



# Choosing Materials

## Fiber Content

When choosing yarn, you will want to think about fiber content before choosing your colors. There are two major types of fiber content: natural animal- or plant-based, and synthetic.

The most popular natural fibers used for yarn are wool and cotton. You may also see yarns made from natural fibers such as alpaca, bamboo, mohair, silk, or linen. Synthetic fibers include acrylic, nylon, and polyester. It's very common for companies to create product lines that combine multiple types of fibers because each type has its own advantages and disadvantages.

Yarns using 100% natural fibers tend to be more expensive than those using synthetic fibers and you may need to shop at a specialty yarn store to find these yarns. Many people find natural fibers (particularly wool) to be very scratchy, so these yarns may not be suitable for babies, individuals with sensitive skin, and people with tactile sensitivities. However, natural yarns tend to be higher quality, more durable, and more environmentally friendly than synthetic yarns.

For more information on fiber types, here are some links to external websites:

- A Beginner's Guide To Choosing The Right Yarn Fibers ([Michigan Fine Yarns link](#))
- Types of Yarn Fibers ([YarnFest link](#))
- Different Types of Yarn: Explained ([Woolcrochet link](#))
- Yarn Fiber Types: Choose the Perfect Yarn for Your Project ([Purls and Pins link](#))

## Yarn Weight

Yarn weight refers to the thickness of a yarn strand. Weights range from lace (size 1) to jumbo (size 7). The thinner your yarn, the longer it will take to complete your project. Thinner yarn also requires the use of smaller knitting needles. If you are a beginner, you may find it easiest to use bulky (size 5) or super bulky (size 6) for this project.

In the Instructions document, you will find pattern directions for yarn weights ranging from super fine/fingering (size 2) through super bulky (size 6).

## Needle/Hook Size

If you are knitting, you will need a set of knitting needles. If you are crocheting, you will need one crochet hook.

The weight of your yarn determines the size needle you will need. Knitting needle and crochet hook sizes are standardized by the [Craft Yarn Council](https://www.craftyarncouncil.com/), so no matter where you shop, the sizes will always be the same.

Refer to the Cast On chart in the Instructions document to find which needle sizes may be suitable for your project. Keep in mind that these corresponding needle sizes are just guidelines. Every knitter/crocheter applies a different amount of tension to their yarn; two people can get very different gauge measurements using the exact same yarn and needles/hooks.

Regardless of the needle size, if you are *knitting* your blanket, you will want to use circular needles. Look for circular needles that are 32 inches or longer when making a small blanket, and 36 inches or longer when making a medium or large blanket.

Knitting needles and crochet hooks also come in a variety of materials. Beginning knitters often find that bamboo needles are the easiest to use because they are a bit more textured compared to metal needles, which helps keep the yarn from slipping off the needles. Crocheters may want to look for an ergonomic crochet hook that will be comfortable to use for long periods of time.

## Colors

Temperature projects make use of a gradient to show temperature changes over the course of a year. Many people use a gradient of "traditional" temperature colors in a rainbow (red for hot moving to blue or purple for cold), but this isn't a requirement. Perhaps you want to use a completely green gradient, or maybe you prefer neutral palettes. You might even want to add in a strand of thin sparkly yarn on days when it snows or rains. There are no rules, and we encourage you to be creative!

Typically anywhere from 7-10 colors are used for temperature blankets, but again, this is not a requirement. Keep in mind that the more colors you select, the more leftover yarn you will have at the end of your project.

If a single yarn product line does not include every color you want to use, feel free to mix yarn brands. Just make sure to select yarns that have the same fiber content and the same weight.

**If you need some help choosing your colors, you can find a customizable palette generator here:**

**<https://temperature-blanket.com/yarn>**

## Map Your Color Palette

Once you have chosen your data, you'll need to decide how the colors correspond to your chosen temperature range. Temperature blankets typically use 7-10 colors, although this is not a requirement. You don't have to worry about which colors you will use at this point – just have an idea of how many you'd like to use.

If you are using historical data, you will know your exact temperature range and will be able to map your colors to it fairly easily.

If you are using 2024 data, the best way to predict the likely temperature range is to look at data from previous years. For historical weather data, navigate to NWS's [NOWData tool](#). Select the geographic region you will be knitting. To produce recent data, select Calendar Day Summaries from the menu. Below, you can see we looked for daily average temperatures for the Washington, DC metro area within the past five years.

