

**chapter**

**1**

# **Sock Yarn and Other Materials**

When you go to the yarn store and ask for sock yarn, odds are you will face a huge wall full of yarn. Sock yarn is available in an array of colors, fibers, and textures. Nearly any yarn can be used to knit socks, but some yarns work better than others. Different fiber contents and thicknesses will affect the feel, utility, and care of your socks, so carefully consider what you'll make when you pick out your yarn. In this chapter, you learn about different yarn types, fibers, and textures, and how to best use each kind of yarn for socks. Matching a yarn to a pattern is sometimes daunting, so here you also learn how to figure out what yarn works best for different types of sock patterns.

In addition to yarn, you need a few more things to get started. First and foremost, you need needles! Depending on what form of sock you decide to knit, you need either double-pointed, circular, or straight needles. You also need a few important notions. For some types of patterns, you might need some extra tools, too.



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# Yarn Weights

Yarns are categorized according to thickness into eight main categories. Fingering weight is the most common weight marked as *sock yarn*. Other weights like sport, DK, worsted, and chunky can also make great, fast-knitting socks.

- **Lace Weight:** Lace weight yarns vary greatly in terms of actual yarn thickness. Thicker lace weight yarns can make comfortable, thin socks if knit on an appropriate needle size—US 0 (2mm) or smaller, with a gauge of 10 stitches per inch or more. Two strands of lace weight yarn held together will approximate the thickness of fingering weight yarn (see below). A thick lace weight yarn will measure about 250–325 yards per 50g skein or ball.
- **Fingering Weight:** The term *fingering weight* is often used interchangeably with *sock weight* and is the thickness most often associated with knitting socks. It usually knits up to approximately 7–10 stitches per inch in stockinette stitch on US 00 to US 3 needles (1.75–3.25mm), depending on the thickness of the yarn and how tightly you knit. Fingering weight yarn is sold in amounts ranging from about 180–220 yards per 50g skein. Socks knit from fingering weight yarn are fairly thin and perfect for everyday wear.
- **Sport Weight:** Sport weight yarn is slightly heavier than fingering weight and knits up to approximately 6–7 stitches per inch on US 3 to US 5 (3.25 – 3.75) needles for a dense fabric. Socks made with sport weight yarn are often a bit faster to knit than those made with fingering weight yarn and they feel thicker. Sport weight yarn is sold in amounts of 140–200 yards per 50g skein.

## TIP

Check your gauge! Different regions such as the UK or Australia use different terms to label yarn thicknesses. When in doubt about what thickness of yarn you have, just knit a swatch to find out how many stitches per inch you have.



Yarn Weight	Types of Yarn	Gauge Range	Hook in Metric	US Hook Size
 SUPER FINE	Sock, Fingering	28 – 40 sts	2.0 – 3.25 mm	0 – 3
 FINE	Sport	24 – 28 sts	3.25 – 3.75mm	3 – 5
 LIGHT	DK, Light Worsted	20 – 24 sts	3.5 – 4.5 mm	4 – 7
 MEDIUM	Worsted, Afghan, Aran	17 – 20 sts	3.75 – 5.0 mm	5 – 8
 BULKY	Chunky	14 – 17 sts	5.0 – 6.0 mm	8 – 10
 SUPER BULKY	Bulky	8 – 13 sts	6.5 mm and larger	10.5 and larger

**Note:** This chart reflects the most commonly used gauges and needle or hook sizes for specific yarn categories. These are only guidelines. Used with permission of yarnstandards.com.

- **DK and Worsted Weight:** Double knitting (DK) and worsted weight yarns are similar in thickness, with worsted weight being thicker than DK. Worsted and DK yarns are labeled as knitting to a gauge of 5–6 stitches per inch. However, to create a sturdy, durable fabric for socks, these yarns should be knit at a slightly tighter gauge—approximately 5.5–7 stitches per inch.

