



Textile

Scouts BSA · Arts

Name

Started

Completed

Textile is about the fabrics all around you, from your clothes to your tent. You will learn where fibers come from, how fabric is made, and how to care for it. You may even get to weave or felt something yourself.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/textile/). Tips and examples are ideas, not extra requirements.

- ☐ **1** Discuss with your counselor why textiles matter. Explain fiber, fabric, and textile, and give examples of textiles you use daily

Tip: Look at your clothes and labels, and talk about what fiber, fabric, and textile each mean.

Example: Use your own clothes to explain the difference: the cotton plant gives a fiber, the fiber is spun and woven into fabric, and the fabric becomes a textile product like your T-shirt. Then name places textiles show up you might not expect, like tents and bandages.

2 Fibers and fabrics

Tips for this section: Compare a few fabrics by touch and stretch, look up where their fibers come from, and read the care labels.

Example for this section: Gather five samples: two natural fibers, like 100% cotton and wool, two synthetics, like polyester and nylon, and one cellulosic, like rayon. Look up where each fiber comes from and what it's like, then explain which you'd choose for your next jacket or T-shirt and why.

- ☐ **2a** Gather fabric samples: two of natural fibers (100% cotton, wool, linen, or silk, not blends), two synthetic (nylon, polyester, acrylic, olefin, or spandex), and one cellulosic (rayon, acetate, or lyocell)

- ☐ **2b** For each fiber from 2a, give its origin, main traits, and general makeup. Explain how cellulosic and synthetic manufactured fibers differ

- ☐ **2c** Describe the main steps that turn raw fiber into yarn, then yarn into fabric

- ☐ **2d** Imagine you'll soon buy a new garment or textile item. Tell your counselor which fiber or blend you'd choose and why

3 Textile projects: Choose 2 of 7

Tips for this section: Pick the two that interest you most, like weaving on a cardboard loom or felting wool, or ask about visiting a textile plant.

Example for this section: Weave a small mat on a cardboard loom using yarn, then try wet felting: layer wool fibers, add warm soapy water, and rub until the fibers lock together into a sheet.

- ☐ **3a** Visit a textile plant, textile product maker, or textile school or college, and report on what you saw and learned

- ☐ **3b** Make a simple loom yourself and use it to weave a belt, headband, placemat, or wall hanging

- ☐ **3c** Use a magnifying glass to examine a woven, a nonwoven, and a knitted fabric. Sketch each and explain how their constructions differ

- ☐ **3d** Make a piece of felt

- ☐ **3e** Make two natural dyes and dye a garment or piece of fabric with them

- ☐ **3f** Waterproof a fabric

- ☐ **3g** Show how to identify fibers using a microscope or the breaking test

- ☐ **4** Explain 10 of these terms: aramid, carbon fibers, cellulose, distaff, extrusion, greige goods, harness, heddle, loom, nonwoven, sericulture, shed, sliver, spandex, spindle, spinneret, staple, warp, worsted, yarn

Tip: Make flash cards of textile terms and quiz a family member.

- ☐ **5** List pros and cons of plant and animal natural fibers, plus cellulosic and synthetic manufactured fibers. Name and discuss at least four environmental concerns about producing and caring for textiles

Tip: Make a chart comparing cotton or wool with polyester or nylon for comfort, care, and strength.

Example: Make a chart comparing wool, cotton, polyester, and nylon on warmth when wet, strength, how fast they dry, and how they're cleaned. Then explain which you'd pick for a hiking base layer and why.

- ☐ **6** Explain to your counselor, out loud or in a written report, five careers in the textile industry. Describe the two that interest you most, including the education, training costs, and duties each involves

Tip: Look up textile jobs and talk with someone who works with fabrics, like a tailor or designer.

Example: Look into five different jobs, such as fashion designer, textile engineer, tailor, quality tester, and fiber farmer. For each, write what they do and the training it takes.