

Rosalind

(an illusion scarf)



Illusion knitting – a technique that provides you with a secret image when viewed at an angle – may look complex but is about the simplest form of patterned colour-work going. At heart, it's just alternating patches of garter and stockinet. If you can purl, you can illusion knit.

DNA and illusion knitting could be made for one another. Looking across the scarf, the ladders of the striping pattern twist round those of the helix as purls and knits start to bunch together to display a regular shape (at least for those initiated on how to look).

This pattern originally was featured in Magknits, and Kerrie challenged me to develop a pattern that works to a variety of yarn choices. I agree – you should be able to make a genetics-based pattern your own. Choose the materials you like, work around the loose set of rules I've outlined below and see what sort of beautiful mutant you turn out. I've made several versions of this now, one as a baby blanket, and another on socks.

The title is after Rosalind Franklin (google it), and, because I thought a family reference would be appropriate, a cousin of mine. However, I should emphasize this scarf is versatile enough for any gender.

Materials

- Jaeger Matchmaker DK, 100% Merino Wool, 120 m (132 yards) per 50 g ball, one ball 655 “burgundy”, one ball 730 “loden”.
- Set of 3.25mm needles
- Crochet hook, tapestry needle.

Gauge: 24 stitches/ 32 rows in stocking stitch over 10cm/ 4inch square gage swatch.

A note on yarn substitutes

The most important thing to remember for illusion knitting is to choose two yarns of the same gage, preferably of the same texture/ material and of contrasting colours.

For illusion knitting I recommend *against* variegated yarns and *in favour* of those with good stitch definition.

When viewing the scarf to see the illusion, the “MC” is the background colour and the CC the double helix, it is worth considering which of the two of your chosen colours is the more dominant when working out which one to cast on with.

Choose needles that will give you a reasonably tight gage for your yarn. For example, I’d use 2mm’s with 4ply. Using 3.25mm’s with DK gave me quite a loose gage for illusion knitting, which I wanted to make a looser, lighter spring scarf, but if you want the illusion to be very obvious you would need be to tighter (but then you might not want it too obvious – again, all these decisions are a matter of your personal taste).

Sizes

The finished DK scarf pictured measured 12cm/ 5inches by 130cm/ 50inches (not including fringe).

However you can knit it to whatever length you wish, and make adjustments for width too. Think about your desired size when you are deciding what yarn and which chart to use. The small DK one pictured used the small chart for a small spring/ autumn scarf. Using the same chart in aran/ heavy worsted would make for a wider, warmer winter garment.

Pattern notes

You can choose from two different versions of the chart, depending on gauge. The more detailed version has been written out in knitters language (for those who won't or can't use charts). See the appendixes.

Each row of the chart is actually four rows of knitting, one double-rowed stripe of each the MC and CC. The CC is, at heart, stocking stitch, giving a nice flat surface, where as the MC is based on the bobbles of garter.

By swapping the MC to stocking you create a little valley, looking at the work from an angle you see through the valley onto the next "mountain" of garter stitch, which you provide by a corresponding swap of stitches in the next CC stripe.

Illusion knit pattern for following the chart:

Row one (RS): with MC, knit

Row two (WS): [knit the blank boxes, purl the ones filled in]

Row three (RS): change to CC, knit

Row four (WS): [purl the blank boxes, knit the ones filled in]

I read the chart from left-right, as its only on the WS rows you need to look at it, but it doesn't really matter other than I should warn you that if you do it right-left your scarf will be a mirror image of what you see on the chart.

The chart is repeatable; once you have finished the last row, go back to row one. You can finish the scarf on any row of the chart.

Please read the modification notes at the end for advice on choosing which chart, non-scarf project ideas for it, adjusting for curling and "splicing" for a keyhole version.

Pattern

You do not need to fringe this scarf, but if you do measure out the fringe-yarn first. This way you can knit the body of the scarf until you run out of yarn without fear of frogging.

Using MC, loosely CO the number of stitches you've decided on (dependent on which chart you use and whether you are adding a boarder).