A good rule of thumb is to choose needles two or three sizes smaller than the size suggested on the ball band — rather than a US 7 (4.5mm), try a US 5–7 (3.5–3.75mm) for a good fabric from worsted weight yarn. You need a slightly smaller needle to produce a similar fabric with DK yarn. Worsted weight yarns usually weigh in at 90–100 yards per 50g ball.

- **Aran and Chunky Weight:** Aran weight yarn is sometimes considered *heavy worsted* weight and usually knits up to 4.5 stitches per inch. Aran weight yarn weighs in around 85 yards per 50g skein. To get a good sock fabric with Aran weight, try using a US 5 to US 7 (3.75–4.5mm) needle for a gauge of 5–5.5 stitches per inch.

Chunky weight yarn is thicker than Aran weight and knits up to 3.5–4 stitches per inch. It comes in skeins or balls of about 60–80 yards per 50g skein. For a dense sock fabric, try US 6 to US 8 (4–5mm) needles. Aran and chunky weight yarns make thick socks suited for boots or indoor wear.

- **Bulky and Superbulky Weight:** Bulky weight yarn knits up to 3–3.5 stitches per inch, while superbulky weight encompasses any yarn thicker than 3 stitches per inch. Since these yarns are rather thick, they are not the best choice for socks—although they work great for cozy slippers!



# Protein Fibers

Protein fibers are derived from animals, and include silk. Wool is the best known of the protein fibers and is used in many sock yarns.



## WOOL

Wool is fiber derived from the fur of sheep. It has many excellent qualities which work well for socks. It is breathable, strong, and durable. Wool is also elastic—when stretched, it wants to spring back to its original shape. This fiber is great for knitting socks because they will keep their shape over time.

Different breeds of wool can also wear differently. Fine, soft breeds like Merino are less durable than other breeds and tend to wear out faster. Coarser breeds such as Corriedale or Romney will wear well, but might feel less soft.

Most wool or wool-blend sock yarns are machine washable for easy care. However, always take care to read the label, especially when using a yarn that isn't labeled *sock yarn*, because some yarns require hand-washing.

## OTHER PROTEIN FIBERS

Other animal fibers include alpaca, mohair, silk, angora, and cashmere. These fibers can be used to knit socks to great effect. Mohair and silk are quite durable and can take the place of nylon in wool-blend sock yarns. Pure forms of these fibers, however—along with other protein fibers—tend to be less durable than wool and might wear out quickly. Non-wool protein fibers also tend to be much less elastic than wool, which can result in socks that stretch out. These fibers are best used for socks that won't see a lot of day-to-day wear.

## BLENDS

Yarns composed of fiber blends can capture the best of all worlds. Wool lends elasticity to inelastic protein fibers as well as plant fibers. Nylon adds strength to all fiber blends. Alpaca and cashmere give a blend of softness and a fuzzier look than pure wool, and silk gives wool a nice sheen.

When considering a blend of wool and synthetic fibers, remember that blends that contain at least 40% wool have the best elasticity and resiliency.



Non-animal fibers are usually made from plants, including the familiar cotton and the less-familiar bamboo, hemp, linen, soy, and corn.



### COTTON

Cotton yarns are composed mainly of cellulose. Cotton is breathable, durable, and usually machine washes and dries well. Cotton is also hypoallergenic and is an excellent choice for those with sensitivities to wool or other animal fibers.

However, cotton and many other plant fibers lack the elasticity of wool and can stretch or sag with wear over time. For this reason, many cotton-based sock yarns contain a small amount of elastic (Lycra) to add stretch. Cotton can also be blended with wool to produce a yarn that is cooler to wear than pure wool.

### NYLON AND SYNTHETICS

Nylon is a synthetic protein fiber that adds durability to any yarn. Many sock yarns contain some nylon, up to 50% of the fiber content. For socks that will see a lot of wear, choose a yarn containing nylon to extend the life of the socks.

