# City & Guilds Foundation Programme - Knitting
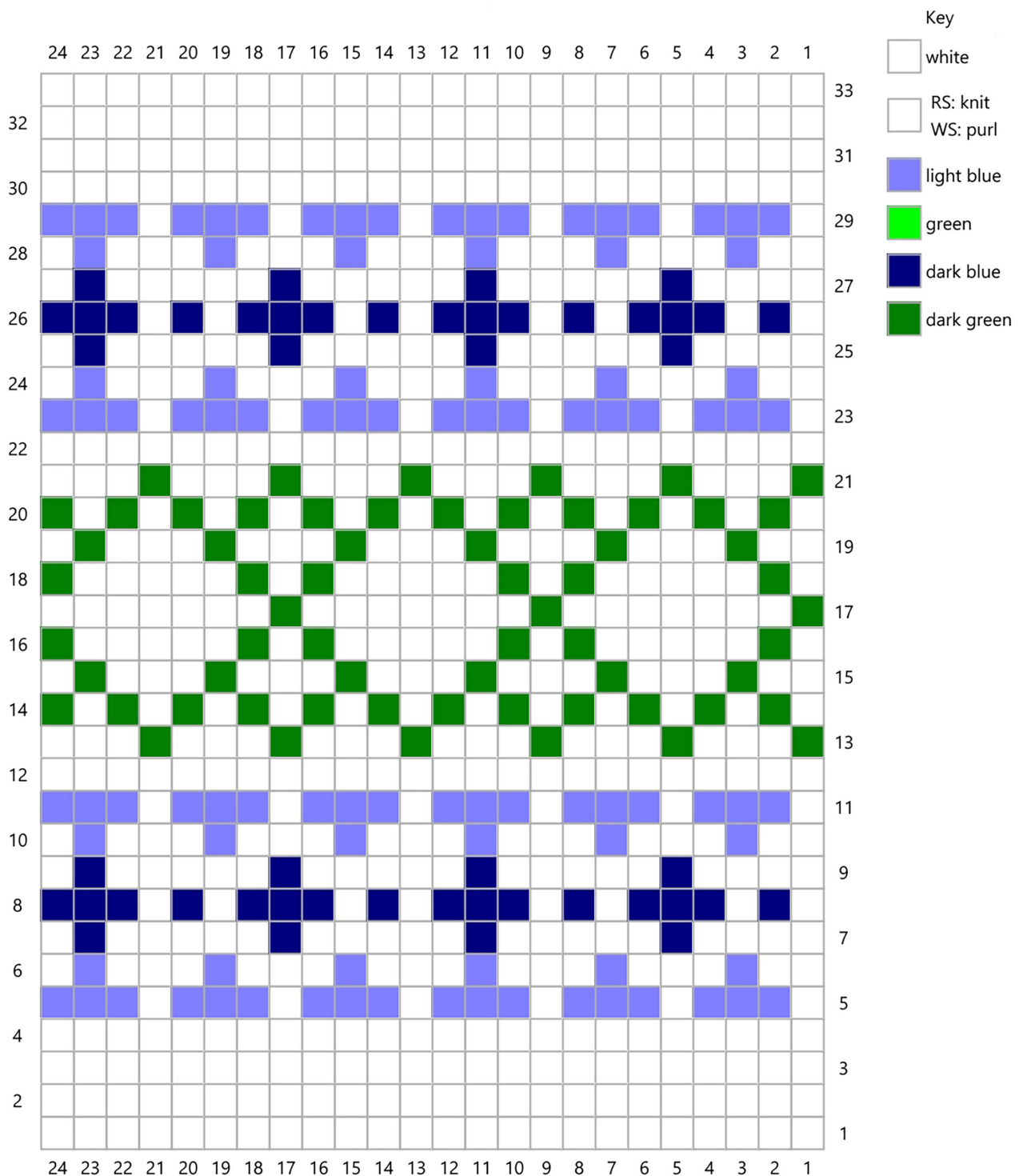
## CGF.M2.L01.1:  Colourwork – Fair Isle
##                         Understanding and reading charts

