



Escher's Forest

Möbius Hairband
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Maths and knitting go together like chemistry and cooking — lots of end users don't think about it and just like to follow the instructions, and you can get fantastic results that way, but if you want to go deeper and truly create something of your own, you have to understand the underlying scientific principles.

The Möbius strip is a great example of the combination of knitting and maths. This headband is a 3D illustration of a 2D surface with only one side in 3D space: an infinite track that could turn your mind inside out if you think about it too hard — but also keeps your hair back and your ears warm! The leaf-patterned lace gives it a vernal, organic feel, and the scalloped edges with a picot bind-off are soft, feminine and ever-so-slightly reminiscent of another mathematical wonder: fractals.

So whether it's to motivate you to do your homework, to tame your hair in the spring breeze or to act as your life-line through a metaphysical maze of numbers, give Escher's Forest a go and let your geek side out.

Yarn:

Sweet Clement Smitten (100% superwash merino; 360 yd/330 m per 100g skein);
color: Olive; 1 skein

Gauge:

28 st/20 rows (2 repeats of leaf lace pattern) = 11.5 cm (4.5 inch) x 4 cm (1.5 inch) in
leaf lace, blocked but unstretched.

Finished measurements:

Circumference: 16.5 inches (42 cm) unstretched, 27 inches (68 cm) stretched to
maximum.

Width: 5 inches (13 cm)

Needles:

3.5mm, 100cm circular

Pattern notes:

One skein of yarn is enough for two headbands.

Picot bind-off method: Bind off 2 st, *return remaining st on right-hand needle to left-hand needle, CO 2 st, cast off 4 st, repeat from * to end and fasten off last st.

Instructions for the möbius cast-on can be found here:

<http://www.knitty.com/pre2010blog/2008/11/in-aid-of-election-eveday-harmony-cat.html>

Abbreviations:

co = cast on

k = knit

p = purl

yo = yarn over

k2tog = right-leaning decrease: knit 2 together

ssk = left-leaning decrease: slip 2 purlwise, return to left needle and knit together through the back loops.

k3tog = right-leaning double decrease: knit 3 together

sssk = left-leaning double decrease: slip 3 purlwise, return to left needle and knit together through the back loops.

Instructions:

Using möbius cast on, co 112 st × 2. Place marker and join,

Knit 1 row.

Follow chart OR lace pattern. There will be 16 repeats of the lace in each round.

For both sets of instructions, work rounds 1–10 twice, then rounds 1–2 again. Bind off using picot method.

Written instructions:

Row 1: *k1, yo, k5, yo, SSSK, yo, k5, yo. Repeat from * around.

Row 2: k all st.

Row 3: *k1, yo, k1, SSK, p1, k2tog, k1, yo, p1, yo, k1, SSK, p1, k2tog, k1, yo.

Repeat from * around.

Row 4: *k4, p1, k3, p1, k3, p1, k3. Repeat from * around

Row 5: *k1, yo, k1, SSK, p1, k2tog, k1, p1, k1, SSK, p1, k2tog, k1, yo. Repeat from * around.

Row 6: *k4, p1, k2, p1, k2, p1, k3. Repeat from * around.

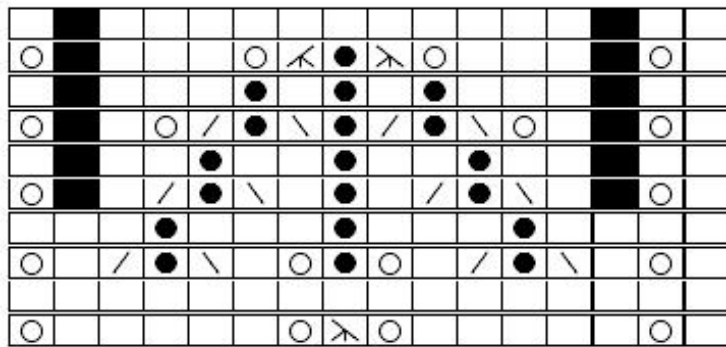
Row 7: *k1, yo, k1, yo, SSK, p1, k2tog, p1, SSK, p1, k2tog, yo, k1, yo. Repeat from * around.

Row 8: *k5, p1, k1, p1, k1, p1, k4. Repeat from * around.

Row 9: *k1, yo, k3, yo, SSSK, p1, k3tog, yo, k3, yo. Repeat from * around.

Row 10: k all st.

Chart:



Legend:

- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

- p
- sssk
- k2tog
- yo
- sssk
- k3tog
- no stitch

Finishing:

Weave in all ends and steam block gently to open up the lace.