Many synthetics are on the market, mainly acrylic and polyester. These yarns are strong, inexpensive, and machine washable; however, they do not breathe as natural fibers do and can produce uncomfortable feet! If you are avoiding animal fibers, cotton-synthetic blends work well provided they have some elastic content, usually 1–5%.

### OTHER FIBERS

Bamboo, soy, corn, chitin, and milk protein are just some of the newest fibers to come on the hand-knitting market. These fibers are considered manmade from natural sources. Chitin and milk protein are not produced from plants. *Chitin* originates in the shells of shrimp and crab, and of course *milk protein* is derived from animal milk. All of these fibers are very durable, but inelastic, like cotton. They carry the same risk of sagging or stretching out over time, so consider blends with elastic or elastic fibers for knitting socks. These cutting-edge fibers are sure to show up in more yarns in the future.

## Work with Color

With the vast array of colors and styles of yarn available today, how can you distinguish between the different types? How do you choose the right kind of yarn for your sock project? This section can help.

### MACHINE-DYED SOLID YARNS

Most yarns from large companies are dyed in batches by machine to precise shades. Solid light-colored yarns are great for learning with, because the stitches are easy to see. They also lend themselves to showing off complex stitch patterns. Make sure you purchase enough yarn of one dye lot to complete your sock project. A yarn's dye lot (usually a number) can be found on the ball band, and identifies balls of yarn which were dyed together and match exactly. Dye lots can sometimes differ enough to be identified with the naked eye.

When buying yarn for socks, pay close attention to the yardage – one 100 g skein (or 2 50 g skeins) is usually enough for a pair of plain adult socks, but lace socks may use less and cabled or patterned sock a bit more. Check your pattern against your yarn to make sure you have enough!



### MACHINE-DYED PATTERNING YARNS

Some yarns are dyed precisely by machine to knit up into patterns such as stripes or faux Fair Isle, and are labeled *self-patterning* or *self-striping*. These yarns can be used very effectively to yield a complex-looking sock knit in plain stockinette stitch. A word of warning: The patterns are dyed based on a specific gauge, so if yours differs from that noted on the ball band, the look of the pattern might be different than you expect. Some self-patterning yarns have a photo of a swatch or finished sock printed on the ball band to give you an idea of how it looks knitted up.



## HAND-DYED SOLID YARNS

Hand-dyed yarns are usually dyed in smaller batches than machine-dyed yarns and can vary much more from skein to skein. Both solid and multi-colored yarns may be dyed by hand. Hand-dyed solids usually have some shading effects that lend depth to the color and can add interest to a highly textured pattern while still showing off the stitches.



## HAND-DYED MULTICOLORED YARNS

Hand-dyed, multicolored sock yarns are all the rage. Multicolored yarns are fun and interesting to knit with, and can produce different effects depending on how the yarn was dyed, as well as the gauge of the piece. Space-dyed or hand-painted yarns in a few colors are more likely to stripe, produce “pools” of certain colors, or produce zigzags of color than behave evenly.



### TIP

Yarns dyed with many colors, such as speckles, are more likely to knit up into a random pattern. The more colors that are present in the yarn, the less likely the colors will pool.



# Match Your Yarn to Your Pattern

The type of yarn you choose can greatly impact the look of your finished socks. Nearly any yarn will work for a plain stockinette sock, but what about when using a more complex pattern? Let's take a look at how different yarns and colors interact with different types of stitches.

## STITCH DEFINITION

Yarn has good stitch definition when the eye can easily distinguish each stitch. Stitch definition is important when choosing yarn for very textured patterns, such as cables—a cable knit in a yarn with good stitch definition will *pop* to the eye more than a cable knit in a yarn with less stitch definition. Yarns with good stitch definition are usually smooth and tightly spun, with little or no *halo* (fuzziness).