*Knit two rows in MC. Change to CC. Knit one row CC, purl one row CC**.

When swapping colours between stripes just carry the yarn up, no need to weave in that many ends.

Work the chart, using the row notes to follow it, until you have nearly run out of yarn or almost achieved desired length.

Every few chart-rows, stop and have a look at the illusion. Everybody's taste and knitting is different and you might want to play with the chart a bit – it may look huge but the shape is simple enough you can swap a purl to a knit here and there to suit yourself.

Repeat from * to ** once more, and finish with two knit rows of MC.

Finishing

CO in MC. If you adding a fringe its worth casting off loosely, swapping to larger needles can help.

Weave in ends and, if desired, work fringe at each end. Block. Next, if you haven't already, make the cable DNA scarf because it's just a work of genius.



Modification notes

Adjusting for curling

There's enough stocking stitch in the scarf to make it curl slightly around the helix. I actually like this, and frogged the version I did with a garter stitch boarder. But some people just hate curl, if you would rather a more flat effect simply cast on an extra few stitches and work a work them in garter stitch either side of the chart pattern.

For the double knit version I found an extra six stitches worked fine (three each side). Remember this will use more yarn per row.

If the scarf seems to curl too much while you are knitting it, remember blocking will make a huge difference.

Choosing which chart to use

The chart comes in “doubleknit” and “chunky” sizes, reflecting the yarns I tested them on, but should work another weight of yarn, just use the chart closest in gage to your yarn choice.

If you want to use a lighter yarn than double knit (e.g. 4ply) I suggest you use the medium chart, and work a good extra 30 sts plain garter stitch next to it, so the double helix runs along side one side of the scarf. I did try a sockweight chart, but once I'd knitted up more than a few inches it became clear it wouldn't be nearly as nice as the other ones. Contrary to what I assumed, the detail provided by such a small gage took something from the regularities of the shapes.

You could use 4ply with the chunky chart to make a tiny helix which would look great worked into a sock or mitten pattern.

Keyhole version

You can “splice” the double helix and turn it into a keyhole scarf. These have a sort of large buttonhole at one end, through which you can tuck the other end of the scarf to fasten it round your neck. I would suggest this for a short scarf (shorter than the example one) made with reasonably lightweight yarn.

If you want a keyhole wait till you are about half way through the scarf before you plan how you are going to fit it. Then try on the scarf to work out roughly where you'll want the hole. Next measure how wide your scarf is, roughly half that distance will be how long you want the keyhole to be, and by then you should have enough worked to see how many rows will achieve that distance.

