## Noro Catherine Wheel Hat

Designed to match the Noro Catherine Wheel Scarf, this pretty hat is crocheted with Noro Silk Garden Sock in the Catherine Wheel stitch.

This pattern was written using American crochet terminology.

## Materials

Size E ( 3.5 mm ) crochet hook
Size F ( 3.75 mm ) crochet hook

Color A: 1 skein Noro Silk Garden Sock

Color B: 1 skein Noro Silk Garden Sock in a contrasting color
Tapestry needle

The pictured hat was made with color S269 (white/natural) and S264 (green/blue/purple).

You'll have some yarn left over from the two skeins, especially color B. This hat used about two-thirds of a 100 g skein of color A, and only a quarter-skein of color $B$.


## Special Instructions

The following stitch is used to create half of the Catherine Wheel pattern:
Cluster (CL): (yo, insert hook into st, yo and draw loop through st, yo and draw through 2 loops on hook) over the number of sts indicated, yo, draw through all loops on hook.

You know you're doing it right if you end up with loops for the number of stitches plus 1 before drawing the final loop through (e.g., CL over 7 sts results in 8 loops on hook before final yo and draw-through.)

## GAUGE

$2^{\prime \prime}=12$ stitches and 6 rows in double crochet
$13 / 4 "=1$ wheel repeat

## Crown

The top of the hat is formed with rounds of simple double crochet. It starts with a loop of yarn known as a "magic adjustable ring." If you don't know how to make one, there are many tutorials on the internet.

With color A, form a magic ring. Using the smaller hook, work the crown as follows.
Round 1: 12 dc in ring.
Round 2: Ch 3, 2 dc in each dc around (24 dc), join to first dc with sl st.
Round 3: Ch 3, dc in same dc, dc in next dc, (2 dc in next dc, dc in next dc) around (36 dc), join.
Round 4: Ch 3, dc in same dc, dc in each of next 2 dc , ( 2 dc in next dc , dc in each of next 2 dc ) around ( 48 dc ), join.

Round 5: Ch 3, dc in same dc, dc in each of next 3 dc , ( 2 dc in next dc, dc in each of next 3 dc ) around ( 60 dc ), join.
Round 6: Ch 3, dc in same dc, dc in each of next 4 dc , ( 2 dc in next dc, dc in each of next 4 dc ) around ( 72 dc ), join.
Round 7: Ch 3, dc in same dc, dc in each of next 5 dc , ( 2 dc in next dc, dc in each of next 5 dc ) around ( 84 dc ), join.
Round 8: Ch 3, dc in same dc, dc in each of next 14 dc , ( 2 dc in next dc, dc in each of next 14 dc ) around ( 90 dc ), join.
Round 9: Ch 3, dc in same dc, dc in each of next 15 dc , ( 2 dc in next dc , dc in each of next 15 dc ) around ( 96 dc ), join.
Round 10: Ch 3, dc in same dc, dc in each of next 16 dc , ( 2 dc in next dc, dc in each of next 16 dc ) around (102 dc), join.
Round 11: Ch 3, dc in same dc, dc in each of next 49 dc , ( 2 dc in next dc, dc in each of next 49 dc ) around (104 dc), join.
In other words, the rounds increase by 12 dc for 6 rounds ( $2 \frac{1}{2}$ " from center), then increase by 6 dc for 3 more, ( $31 / 2^{\prime \prime}$ from center) then just 2 dc for the last round of the crown ( $33 / 4$ " from center).

## BAND

The Catherine Wheel is a 10 -stitch repeating pattern. Gauge is quite different from the rounds of dc, so the first row of the band adjusts the number of stitches for the repeating pattern from 104 to 130 ( 13 wheels around).

Switch to the larger hook.
Round 12: Ch3 (counts as first dc), dc in next dc, skip 1 dc , sc in each of next 3 ch , skip $2 \mathrm{dc}, * 7 \mathrm{dc}$ in next dc, skip 2 dc , sc in each of next 3 dc , skip 2 dc ; repeat from * 11 times, 3 dc in last dc, join beginning of round with sl st.

Switch to color B.
Round 13: Ch 1 (counts as first sc), sc into next st, * ch 3, CL over next 7 sts, ch 3 , sc in each of next 3 sts; repeat from * 11 times, ch 3 , CL over next 7 sts, ch 3 , sc in last st, join.

Round 14: Ch 1 (counts as first sc), sc in next sc, skip 3 ch, 7 dc into loop that closed CL, * skip 3 ch, sc in each of next 3 sc, skip 3 ch, 7 dc into loop that closed CL; repeat from * 11 times, skip 3 ch, sc in last st, join.