## DURABILITY

Consider the type of wear your hand-knit socks will get when choosing a yarn—special occasion only? Go for the softest merino wool, maybe blended with some silk or cashmere for extra luxury. Knitting a thick boot sock that will get lots of wear? Choose a more durable, tightly spun non-merino wool for more longevity.



## TIP

You can give less durable fibers like cashmere a longer lifespan by knitting the socks tighter than usual on needles a size or two smaller.

## COLOR INTERACTION

Although multicolored yarns are beautiful to look at in the skein, complex stitch patterns such as lace or texture patterns can get lost in the mix of colors. It is also more difficult to knit a texture pattern in a highly variegated color, because the stitches are not as easy to see.



Solid or tone-on-tone colors work best for cables, lace, or other textured patterns. Hand-dyed, semisolid yarns are often very attractive in cabled or lace patterns, provided there is not a huge range in the intensity of the color.



Highly variegated colors often look best in stockinette, ribbing, or patterns which incorporate biasing stitches, such as a chevron stitch. Slip-stitch color patterns can help break up random hand-painted colors and prevent the color from pooling or striping.



# Needle Materials

Knitting needles come in all types of materials, shapes, and colors, and range greatly in price. You can often find secondhand needles at thrift shops or garage sales. Keep in mind that you'll use your needles over and over again, so take the time to find needles that you really like to use.

## BAMBOO

Bamboo is a fast-growing plant that is gaining in popularity as a material for all sorts of things. Because of bamboo's fast growth rate, this crop can be grown sustainably as an alternative to slow-growing trees.

Bamboo needles are strong, flexible, and feel warm in your hands. They can be quite *grippy*, meaning the stitches will not slide as easily as with other materials. This prevents the dreaded *slide-out* where stitches slip off the needles, but is slower for some knitters. With wear, bamboo needles will become more polished and smoother, developing a nice patina.



## WOOD

Wooden needles, made of materials such as birch and rosewood, are also quite popular. Wooden needles are more expensive than other materials because of the cost of the wood itself. Wooden needles are either mass-produced or handmade. Needles that are hand carved from exotic wood are both beautiful and functional!

Wooden needles are also warm in the hands and flexible, although they are less flexible than bamboo. Generally, wooden needles are more highly polished than bamboo ones and offer more slip in the stitches.



### TIP

If your wood or bamboo needles develop a splinter or burr at the tip, you can sand it lightly using a nail file. You can also seal the area with clear nail polish.

## PLASTIC

The most widely available needle material, plastic is lightweight and inexpensive. Depending on the style, plastic needles can range from quite slick to very grippy, like bamboo. They can be very flexible, rigid like metal, or somewhere in between. Plastic needles are available in a wide variety of colors and styles.



## METAL

Made of steel or aluminum, metal needles are usually inexpensive and stitches slide easily on their slippery surface. Be careful with double-pointed needles as stitches can slip completely off the needles when you least expect it! Metal needles are quite rigid and can be uncomfortable if you have hand or wrist ailments.



## CASEIN

Needles made from *casein*, a milk protein, feel and look like plastic needles. They tend to be extremely flexible, even more so than most bamboo or plastic needles, and are available in a variety of finishes, from different colors to textures like faux tortoise shell. Some say that casein needles are especially tantalizing to household pets, so keep them away from the dog!



## OTHER MATERIALS

Knitting needles are now made of lots of other types of materials, including sterling silver and glass (don't drop them!). Many of these needles are handmade, artisan pieces with prices to match.

You might find vintage needles made of bone or Bakelite, which are collector's items for many. Keep an eye out at garage sales or auctions for these extra-special heirloom needles.





# Needle Types

Knitting needles come in several different styles. What most people think of as knitting needles are straight needles, but circular and double-pointed needles are just as common. The type of needles you will need depends on what style of sock you are knitting—and your preference for knitting in the round (round/round); or flat (back/forward).