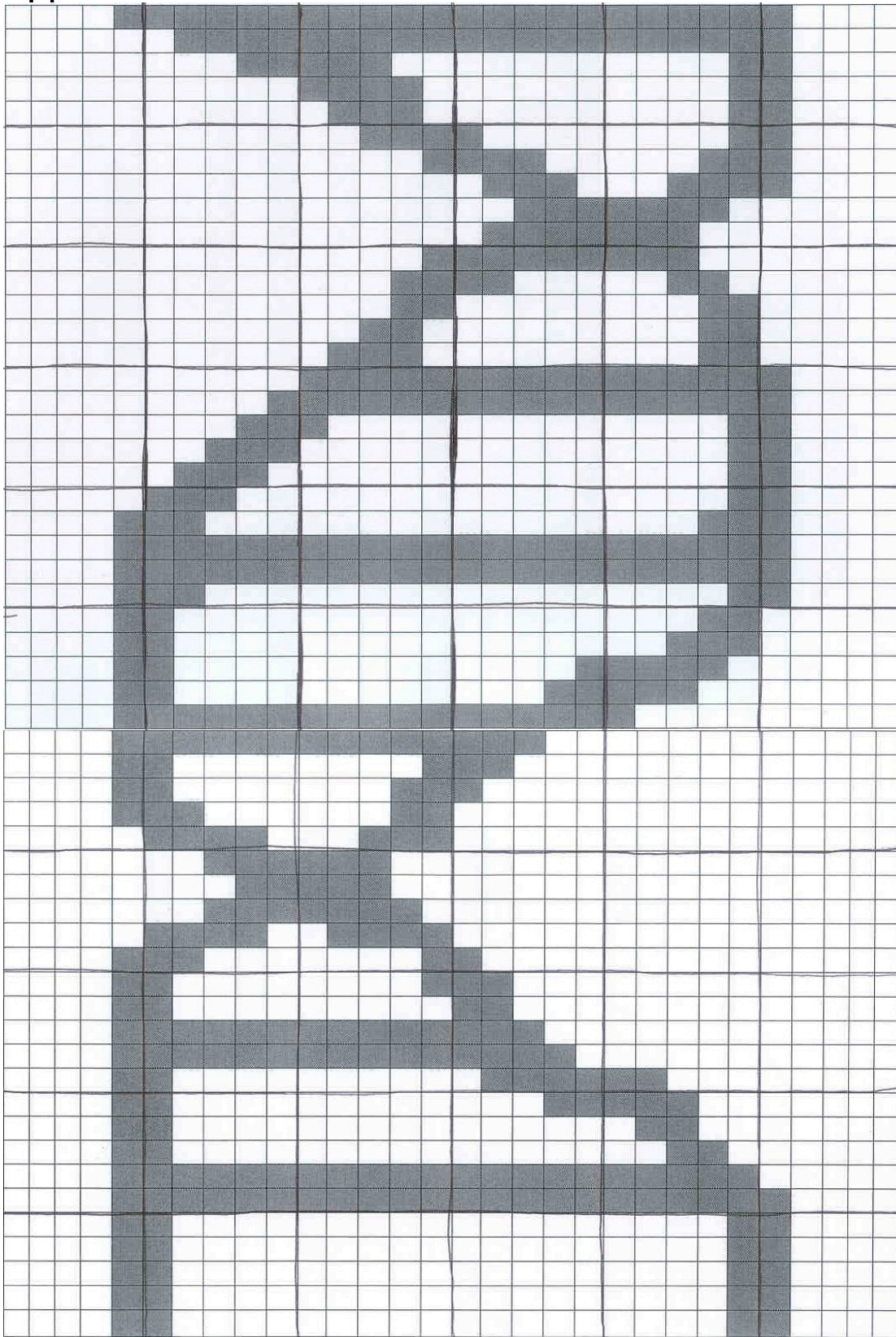
When you reach the point the hole should start work half the stitches in the row, then continue with new yarn (working from both ends of a centre-pull ball is recommended), so you are working both sides of the scarf at once but with different ends of yarn. Do the same when you move to the next colour and continue in pattern until the hole is large enough, then you seal it up simply by going back to working just the one end of yarn.