In the NOWData tool, select the geographic region you will be knitting. To produce recent data, select Calendar Day Summaries from the menu.

In the screenshot on the right, you can see we looked for daily average temperatures for the Washington, DC metro area within the past five years.

**NOWData - NOAA Online Weather Data**

1. Location » View map  
 Baltimore Area  
**Washington Area**  
 Sterling-Dulles Area  
 Baltimore Downtown /  
 Annapolis Area  
 Hagerstown Area  
 Martinsburg Area  
 Charlottesville Area  
 Dalecarlia Rsrvc, DC  
 National Arboret, DC

2. Product »  
☐ Daily data for a month  
☐ Daily almanac  
☐ Monthly summarized data  
☒ Calendar day summaries  
☐ Daily/monthly normals  
☐ Climatology for a day  
☐ First/last dates  
☐ Temperature graphs  
☐ Accumulation graphs

3. Options »  
 Year range: 2018 - 2023  
 Variable: Avg temp  
 Summary: Mean

4. View » Go

**Product Description:**  
 CALENDAR DAY SUMMARIES - for each calendar day of the year, provides the mean, extreme daily value, or frequency of days meeting criteria based on the selected range of years. For extremes, the year of occurrence is also provided. Temperatures are reported in degrees F; precipitation, snowfall and snow depth are reported in inches.

- Common questions -  
 - Submit a question/comment -

Powered by **ACIS**  
 NOAA Regional Climate Centers

The Applied Climate Information System (ACIS) is a joint project of the Regional Climate Centers, the National Centers for Environmental Information (NCEI) and the National Weather Service. Official data and data for additional locations are available from the Regional Climate Centers and NCEI.

From here, you'll want to look for the lowest low and the highest high. For this region, the lowest low was 32 degrees and the highest high was 84 degrees. We'll round this slightly to accommodate for temperatures that may fall above or below historical temperatures, and our scale will be 28 to 88.

If you are using both highs and lows for your project, you'll run through that process twice selecting Max temp and then Min temp as your variable.

Now you'll map your colors to your data set. Subtract your temperature low from your temperature high, and then divide that number by the number of colors you want to use. Our range is 60 degrees and we'll use 10 colors, so each color will represent 6 degrees. If you're having trouble getting your colors to match up with your data, you may need to add or subtract a color. This is why it's important to make your color/data chart before you purchase any yarn!

## Determine Yardage

After selecting your data, applying it to your color palette, and selecting your design, you'll be ready to round up some yarn. You may want to start your project by purchasing one skein/ball of yarn in each color you are using. You can also use the dataset you generated from previous years (or your actual dataset if you are using historical data) to estimate which colors may require more than one skein/ball.

Keep in mind that the pattern design you choose can affect how much yarn you'll need. For example, if you are doing a corner-to-corner blanket, the stripes in the middle - which will be the warmer colors - will be longer and will require more yarn.

## Further Reading

Want to learn more about knitting or crocheting?  
Here are some of our favorite books!

*400 Knitting Stitches: A Complete Dictionary of Essential Stitch Patterns* by Potter Craft

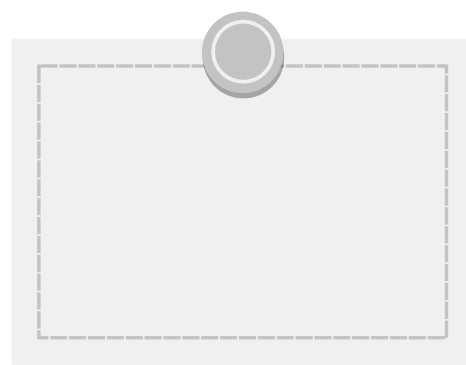
*A to Z of Crochet: The Ultimate Guide for the Beginner to Advanced Crocheter* by Martingale

*Crochet Kaleidoscope: Shifting Shapes and Shades Across 100 Motifs* by Sandra Eng

*The Fleece & Fiber Sourcebook: More Than 200 Fibers, from Animal to Spun Yarn* by Deborah Robson and Carol Ekarius

*The Knitter's Book of Yarn: The Ultimate Guide to Choosing, Using, and Enjoying Yarn* by Clara Parkes

*Vogue Knitting: The Ultimate Knitting Book* by the editors of Vogue Knitting Magazine



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