

## KNITTING HIDDEN IMAGES – Workshop at 29C3 – 2012 – Dez. 28

A special but simple knitting process effectuates stunning images if viewed from an angle. Looking directly at the illusion knitting you'll only notice simple stripes. Any garment from wristlets, scarfs, headwear or else can be designed with a hidden image. You can even "write" an 'encrypted' message on a scarf, i.e. Learn how to design and knit your own motive.

The construction of an illusion image is worked in stripes of two rows. You only knit with one thread at a time, what makes it supereasy. One pair of rows in one colour generates the background, the other creates the image in knitting the reverse.

The technique is also known as illusion knitting or shadow knitting.

## How to create a hidden image

Hidden images are created with two colours. Each colour will be worked in two rows alternately. The first good news: you only knit with one colour at a time.

Each colour in knit stitches is the background for the prominent image appearing on the front side in purl stitches.

The second good news: the first row (public or right site of the image) is always a knit row. Result: the charts are only instructions for the private or wrong site.

**Mark 1:** *Each pattern line is four knitting rows.  
Two rows in colour 1 (colour-1-rib). The first row is always a knit-row, the second row generates the picture in knit and purl stitches  
Two rows in colour 2 (colour-2-rib). The first row is always a knit-row, the second row is the reverse of the back row of colour 1*

													Colour 2: Back row is always a <i>purl</i> row if there is no pattern required
													Colour 1: Back row is always a <i>knit</i> row if there is no pattern required

If you repeat these two rows you'll get ribs where colour 1 has prominent purl stitches on the front/public side.

For the pattern we need purl stitches on the back row of colour 1 and knit stitches on the back row of colour 2.

Let's make a row of 7 stitches show visible on the front side.

Purl stitches are marked in “o”, knit stitches have no markings, in either colour. This makes it simple to design your pattern.

[illegible]

How will this show up on front side when knit?

Colour 1: You'll see prominent purl stitches on either side of seven knit stitches (which you purled on wrong side)

Colour 2: You'll see prominent purl stitches in the middle of the row (which you knitted on wrong side)

Did you notice? Markings in the second row of colour 2 is the reverse of the second row of colour 1.

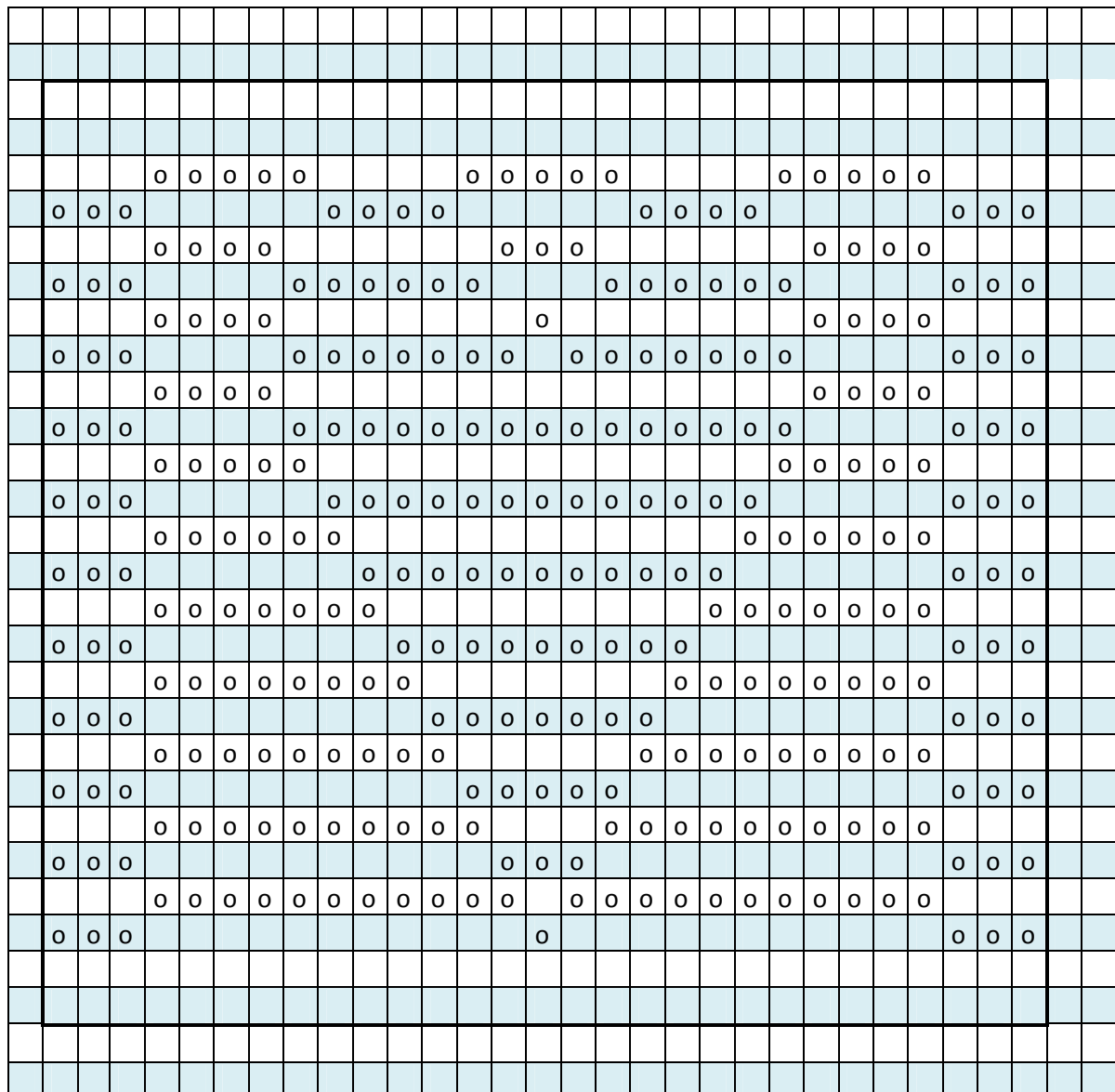
*Mark 2: First row is a l w a y s a knit-row so you read second row (back-row on wrong side) from left to right. If your motive is symmetrical, you can read from right to left, as you knit.*

