: 30-35cm/ 12-14in circumference. Approx. 9-11cm / 4in of height before starting crown.
- Large (full term baby): 38cm / 15in circumference. Approx. 13-15cm/ 5-6in of height before starting crown.

Pattern:

CO 60 (90,120) stitches using the German twisted cast on, in pattern (k1, p1). This is the most difficult row of the whole hat, (and the most important, so take your time). If you don't usually use this cast on, this is your opportunity to learn it, and I suspect it will become a favourite, if you knit items with rib edges. This cast on is strong yet flexible, helping the hat to snug up to the baby's head without causing too much pressure. It also allows the nurses to stick their fingers inside to check the skin integrity around the baby's ears. If you need a tutorial for the technique, Patty Lyons has posted a great one on YouTube called [German Twisted Cast on in Pattern](#). Please don't experiment with another cast on.

R1 join the stitches in the round and k1, p1 around. Put 20 (30, 40) sts on each of three needles and work with a fourth. The hat has a tri- corner crown decrease, worked at the beginning and end of each needle, so this will be the simplest way to work it all the way up.

R2 N1: sl 1 st p-wise, *yo,k2tog* x 9 (14,19), sl final p st to N2 p-wise.

N2: *yo,k2tog* x 10(15, 20), sl final p st to N3 p-wise.

N3: *yo, k2tog* x10(15, 20), sl final p st to N1, yo, k2 tog. You are now at the beginning of R 3 on N1.

R3 continue across N1,* p next yo, k1* to end.

N2 p next yo and place it on N1, continue across N2, *k1, p1* x9 (14, 19), k1.

N3 p next yo and place on N2. *k1p1* x 9 (14, 19) k1. P the yo on N 1 and place it on N3. You should now have 20 (30, 40)sts on each N in k1p1, beginning with a k and ending with a p.

(K2tog with a p st followed by a k st causes the purl to disappear behind the k, resulting in a very tidy almost column effect. You are constructing an eyelet row for tying the breathing tube/feeding tube to the hat. The nurses need flexibility in where to place the ties, which varies with each child.)

R4 k in pattern around

R5 k in pattern to st 10 (15, 20) on needle 1. Make a 5 st bobble and complete the row in pattern. If you have forgotten how to make a bobble, don't panic, it is simple. Mimi Kezer's bobble tutorial on YouTube is excellent. (She does a few manipulations to minimize the dangling she thinks she gets, but we will be using the bobble in place of a button, so a little dangling is fine). Finish the row in pattern.

R6 This is a row where the ten middle stitches are cast off to make the opening for the flap for the fontanel check the nurses do. The edges of the opening need to lie flat. This is done by working two stitches at either edge in moss stitch, which is simply knit the purl and purl the knit. The m1l at stitch 5 gives a more secure corner to the opening. (Roxanne Richardson explains this technique in her YouTube video called [Binding Off in the Middle of a Row](#)). The cast off is a stretchy bind off technique shown really well in the You Tube video by 10rowsaday called [Stretchy Bind Off - Three Ways](#); follow the instructions for the third way which begins at minute 7.55 of the video. She demonstrates on a k3,p3 rib, but of course you can adapt it for your k1, p1 rib!



Knit in pattern to st 5 (10, 15) m1l, k1; put the k1 and the m1l on the left needle and knit them together, work the next st as it presents, put the previously worked st back on the l needle and work them together (the stretchy bind-off). Continue across the needle, working each st as it appears until you have 5 (10,15)sts, work the 2 edge sts in moss st, and the final sts in pattern. Needle 1 should now have 5 (10, 15) sts, 10 cast off sts and 5 (10, 15) sts at the other end. Continue in pattern across needles 2 and 3 to finish the row.

R7 At this point work back and front as though flat knitting for 8 rows, don't forget to make the opening edge sts in moss st. Begin by working the first 5 (10, 15)sts of row 7 on needle 1, turn your work, work the moss st on the first 2 sts, and work in pattern across the other stitches, then in pattern across needle 3 then 2 and finally the 5(10,15)stitches at the other end of N 1. Work this row 7 more times. You should have about a 1.5cm opening and end on the outside with the bobble button facing out.



Break the yarn leaving about a 6 inch tail.

Flap

On separate needles CO 15 sts in pattern (k1,p1). This is a good chance to practice that German twisted cast on again.

R1 work row in moss st; knit the purls and purl the knits.

R2 work across in moss st pattern through st 7, yo, work 2 sts together as the second st presents, e.g., if the second st is a k, then purl the sts together, if it is a purl then knit the stitches together. (This is making the buttonhole for the flap).

R3-10 work across in moss st. This creates a decorative flat, non-curling flap.

R11,12,13 dec 1 st at the beginning of each row. Stay in pattern. 12 sts (2cm top to bottom).

R14 K the 5th (10th, 15th)stitch on needle 1 with the first st of the flap, work across the flap and purl the final flap st with the next st. Tip: I like to use the cut yarn from the hat to tighten up the join later, so if you usually knit your ends in as you work, I recommend that you not do that this time. With the flap in place, you resume knitting in the round. Work across the other needles in pattern.

R 15 work across three needles in pattern until the hat measures 2.5 inches or 6.5cm (3in/7.75cm, 4in/10cm).



Crown

Each needle has 20 (30, 40) sts and will be worked in the same way.

R 1 Dec row- k1,k2tog, work in pattern to last 2 sts, ssk.

R 2 work in pattern. Tip: When working this row, if I see that a purl st will be involved in the dec in the next row, I knit rather than purl it; I think it has a smoother look to it, but it is not necessary.



When you have 12 (15, 20)sts per needle, begin decreasing each row. End when there are 4 sts left per needle. Pull yarn through all the sts and weave the yarn inside.

Your hat will need three cords for the nurses to use. Two should be about 10-11 inches (25-28cm) and one long enough to go through all the eyelets and tie at the top (a bit longer than the others). They don't always use this longer cord, but it is good to send it along, in case. The two-loop cord is perfect for tying the flange. I direct you to another YouTube video to learn or review this technique. [Two-loop cord technique](#) by The Artful Acorn.



Final steps: Wash and block your hat. Place it in a clear bag, label it as to what wool you used, what size it is.

Thank you for your work to improve the lives of this very fragile population.