## DOUBLE-POINTED

Double-pointed needles are generally small, 5–7 inches in length. They come in packages of four or five. Sets of five are preferable, even if you like working with four needles—if one needle breaks, you still have enough to work with.

Short double-pointed needles are perfect for smaller projects or if you have trouble holding longer needles. Longer double-pointed needles are preferable for larger projects so that the stitches on each needle have room to move without danger of falling off the ends of the needles.



## CIRCULAR

Circular needles are composed of two solid tips connected by a flexible cord. They come in various lengths, the most common being 16", 24", 32", and 40". A smooth join between the needle and cord is important for ease of use, as is a flexible cable.

For the two-circular method of sock knitting (see p. 48), you need two circular needles of the same size. Length can differ between the two, but generally shorter needles of 16" or 24" are used.

For the one-circular magic loop method of knitting in the round (see p. XX), you need one circular needle of at least 32" in length. A 40" needle is ideal for learning, but can be cumbersome once you are comfortable with the method.



## STRAIGHT

Straight needles come in all sorts of lengths, ranging from 9" to 14" long and beyond. Choose a length of needle that accommodates all stitches comfortably and enables you to knit comfortably. Some people tuck the end of the needle under an arm for anchoring; for this, the longest needles you can find are useful. For knitting in cramped spaces, shorter needles are perfect. When knitting socks flat rather than in the round, either straight needles or circulars can be used.



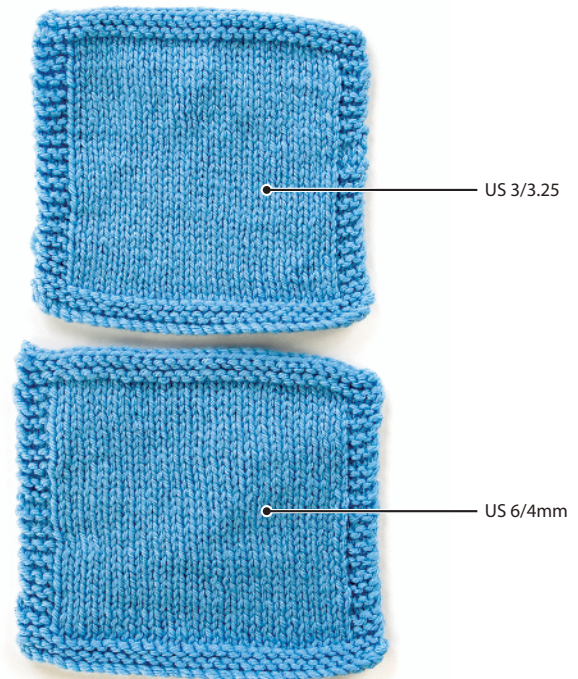
## CHOOSING NEEDLE SIZES

Choosing the right needle size to use with the yarn you select is important. A too-large needle produces a loose fabric, which will not wear well in socks. A too-small needle is difficult to work with, because the fabric is so dense.

The needle size you choose depends quite heavily on how you knit—if you tend to knit tightly, you might need a larger needle size than someone who knits loosely when using the same yarn.

As a general rule, most yarns labeled *sock yarn* suggest an appropriate needle size to use to produce a good fabric for socks.

However, when using thicker yarn such as DK or worsted weight, you should go 2–3 needle sizes down from the suggested needle in order to get a dense fabric.



You will need a few basic notions when getting started knitting socks. Many are not necessary for all patterns, but are often useful when dealing with a more complex pattern.

## TAPESTRY NEEDLE

A tapestry or darning needle is usually made of either metal or plastic, with an oversized eye to accommodate yarn. They might come in packages of two or more, either straight or bent tips, and various diameters and lengths.

For socks, you will need a tapestry needle for grafting (see pages 78–80) the toe on top-down socks and for weaving in the ends on all socks. Choose a needle size that fits comfortably through your stitches.



