

Textile

Merit Badge Workbook

Merit badges are earned by doing: reading the pamphlet, practicing the skills, and showing your counselor what you have learned.
This workbook gives you a place to organize your notes and track your progress along the way.
Merit badge counselors may not require the use of this or any similar workbook.
You still must satisfy your counselor that you can demonstrate each skill and have learned the information.
Use the space under each requirement to note what you have done and what you want to talk about, not to write out full answers.
When a requirement says discuss, show, tell, explain, or demonstrate, that is what you must do.
No one may add to or subtract from the official requirements found on scouting.org (Guide to Advancement 7.0.4.8).

Scouting America last updated this badge's requirements page on September 19, 2025.
Requirements change from time to time. Double-check scouting.org before you start.

Scout's name: _____ Unit: _____ Date started: _____

Counselor's name: _____ Phone no.: _____ Email: _____

Links marked "Scouting America resources" are the ones Scouting America shares on its official badge page.
This workbook is unofficial and not endorsed by Scouting America.

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1. Discuss with your counselor the importance of textiles. Explain the terms fiber, fabric, and textile. Give examples of textiles you use every day.

Scouting America resources: Textiles: What Are They? Where Do They Come From? (video)

Why textiles are important

Terms

Term	What it means
fiber	
fabric	
textile	

Textiles I use every day

Requirement 1 completed on _____ counselor initials _____

2. Do the following:

(a) Get swatches of two natural fiber fabrics (100% cotton, linen, wool, or silk; no blends). Get swatches of two synthetic fiber fabrics (nylon, polyester, acrylic, olefin, or spandex). Get a sample of one cellulosic fabric (rayon, acetate, or lyocell).

My fabric swatches

Swatch	Fiber	Where I got it
Natural fiber 1		
Natural fiber 2		
Synthetic fiber 1		
Synthetic fiber 2		
Cellulosic fiber		

(b) Give the origin, major characteristics, and general content of each type of fiber obtained for 2(a). Explain the difference between a cellulosic manufactured fiber and a synthetic manufactured fiber.

Scouting America resources: Natural vs Synthetic Fibers (Which to Choose and Why) (video)

My fibers from 2(a)

Fiber	Origin	Major characteristics	General content
Natural fiber 1			
Natural fiber 2			
Synthetic fiber 1			
Synthetic fiber 2			
Cellulosic fiber			

The difference between a cellulosic manufactured fiber and a synthetic manufactured fiber

(c) Describe the main steps in making raw fiber into yarn, and yarn into fabric.

Scouting America resources: From Cotton to Yarn (video) · Weaving Process (video) · Knitting Process (video)
Complete Process of Textile Manufacturing Fiber to Complete Garments (video)

Main steps: raw fiber into yarn

Main steps: yarn into fabric

(d) Assume you will soon buy a new garment or other textile item. Tell your counselor what fiber or blend of fibers you want the item to be, and give reasons for your choice.

Item I will buy _____ Fiber or blend I want _____

My reasons for this choice

Requirement 2 completed on _____ counselor initials _____

3. Do TWO of the following:

☐ **(a)** Visit a textile plant, textile products manufacturer, or textile school or college. Report on what you saw and learned.

Place I visited _____ Date _____

My report: what I saw and learned

☐ **(b)** Weave a belt, headband, placemat, or wall hanging using a simple loom that you have made yourself.

Scouting America resources: How To Make a Cardboard Loom (website)

What I wove _____ Date _____

How I made my loom

☐ **(c)** With a magnifying glass, examine a woven fabric, a nonwoven fabric, and a knitted fabric. Sketch what you see. Explain how the three constructions are different.

Scouting America resources: Woven vs. Knit vs. Non-Woven Fabrics | Textile Talk w/ A Thrifty Notion (video)

My sketches of the woven, nonwoven, and knitted fabrics (draw here or attach)

How the three constructions are different

Fabric	How it is built
Woven	
Nonwoven	
Knitted	

☐ **(d)** Make a piece of felt.

Scouting America resources: Wet Felting Tutorial for Beginners (video)

Date _____ Materials I used _____

How I made my felt

_____

☐ **(e)** Make two natural dyes and use them to dye a garment or a piece of fabric.

Scouting America resources: Natural Dyes From Plants and Vegetables | DIY Eco-Friendly Dyes | Homeschool with Everyday Food (video) · Short Tie Dye Demo - No Narration (video) · Short Tie Dye Demo - With Narration (video)

My natural dyes

Dye	What I made it from	Color I got
Dye 1		
Dye 2		

Garment or fabric I dyed _____ Date _____

☐ **(f)** Waterproof a fabric.

Scouting America resources: A Simple DIY Way to Waterproof Anything (video) · DIY Seam Seal (video)

Fabric _____ What I used to waterproof it _____ Date _____

☐ **(g)** Demonstrate how to identify fibers, using microscope identification or the breaking test.

Scouting America resources: Identification of Basic Textile Fibers by Polarized Light Microscopy (video)

Method (microscope or breaking test) _____ Date _____

Fibers I identified

Sample	What I observed	Fiber

Requirement 3 completed on _____ counselor initials _____

4. Explain the meaning of 10 of the following terms: warp, harness, heddle, shed, aramid, spandex, sliver, yarn, spindle, distaff, loom, cellulose, sericulture, extrusion, carbon fibers, spinneret, staple, worsted, nonwoven, and greige goods.

Scouting America resources: Loom and Weaving Terminology (video)

My 10 terms

Term	What it means

My 10 terms (continued)

Term	What it means

Requirement 4 completed on _____ counselor initials _____

5. List the advantages and disadvantages of natural plant fibers, natural animal fibers, cellulosic manufactured fibers, and synthetic manufactured fibers. Identify and discuss at least four ecological concerns regarding the production and care of textiles.

Scouting America resources: The Ultimate Fabric Guide - The Differences Between Natural vs Synthetic vs Semi-Synthetic Fibers (video)

Advantages and disadvantages

Fiber type	Advantages	Disadvantages
Natural plant fibers		
Natural animal fibers		
Cellulosic manufactured fibers		
Synthetic manufactured fibers		

Ecological concerns (at least four)

Concern	Production or care	Notes for discussion

Requirement 5 completed on _____ counselor initials _____

6. Explain to your counselor, either verbally or in a written report, five career possibilities in the textile industry. Tell your counselor about two positions that interest you the most and the education, cost of training, and specific duties those positions require.

Scouting America resources: Day in the Life of a Textile Engineer (video) · Careers in the Fashion & Textiles Industry (video) Textile Engineering Careers (video) · Want To Work in the Textiles Industry? (video)

Five careers in the textile industry

Career	What the job involves

The two positions that interest me most

Position	Education	Cost of training	Specific duties

Requirement 6 completed on _____ counselor initials _____

Counselor sign-off

Your counselor signs your blue card or approves the badge in Scoutbook, and your unit records it. This line is for your own records.

Counselor's signature _____ Date completed _____

Official Scouting America resources

Scouting America resources: Textile merit badge page (requirements and resources) · Textile merit badge pamphlet (free PDF) All merit badges

Made by Cole at ScoutSmarts.com, an Eagle Scout who loves helping Scouts.
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