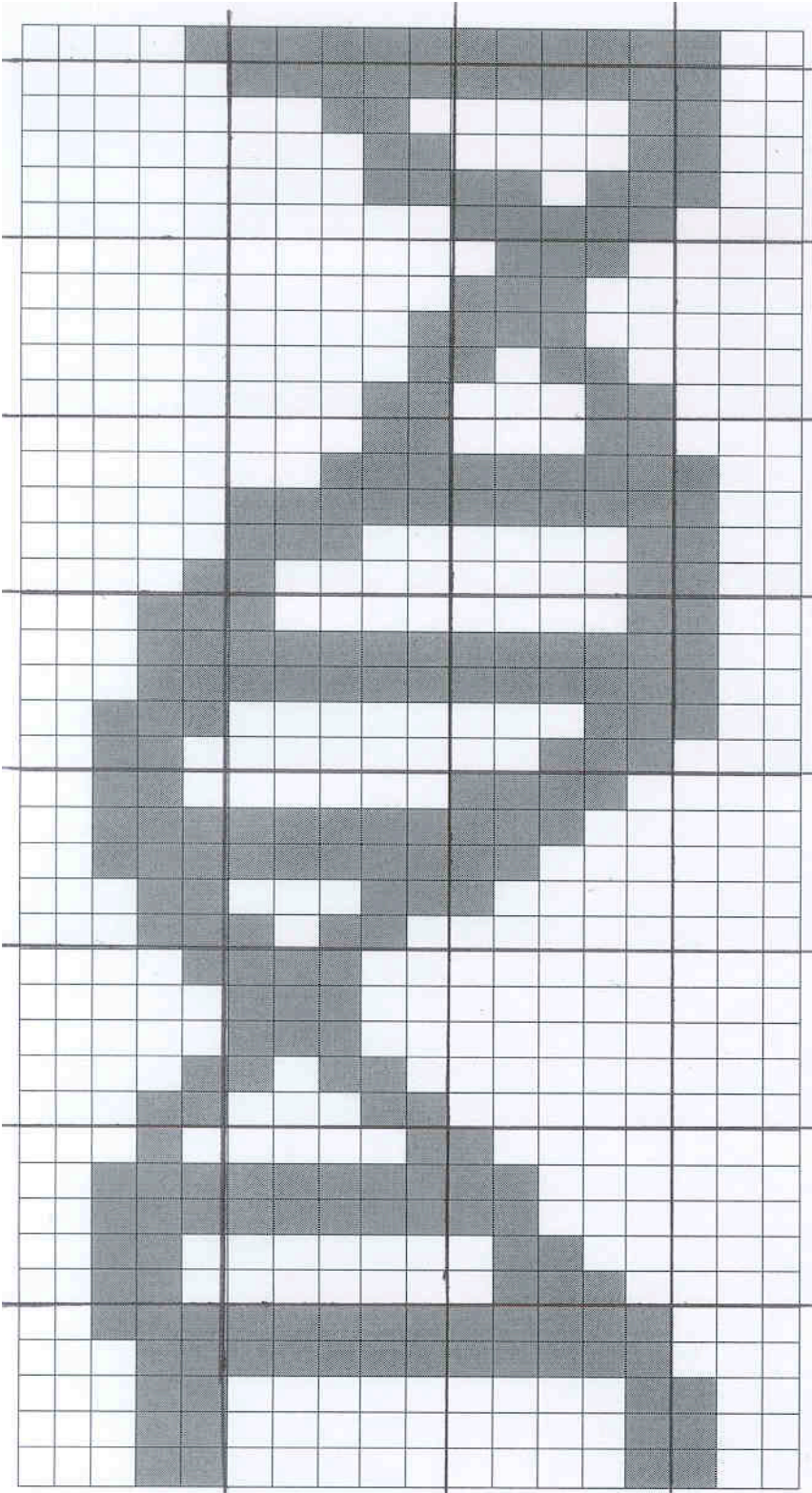
Designer: A life-long Londoner, Alice learnt to knit when she got board of looking out the windows on the bus. She blogs at <http://slippedstitch.blogspot.com>. Email: alicerosebell@gmail.com. Ravelry username: slippedstitch.