## ROW COUNTERS

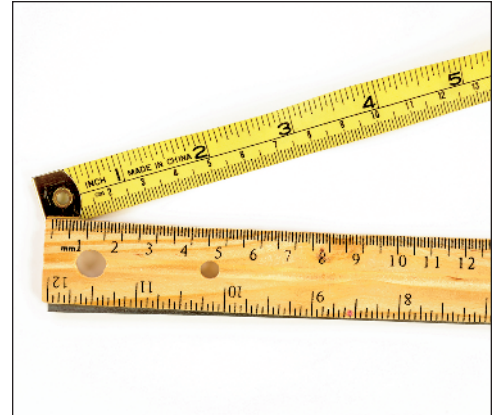
Clicking the top of the *click counter* (a) advances the number. This counter is quite large and is not attached to the work.

The traditional row counter slips onto the end of a straight knitting needle where the stopper holds it. On double-pointed needles, thread scrap yarn or a large pin (such as a kilt pin) through the counter, then through the sock work. The counter hangs off the work (b). You can also keep the counter separate and just turn the dial after each row.



## TAPE MEASURE

You can use either a soft tape measure (dressmaker's tape measure) or a hard ruler to measure lengths as you knit. A soft tape measure is essential for measuring around parts of the foot to ensure a proper-fitting sock!



## CROCHET HOOK

Although not strictly a notion, a crochet hook is invaluable in sock knitting. You'll need it for a crochet provisional cast-on if you're knitting a toe-up sock. A crochet hook is also very useful for fixing dropped or incorrect stitches as well as for picking up stitches along the edges of heel flaps.

Choose a crochet hook of a comparable size to your needles—a US B or C (2.25mm, 2.75mm) hook for 2.0 – 2.75mm needles and so on. Smaller steel crochet hooks, such as sizes 3 and 4, can also come in handy when knitting with fine yarns.



## STITCH MARKERS

Stitch markers are closed or locking rings that either sit on the needle or are clasped into the work. They indicate the beginning of the round or other important places in the work, such as where a decrease will occur.





# Using Stitch Markers

Choose a size of marker that is close to, but larger than the needles you are using.

To use a closed stitch marker, place it on the right needle and continue knitting across your row or round. When you come to the marker on the next row or round, slip it from the left needle to the right and continue.

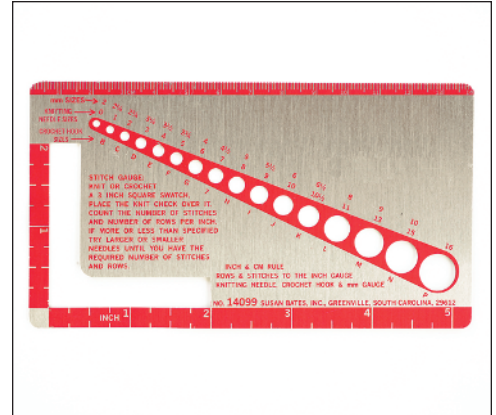


To use a locking or split-stitch marker in the work, place the marker through a stitch or between stitches below the row currently on the needles. You might need to move this marker up the work as you progress.



## NEEDLE/GAUGE CHECK

A needle or gauge check is usually a flat piece of metal with holes ranging in size from small to large, a cut-out section (sometimes L-shaped), and ruled edges. To double-check the size of your needles, especially if they are not labeled, place one of the needles through a hole of similar size. Try different-sized holes until the needle just fits through; this is your needle's size.



## PENCIL AND PAPER

A pencil and paper are handy for keeping track of rows that have multiple patterns, or for taking notes on your work so that you can duplicate it (such as for the second sock!).



## TIP

### MAGNETIC BOARD

A magnetic board consists of a backing piece and a magnetic strip. A piece of paper, such as a pattern, is placed against the backing piece and held there by the magnetic strip. This tool is especially useful when knitting from a chart or developing a pattern.

To keep track of rows you can place the magnetic strip under or over the row of the chart on which you are working.