## Science Matters Hat

## Materials

* 85-100 g / 110-130 yards Aran (or $100 \mathrm{~g} /$ 200 yards worsted held double)
* US 10 ( 6 mm ) - 16 in ( 40 cm ) circular needles, or needles required to reach gauge.
* Recommended: US 8 ( 5 mm ) - 16 in ( 40 cm ) or smaller circular needles for snugger brim.
* Stitch marker.


## Gauge

In stockinette, unblocked: 12-14 st / 4 in ( 10 cm ), blocked: $14-16$ st / 4 in ( 10 cm ).

## Sizing

## Small (Medium, Large)

Small will fit children, Medium will fit S/M adult heads ( $21^{\prime \prime}-22.5^{\prime \prime}$ ), Large will fit Large adult heads ( $23^{\prime \prime}$ and over). The size of your hat will vary based on your yarn weight, yardage, and gauge.

## Abbreviations

st(s): stitch(es)
m: marker
pm: place marker
k: knit
p: purl
k2tog: knit two together

## Instructions for one color

## Set Up \& Ribbing

Loosely CO $70(74,78)$ sts (using smaller needle if you have one, anything from a US7 - US9 will work for the brim). Pm, join for working in the round.
$1 \times 1$ ribbing: with smaller needle ( $k 1, \mathrm{p} 1$ ) to end of round. Repeat until work measures $2 \mathrm{in} / 5 \mathrm{~cm}$. If working ribbing in smaller needle, change to larger needle after ribbing is complete.

## Crown Pattern Repeat

Rnd 1-5: $k$ to end of round.
Rnd 6-7: $p$ to end of round.
Repeat Rounds 1-7 three more times (or four more for extra slouch or size large).

## Decreases

Most rounds will not end with a k2tog, i.e. if there are less than 7 stitches remaining after the last ( $k 5, k 2 t o g$ ) then knit the remaining stitches.
Rnd 1-2: $\mathbf{k}$ to end of round.
Rnd 3: *(k5, k2tog) repeat from * until end of round.
Rnd 4: $\mathbf{k}$ to end of round.
Rnd 5: *(k4, k2tog) repeat from * until end of round.
Rnd 6-7: $p$ to end of round.
Rnd 8-9: k to end of round.
Rnd 10: *(k3, k2tog) repeat from * until end of round.
Rnd 11: $\mathbf{k}$ to end of round.
Rnd 12: k1 * (k2tog, k2) repeat from * until end of round.
Rnd 13: $\mathbf{k}$ to end of round.
Rnd 14: *(k1, k2tog) repeat from * until end of round.
Rnd 15: $\mathbf{k}$ to end of round.
Rnd 16 \& 17: k2tog until end of round, k1 if 1 st remains before marker.
Cut yarn. Using tapestry needle, pull yarn through remaining stitches. Weave in ends. Block gently.

## Science Matters Hat

## Instructions for two colors

## Set Up \& Ribbing

Using Color A, loosely CO $70(74,78)$ sts (using smaller needle if you have one, anything from a US7 - US9 will work for the brim). Pm, join for working in the round.

1 x 1 ribbing: with smaller needle ( $k 1, \mathrm{p} 1$ ) to end of round. Repeat until work measures 2 in / 5 cm . If working ribbing in smaller needle, change to larger needle after ribbing is complete.

## Crown Pattern Repeat

When switching between colors keep non-working color held to back. Optional: To better hide the jog that occurs when striping in the round, pick up the first stitch of the second round knit with the new color along with the stitch below, knit these two stitches together.
Rnd 1-4: with color $A, \mathbf{k}$ to end of round.
Rnd 5: with color $B, \mathbf{k}$ to end of round.
Rnd 6-7: with color B, $\mathbf{p}$ to end of round.
Repeat Rounds 1-7 three more times (or four more for extra slouch or size large).

## Decreases

Most rounds will not end with a k2tog, that is fine. For example, if there are less than 7 stitches remaining after the last ( $k 5, k 2$ tog) then knit the remaining stitches.
Rnd 1-2: with color A, $\mathbf{k}$ to end of round.
Rnd 3: *(k5, k2tog) repeat from * until end of round.
Rnd 4: $\mathbf{k}$ to end of round.
Rnd 5: with color $\mathrm{B},{ }^{*}(\mathbf{k 4}, \mathrm{k} 2$ tog $)$ repeat from * until end of round.
Rnd 6-7: $p$ to end of round.
Rnd 8-9: with color A, $\mathbf{k}$ to end of round.
Rnd 10: *(k3, k2tog) repeat from * until end of round.
by Danielle Morgan, GoldenAppleThreads.com

## Instructions for Optional Intarsia Rain Drops are inset

Rnd 11: $\mathbf{k}$ to end of round.
Intarsia Rnd 11: *(with color A: k3, with color
$B$ : k1) repeat from * until end of round.
Rnd 12: k1 * (k2tog, k2) repeat from * until end of round.

Rnd 13: $\mathbf{k}$ to end of round.
Rnd 14: *(k1, k2tog) repeat from * until end of round.

Intarsia Rnd 14: *(with color A: k1, with color B: k2tog) repeat from * until end of round.
Rnd 15: $\mathbf{k}$ to end of round.
Rnd 16 \& 17: k2tog until end of round, k1 if 1 st remains before marker.

Cut yarn. Using tapestry needle, pull yarn through remaining stitches. Weave in ends. Block gently.