### Introduction

Charts are a way of depicting pattern information in a graphical form. Charts are mainly used to depict the more complex parts of a design, for example, a Fair Isle or lace design. Many knitters and designers find them helpful as they are more visually representative of the design and it is possible to see the pattern structure at a glance.
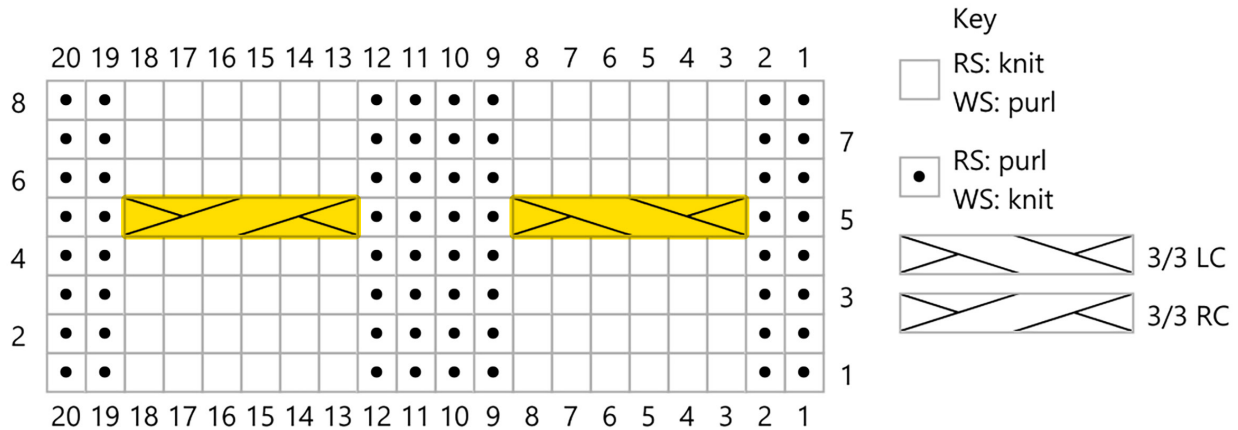
### Chart format

Charts for colourwork will normally be written using a different colour to represent each colour in the design.



Key

| | |
|---|---|
| ⬜ | white |
| ⬜ | RS: knit WS: purl |
| 🟦 | light blue |
| 🟩 | green |
| 🟦 | dark blue |
| 🟩 | dark green |

## Key

Each chart will be accompanied by a key. Always read the key before you begin as there is no standard set of symbols and designers and publishers follow different conventions when producing charted patterns. Take particular care to note any symbols that have a double use. For example, a blank white square will often be used to depict a knit stitch on a RS row and a purl stitch on a WS row. In other words, this would produce a series of stockinette stitches. Purl stitches worked on a RS row may then have a separate symbol (often O) so don't worry if you see what are apparently two instructions for a single stitch type.
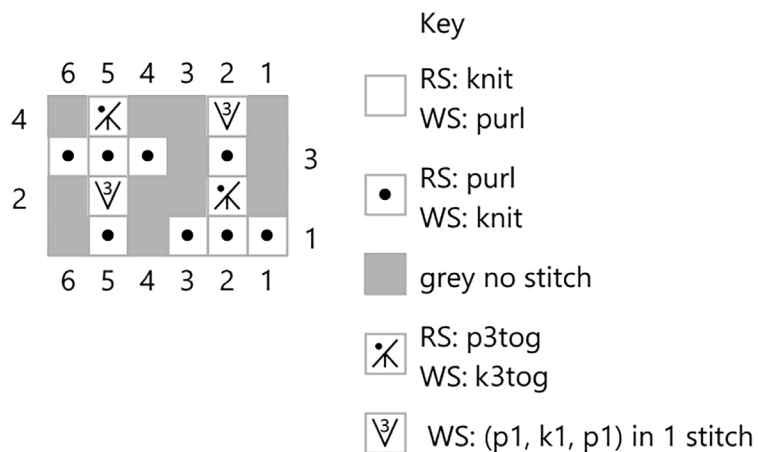


Symbols are more commonly used for lace, cables and other stitch patterns.

## Squares and spans

Each square of a chart represents one stitch of knitting. Combinations of stitches, for example, the two cables (highlighted in the chart above) may span over a number of squares. This denotes that these stitches are worked as a unit.