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Appendix 1: DK Chart



Appendix 2: Chunky Chart



Appendix 3: DK Version Written Out

MC – main colour

CC – contrast colour

Row 1 – MC – knit

Row 2 – MC, k4, p2, k18, p2, k4

Row 3 – CC – knit

Row 4 – CC, p4, k2, p18, k2, p4

Rows 5-20 – Repeat rows 1-4 four times

Row 21 – MC, knit

Row 22 – MC - k4, p22, k4

Row 23 – CC, knit

Row 24 – CC – p4, k22, p4

Row 25 – MC knit

Row 26 – MC – k5, p 21, k4

Row 27 – CC – knit

Row 28 – CC – p5, k21, p4

Row 29 – MC knit

Row 30 – MC – k6, p2, k16, p2, k4

Row 31 – CC – knit

Row 32 – CC – p6, k2, p16, k2, p4

Row 33 – MC – Knit

Row 34 – MC – k7, p2, k15, p2, k4

Row 35 – CC – Knit

Row 36 – CC – p7, k2, p15, k2, p4

Row 37 – MC – Knit

Row 38 – MC – k7, p5, k12, p2, k4

Row 39 – CC – Knit

Row 40 – CC – p7, k5, p12, k2, p4

Row 41 – MC – Knit

Row 42 – MC – k8, p6, k10, p2, k4

Row 43 – CC – Knit

Row 44 – CC – p8, k6, p10, k2, p4

Row 45 – MC – Knit

Row 46 – MC – k11, p15, k4

Row 47 – CC – Knit

Row 48 – CC – p11, k15, p4

Row 49 – MC – Knit

Row 50 – MC – k12, p14, k4

Row 51 – CC – Knit

Row 52 – CC – p12, k14, p4
Row 53 – MC – Knit
Row 54 – MC – k13, p2, k9, p2, k4
Row 55 – CC – Knit
Row 56 – CC – p13, k2, p9, k2, p4
Row 57 – MC – Knit
Row 58 – MC – k13, p3, k8, p2, k4
Row 59 – CC – Knit
Row 60 – CC – p13, k3, p8, k2, p4
Row 61 – MC – Knit
Row 62 – MC – k14, p2, k7, p3, k4
Row 63 – CC – Knit
Row 64 – CC – p14, k2, p7, k3, p4
Row 65 – MC – Knit
Row 66 – MC – k15, p4, k2, p4, k5
Row 67 – CC – Knit
Row 68 – CC – p15, k4, p2, k4, p5
Row 69 – MC – Knit
Row 70 – MC – k16, p7, k7
Row 71 – CC – Knit
Row 72 – CC – p16, k7, p7
Row 73 – MC – Knit
Row 74 – MC – k17, p5, k8
Row 75 – CC – Knit
Row 76 – CC – p17, k5, p8
Row 77 – MC – Knit
Row 78 – MC – k17, p6, k7
Row 79 – CC – Knit
Row 80 – CC – p17, k6, p7
Row 81 – MC – Knit
Row 82 – MC – k15, p3, k3, p4, k5
Row 83 – CC – Knit
Row 84 – CC – p15, k3, p3, k4, p5
Row 85 – MC – Knit
Row 86 – MC – k15, p2, k6, p3, k4
Row 87 – CC – Knit
Row 88 – CC – p15, k2, p6, k3, p4
Row 89 – MC – Knit
Row 90 – MC – k14, p3, k7, p2, k4
Row 91 – CC – Knit
Row 92 – CC – p14, k3, p7, k2, p4
Row 93 – MC – Knit
Row 94 – MC – k13, p3, k8, p2, k4
Row 95 – CC – Knit

Row 96 – CC – p13, k3, p8, k2, p4
Row 97 – MC – Knit
Row 98 – MC – k12, p14,k4
Row 99 – CC – Knit
Row 100 – CC – p12, k14, p4
Row 101 – MC – Knit
Row 102 – MC – k9, p17, k4
Row 103 – CC – Knit
Row 104 – CC – p9, k17, p4
Row 105 – MC – Knit
Row 106 – MC – k7, p5, k12, p2, k4
Row 107 – CC – Knit
Row 108 – CC – p7, k5, p12, k2, p4
Row 109 – MC – Knit
Row 110 – MC – k6, p5, k13, p2, k4
Row 111 – CC – Knit
Row 112 – CC – p6, k5, p13, k2, p4
Row 113– MC – Knit
Row 114 – MC – k5, p3, k16, p2, k4
Row 115 – CC – Knit
Row 116 – CC – p5, k3, p16, k2, p4
Row 117 – MC – Knit
Row 118 – MC – k5, p2, k17, p2, k4
Row 119 – CC – Knit
Row 120 – CC – p5, k2, p17, k2, p4
Row 121 – MC – Knit
Row 122 – MC – k4, p2, k17, p3, k4
Row 123 – CC – Knit
Row 124 – CC – p4, k2, p17, k3, p4
Row 125 – MC – Knit
Row 126 – MC – k4, p22, k4
Row 127 – CC – Knit
Row 128 – CC – p4, k22, p4
Row 129 – MC – Knit
Row 130 – MC – k4, p22, k4
Row 131 – CC – Knit
Row 132 – CC – p4, k22, p4
Row 133 – MC – Knit
Row 134 – MC – k4, p3, k16, p3, k4
Row 135 – CC – Knit
Row 136 – CC – p4, k3, p16, k3, p4
Row 137 – MC – Knit
Row 138 – MC – k4, p2, k16, p3, k5
Row 139 – CC – Knit