## Notes

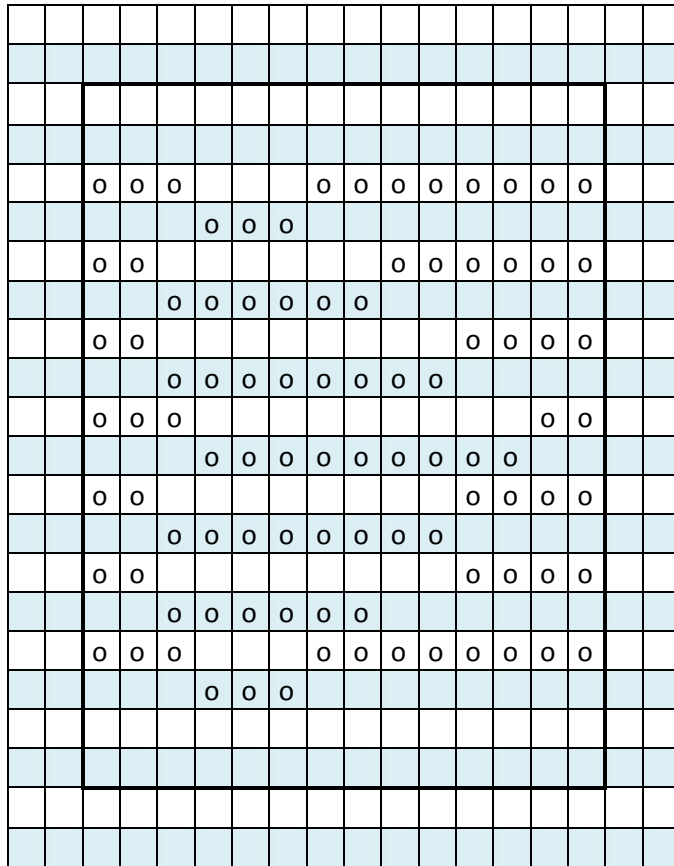
I made this heart-motive for a scarf for my niece. You can see the motive when looking from the point of the heart. You can also see a contrasting frame on both sides.

You may notice some things:

- It looks better to make one rib at minimum without patterning before starting the motive and to end with a rib without pattern stitches.
- The motive stretches to double length
- The picture appears in colour 2, here seen in white on a blue background.  
If you want to have the motive in a darker colour on a light background it may be helpful considering this before beginning to chart. Then start with the light shade on the grid paper.



You can also design the motive if you want to see it from a side angle.  
This is a heart charted sideways.



### Some notes about knitting and supplies

Best results are achieved if your knitting is very dense. So you may want to choose your needle size smaller than given for the yarn.

### Variations

Glossary of your charts:

There are several possibilities (as often), charting will be done for two Threads in different colours.

- Working with letters: use letters instead of dots and mark all knit stitches with “k” and all purl stitches with “p”
- I saw patterns in written instructions, which may be a little confusing
- You may want to use coloured columns
- Stephen Plummer has a special idea to mark the stitches. Take a look on his website and take some time to admire what he and Pat Ashforth created and knitted.  
[www.woollythoughts.com](http://www.woollythoughts.com)

I like to design my motives with pencil and eraser on grid paper but I also often use a grid I prepared in Excel.

Some of you wanted to knit Space Invaders so I made two of them. Have fun with knitting!

