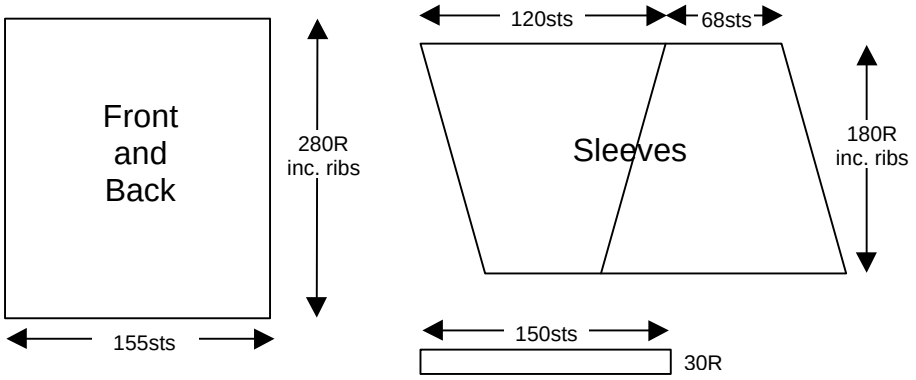
Estimating Yarn Quantities – Erica Thomson

By Weight Of Yarn



Neckband

Example of a jumper knitted in Superwash Wool

First work out the total number of stitches in the garment.

Front	280 x 155	=	43,400 sts.
Back	280 x 155	=	43,400 sts.
Sleeves	(120 + 68) x 180	=	33,840 sts.
Neckband	150 x 30	=	4,500 sts.
TOTAL		=	125,140 sts.

(Ignore the stitches missing at the neck opening – this will compensate for the yarn used when casting on and off and sewing up)

Knit the back (43,400 sts.) and weigh it.
If it weighs 5¼ oz. so the total stitches (125,140 sts.) = 15oz. (430g)

This garment actually weighs just over 15oz, so this method seems to work very well.

If you have electronic scales, accurate to the nearest ¼ oz or 2g, you can use the same method, but knitting only a 100 sts x 100R swatch (10,000 sts.).
This swatch would weigh 1¼ oz or 34g.

$$\frac{\text{Total number of sts. in garment}}{\text{Number of sts in swatch}} \times \text{weight of swatch} = \text{weight of garment}$$

Calculate -

$$\frac{125{,}140}{10{,}000} \times 1\tfrac{1}{4} \text{ oz or } 34\text{g.} = 15\tfrac{1}{2} \text{ oz. or } 425\text{g}$$

The larger the sample of knitting used for the calculations, the more accurate the result will be.
I use both Tefal and EKS electronic scales which are both very good.

By Length Of Yarn

Only possible if you know the length and weights of the yarns you are using.

Method 1
Different types of yarn knitted at the same tension will use the same length of yarn per garment piece.
e.g. You have knitted a jumper in chunky yarn at T8 weighing 470g and the information on that cone of yarn says 500g, 730 yards.
You want to knit another identical jumper, but in mohair, at the same tension – how much will you need?

Calculate -

$$\frac{\text{No. of yards on cone}}{\text{Weight of yarn}} \times \text{garment weight} = \text{Yards of yarn in garment}$$

$$\frac{730}{500} \times 470 = 686 \text{ yds.}$$

Information on the cone of mohair says 400g and 874 yds.
Calculate-

$$\frac{\text{Weight of cone}}{\text{No. of yards on cone}} \times \text{yards of yarn in the garment} = \text{Weight of garment}$$

$$\frac{400}{874} \times 686 = 315\text{g}$$

So you will only need 315g of Mohair to knit your garment.

Method 2
Knit a 20R by 100sts swatch, undo it and measure the length of yarn used. Calculate the total number of stitches used in the garment, (see previous page) and then you can work out the length of yarn needed for the garment and so the weight of the garment.

Tips

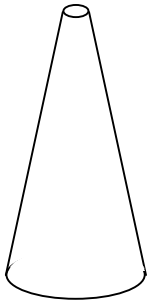
1) Measure yarn in grams for greater accuracy (1oz = 28.35g).
2) Get in the habit of weighing full cones before you start knitting.
   Weighing tension or garment pieces with waste yarn attached will cause inaccuracies.
3) The difference in weight between a size 10 and size 12 may be only 20g, whereas the difference between a size 18 and 20 may be 40g.
4) As a rough guide, it will take approximately 25% more yarn to knit a garment in double knitting yarn than in 4-ply, and approximately 25% less when using 3-ply.

Some ideas to make your yarn go further.

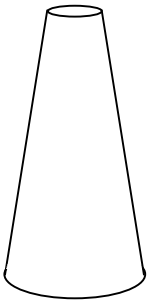
1) Knit a smaller size garment on a looser tension.
2) Knit shorter cuffs and welts and/or use contrast yarn.
3) Introduce stripes or Fair-Isle patterns.
4) Use inset woven material panels.
5) Press or steam the garment stretching it slightly further than intended (having knitted a smaller size).
6) Plate the yarn with 2/30's, brights or matching sewing thread so you can use fewer strands or knit with a looser tension whilst maintaining the same thickness.

Weights Of Cones

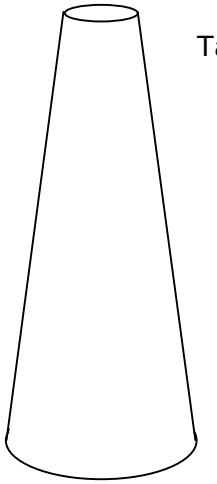
It is good idea to keep an example of each type of empty cone to tare your weighing scales as cone weights vary greatly. The diagrams below show some approximate weights.



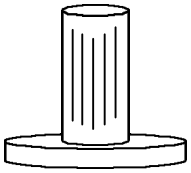
Cardboard 33-37g
Plastic 28-35g



Cardboard 23-31g
Plastic 33-39g



Tall Cardboard 42-56g



Hand and Electric winder cones
25g (approx).