Switch to color A.
Round 15: Ch 3 (counts as first dc), CL over next 3 sts, * ch 3, sc in each of next 3 sts, ch 3 , CL over next 7 sts; repeat from * 11 times, ch 3,1 sc in each of next 3 sts, ch $3, C L$ over next 4 sts, join.

Round 16: Ch 3 (counts as first dc), 3 dc in same st, * skip 3 ch, sc in each of next 3 sc, skip 3 ch, 7 dc into loop that closed CL; repeat from * 11 times, skip 3ch, sc in each of next 3 sc , skip $3 \mathrm{ch}, 3 \mathrm{dc}$ into loop that closed CL , join.

Rounds 17-20: repeat rounds 12-15.
Rounds 21-23: repeat rounds 12-14.
The band should now look like 3 stripes of color B, ending with semicircles of color A. Cut color B and move on to the brim with color A.

## Brim

The brim is just more rounds of double crochet. The stitch count is adjusted back to 104 and then increased. The brim edge is made up of semicircles and dense picots to create a ruffled effect.

Switch back to the smaller hook.

Round 24: With color A, ch 3 (counts as first dc), * 2 dc in 3 ch , dc in each of next $3 \mathrm{sc}, 2 \mathrm{dc}$ in 3 ch , 1 dc in loop that closed CL, repeat from * 11 times, 2 dc in 3 ch , dc in each of next $3 \mathrm{sc}, 2 \mathrm{dc}$ in 3 ch , join ( 104 dc ).

Round 25: Ch 3, dc in same dc, dc in each of next 26 dc, ( 2 dc in next dc, dc in each of next 26 dc) around (108 dc), join.
Round 26: Ch 3, dc in same dc, dc in each of next 9 dc , ( 2 dc in next dc, dc in each of next 9 dc ) around ( 120 dc ), join.
Round 27: Ch 3, dc in same dc, dc in each of next 10 dc , ( 2 dc in next dc, dc in each of next 10 dc ) around ( 132 dc ), join.
Round 28: Ch 3, dc in same dc, dc in each of next 11 dc , ( 2 dc in next dc, dc in each of next 11 dc ) around (144 dc), join.
Round 29: Ch 3, dc in same dc, dc in each of next 12 dc , ( 2 dc in next dc , dc in each of next 12 dc ) around ( 156 dc ), join. In other words, the first round adjusts the stitch count to 104 , which is then increased by 4 dc in one round, then by 12 dc in the remaining four.

Round 30: Sl st in first dc, * skip 2 dc, 7 dc in next dc, skip 2 dc, sl st in next 2 dc, skip 2 dc, 7 dc in next dc, skip 2 dc, sl st in next dc, repeat from * around ( 24 semicircles), join.

Note: the pattern changes from sl st in $2 d c$ to sl st in $1 d c$ after alternating semicircles. If your count isn't coming up right, make sure you're following this rhythm.

Round 31: Ch 1, (sc, ch 3, sc) in each dc around, skipping slipped stitches. Join and tie off.


## Finishing

After completing the edge, cut A and weave in all ends with the tapestry needle.

Noro yarn really softens with good soak and block. Let the finished hat soak in cool water and a bit of wool wash or conditioner. Gently squeeze the water out and air dry, preferably on a head-shaped form.

## Variations

You can make this hat in different yarn weights, following some general guidelines. For the crown, start out by increasing by 12 dc for most of the rounds, then shape (see the "in other words" notes in that section for info about how this one was shaped). Your dc rounds should go out about $31 / 2 "-33 / 4$ from center before starting the band.

For the band, make a couple of swatches of the Catherine Wheel in the round to see how many wheels to make. (In the round is important, since a flat Catherine Wheel can have a very different gauge.) The average woman's head circumference is $22^{\prime \prime}$. The wheels on this hat are between $1 \frac{1}{2}$ " and $1 \frac{3}{4}$ " apart, so 13 wheels makes the band just about right. Also, 10 sts of a Catherine Wheel is much smaller than 10 sts dc, so you'll have to adjust accordingly. (This is why this hat jumped from 104 sts dc to 130 sts in the wheel pattern, and also used a larger hook.) Make as many rows as will fit in about 3 " - $311 / 2$ ".

For the brim, adjust the dcs back to the original count, increase to a multiple of 12 , then increase by 12 for a few rows. Finish off with evenly spaced 7-dc semicircles (use sl sts to get them evenly spaced), and then work picots in those dcs. Voilà!