## No stitch

To make charts easier to produce, where a stitch is decreased (and so does not exist for the remainder of the section) a black square is often used to depict "no stitch".



In this example, the equivalent written pattern would read as follows:

**Cast on 4 sts.**

**Row 1 (RS): P.**

**Row 2 (WS): (P1, k1, p1) in same stitch, k3tog.**

**Row 3: P.**

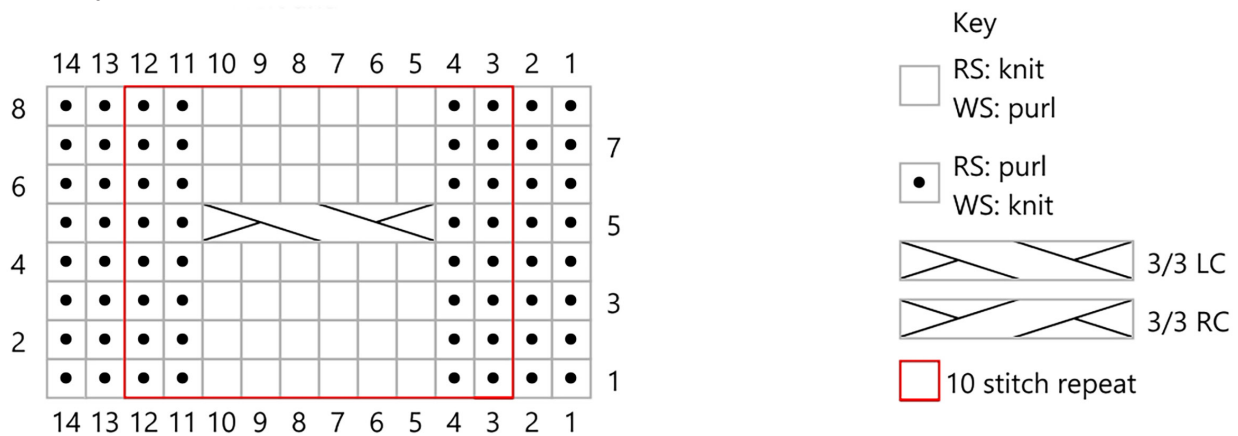**Row 4: K3 tog, (p1, k1, p1) in same stitch.**

In other words, the chart is read straight across, ignoring the black squares.

## Row numbering

To save printing space and to make patterns easier to visualise, designs where alternate rows are all identical may not be shown on the chart. This will be clear from the row numbering (usually printed vertically up the side of the chart) where only every other row will be numbered. Alternatively, the key may have instructions to treat every alternate row as, for example, a purl row.

## Pattern repeats

Where a pattern is repeated several times across a row, the designer will normally chart the pattern section just once (the pattern repeat). Any odd stitches at the beginning or end of the row are shown at either side of the pattern repeat and the section to be repeated is usually surrounded by a bold line or clearly demarcated in another way.



**Key**

| | |
|---|---|
| ☐ | RS: knit / WS: purl |
| ⊡ | RS: purl / WS: knit |
| ⤬ | 3/3 LC |
| ⤬ | 3/3 RC |
| ☐ | 10 stitch repeat |

This chart for example would read:

**Cast on a multiple of 10 sts plus 4**

**Row 1 (RS): P2, *p2, k6, p2; rep from * to last 2 sts, p2.**

**Row 2 (and all WS, even-numbered, rows): K2, *k2, p6, k2; rep from * to last 2 sts, k2.**

**Row 3: Rep row 1.**

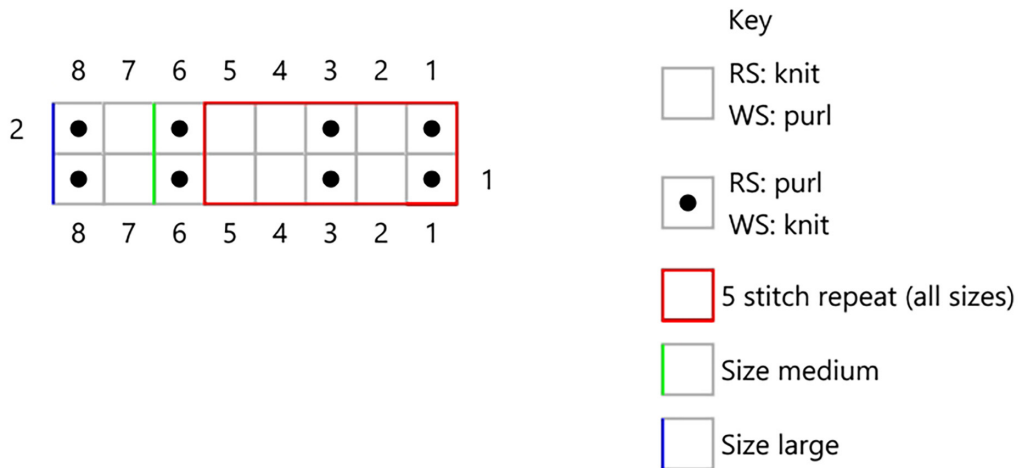**Row 5: P2, *p2, 3/3 LC, p2; rep from * to last 2 sts, p2.**

**Row 7: Repeat row 1.**

**Repeat rows 1-8.**

## Sizing

A chart may have additional boxed-out or demarcated sections to depict the different instructions for different sizes. Follow the correct section for your size.



Here, if you were making the small size of the left front (knitted flat as a separate piece) you would work the first three rows as follows:

**Cast on 100 (101, 108) stitches.**

The small size would read:

**Row 1 (RS ) *P1, k1, p1, k2 rep from * to end.**

**Row 2 *p2, k1, p1, k1 rep from * to end.**

**Repeat rows 1 and 2.**

The medium size would read:

**Row 1 (RS ) *P1, k1, p1, k2 rep from * to last st, p1.**

**Row 2 K1, *p2, k1, p1, k1 rep from * to end.**

**Repeat rows 1 and 2.**

And the large size would read:

**Row 1 (RS ) *P1, k1, p1, k2 rep from * to last 3 sts,**

**p1, k1, p1.**

**Row 2 K1, p1, k1, *p2, k1, p1, k1 rep from * to end.**

**Repeat rows 1 and 2.**

Note: The number of cast on stitches for the small size is a simple multiple of the pattern repeat of 5 stitches. Sizes medium and small also use the same 5 stitches for the pattern repeat but have an extra stitch (in the medium size) and an extra 3 stitches (for the large size) to make the pattern balance. In the large size there is also a full extra repeat.

So, for each size the total is:

*Small:* 5 sts x 20 repeats = 100 sts

*Medium:* 5 sts x 20 repeats = 100 sts, plus 1 st = 101 sts

*Large:* 5 sts x 21 repeats = 105 sts, plus 3 sts = 108 sts

## Multiple charts

It is rare for a chart to show an entire garment due to the size of chart this would require. Hence, where there are several areas of pattern in a piece, there will be several small charts. You will be instructed which chart to follow at the appropriate part in the text.

## Colour charts

Usually used for colourwork, each coloured square represents a different colour yarn. As the colour on the chart may not be the colour you will be using, make a note which colour on the chart represents the colour you will be using.

## Knitting direction – flat knitting vs knitting in the round (circular knitting)

Charts are used for both flat knitting and knitting in the round. The key difference in following these charts is in the direction of knitting and the order in which to read the chart.

## Flat knitting

Rows are normally worked starting at the bottom right corner and reading from right to left for the first row. The next row is then read starting at the left and reading from left to right.

## Circular knitting

With projects knitted in the round, all rows (rounds) are read in the same direction, usually starting at the bottom right corner and reading from right to left.

This may seem confusing but if you visualise your knitting as you hold it, a flat piece is knitted from the right hand edge to the left, swapped back into the left hand and knitted from left edge to right. By contrast, with a circular knit you are always knitting in the same direction, usually from right to left and the work never swaps hands.

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**TOP TIP**

- **Photocopy (and enlarge if necessary) your charts and use a piece of masking tape to show which row you are on.**

- **Mark off rows as you complete them with a highlighter pen. If you re-use the chart, use a different pen or cross through the highlighter.**

- **Don't be tempted to cross out completed lines – just in case you make a mistake!**

- **Mark out your size with a highlighter pen if appropriate.**

- **Photocopy the key and keep it next to you for easy reference.**

- **Copy the colour chart and attach a small piece of the relevant colour yarn next to each colour on the chart for easy reference.**