Row 140 – CC – p4, k2, p16, k3, p5
Row 141 – MC – Knit
Row 142 – MC – k4, p2, k15, p3, k6
Row 143 – CC – Knit
Row 144 – CC – p4, k2, p15, k3, p6
Row 145 – MC – Knit
Row 146 – MC – k4, p2, k14, p3, k7
Row 147 – CC – Knit
Row 148 – CC – p4, k2, p14, k3, p7
Row 149 – MC – Knit
Row 150 – MC – k4, p2, k13, p3, k8
Row 151 – CC – Knit
Row 152 – CC – p4, k2, p13, k3, p8
Row 153 – MC – Knit
Row 154 – MC – k4, p17, k9
Row 155 – CC – Knit
Row 156 – CC – p4, k17, p9
Row 157 – MC – Knit
Row 158 – MC – k4, p16, k10
Row 159 – CC – Knit
Row 160 – CC – p4, k16, p10
Row 161 – MC – Knit
Row 162 – MC – k5, p2, k9, p3, k11
Row 163 – CC – Knit
Row 164 – CC – p5, k2, p9, k3, p11
Row 165 – MC – Knit
Row 166 – MC – k5, p2, k9, p2, k12
Row 167 – CC – Knit
Row 168 – CC – p5, k2, p9, k2, p12
Row 169 – MC – Knit
Row 170 – MC – k5, p2, k8, p2, k13
Row 171 – CC – Knit
Row 172 – CC – p5, k2, p8, k2, p13
Row 173 – MC – Knit
Row 174 – MC – k6, p2, k5, p4, k13
Row 175 – CC – Knit
Row 176 – CC – p6, k2, p5, k4, p13
Row 177 – MC – Knit
Row 178 – MC – k7, p9, k14
Row 179 – CC – Knit
Row 180 – CC – p7, k9, p14
Row 181 – MC – Knit
Row 182 – MC – k7, p7, k16
Row 183 – CC – Knit

Row 184 – CC – p7, k7, p16
Row 185 – MC – Knit
Row 186 – MC – k6, p7, k17
Row 187 – CC – Knit
Row 188 – CC – p6, k7, p17
Row 189 – MC – Knit
Row 190 – MC – k4, p4, k3, p3, k16
Row 191 – CC – Knit
Row 192 – CC – p4, k4, p3, k3, p16
Row 193 – MC – Knit
Row 194 – MC – k4, p3, k5, p4, k14
Row 195 – CC – Knit
Row 196 – CC – p4, k3, p5, k4, p14
Row 197 – MC – Knit
Row 198 – MC – k4, p2, k8, p4, k12
Row 199 – CC – Knit
Row 200 – CC – p4, k2, p8, k4, p12
Row 201 – MC – Knit
Row 202 – MC – k4, p2, k10, p3, k11
Row 203 – CC – Knit
Row 204 – CC – p4, k2, p10, k3, p11
Row 205 – MC – Knit
Row 206 – MC – k4, p2, k10, p4, k10
Row 207 – CC – Knit
Row 208 – CC – p4, k2, p10, k4, p10
Row 209 – MC – Knit
Row 210 – MC – k4, p2, k11, p5, k8
Row 211 – CC – Knit
Row 212 – CC – p4, k2, p11, k5, p8
Row 213 – MC – Knit
Row 214 – MC – k 4, p20, k6
Row 215 – CC – Knit
Row 216 – CC – p4, k20, p6
Row 217 – MC – Knit
Row 218 – MC – k4, p22, k4
Row 219 – CC – Knit
Row 220 – CC – p4, k22, p4