



How To Guide

Understanding Tension



If you've ever done any kind of knitting, you've probably come across the term 'tension', but why is it so important and why do so many of us ignore it when we probably shouldn't? We have put together this short guide to help you to find out about the basics. [Download a PDF version of this guide for offline reading.](#)

Put simply, tension guides the knitter on how to create a piece of knitting of a certain size, using a particular yarn. The standard size given to demonstrate this is a 10cm by 10cm (4" by 4") square, knitted using the recommended needle size. To knit a tension square, you would simply cast on the number of stitches specified, and then knit the number of rows specified.

Let's look at an example:

Yarnsmiths Create DK has a listed tension of 22 stitches by 28 rows on 4.00mm needles. This means that, for your tension to be a perfect match for the yarn, if you cast on 22 stitches and knit 28 rows on this size needle, you would end up with a knitted square measuring 10 cm by 10cm.



28 rows = 10cm (4")

22 stitches = 10cm (4")

The tension given by the manufacturer for each yarn is only an estimate, and the actual achievable tension can vary from person to person. If you find that you knit tightly, knitting 22 stitches for 28 rows will give you a smaller square than 10cm by 10cm. To achieve the correct size square, it will be necessary to either add more stitches and rows, or use larger needles. The opposite will be true if you find you knit loosely – your square will be bigger than the stated size, and you will need fewer stitches and rows or smaller needles.

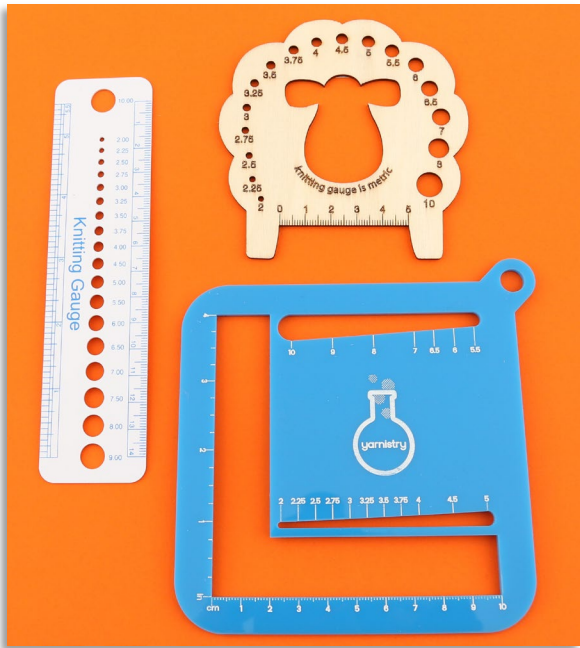
This is why it's so important to knit a test (or **tension**) square before you start a project. It is important to check that your personal tension matches the tension stated in the pattern or your project will finish with different measurements than intended, even if you followed the correct instructions for your chosen size.

If the pattern asks you to work with a tension of 16 stitches to 24 rows and you knit loosely, your 16 stitches will take up more room and make your item larger than it was intended to be, meaning that, if it is a garment, it may not be the correct size for its recipient.

You might find that the pattern you are using states one tension and needle size, and the yarn you need for the project lists something else entirely. In this case, always follow the tension stated in the pattern and use the needles it recommends. Some patterns require a certain size needle and the right tension for a thin yarn to create a loose and lacy garment that drapes well.

It is also worth making sure you are using the right type of stitch in your tension square. Some stitches will create smaller squares than others, so make sure you're not knitting your tension square in stocking stitch when the pattern is in moss stitch! If this happens, you may end up very confused as to why your tension doesn't match the pattern at all.

Knitting gauges can be useful if you need to work out your personal tension for a particular yarn. Some are shaped as a small, square ruler and provide you with a 10cm by 10cm (4" by 4") window so that you can count the stitches and rows within this space to find your gauge. This can be useful if you don't know the weight or tension of the yarn you want to use; if you have spun the yarn yourself; or if you are designing your own pattern. Others incorporate a needle sizer and have a ruler to allow you to check your tension square size.



Tension is incredibly important when it comes to crafting items that need specific sizing or yarn quantities, but once you become more practised and get a better idea of your own knitting habits, you might find you pay less attention to it (don't worry, we all do it). While crafting is about the joy of creativity, remember that it can be helpful to come back to this information every so often, especially if you're working on something special.

We've all experienced the heartbreak of crafting for hours, only to find we have made something that is completely wrong! Remember to be careful of guidelines, without ruining your own fun – it's all about balance.

If you find any of these points unclear, or just need a little extra help, don't hesitate to email us at sales@woolwarehouse.co.uk or give us a call on 01926 88 28 18.

