<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: [Workbooks@USScouts.Org](mailto:Workbooks@usscouts.org?subject=Merit%20Badge%20Workbooks)

Comments or suggestions for changes to the **requirements** for the **merit badge** should be sent to: [Merit.Badge@Scouting.Org](mailto:merit.badge@scouting.org)

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1. Discuss with your merit badge counselorthe importance of textiles. In your discussion, define the terms fiber, fabric, and textile.

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| Fiber; | |  |
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| Fabric; | |  |
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| Textile: | |  |
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Give examples of textiles you use every day.

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2. Do the following:

a. ⬜ Get swatches of two natural-fiber fabrics (100 percent 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).

b. Give the origin, major characteristics, and general content of each type of fiber obtained for 2a.

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| Natural Swatch type: |  |
| Origin: |  |
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| Major characteristics: |  |
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| General content: |  |
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| Natural Swatch type: |  |
| Origin: |  |
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| Major characteristics: |  |
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| Synthetic Swatch type: |  |
| Origin: |  |
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| Major characteristics: |  |
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| Synthetic Swatch type: |  |
| Origin: |  |
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| Major characteristics: |  |
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| General content: |  |
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| Cellulosic Swatch type: |  |
| Origin: |  |
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| Major characteristics: |  |
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| General content: |  |
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Explain the difference between a cellulosic manufactured fiber and a synthetic manufactured fiber.

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

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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.

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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.

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⬜ b. Weave a belt, headband, place mat, or wall hanging. Use a simple loom that you have made yourself.

⬜ 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.

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⬜ d. Make a piece of felt.

⬜ e. Make two natural dyes and use them to dye a garment or a piece of fabric.

⬜ f. Waterproof a fabric.

⬜ g. Demonstrate how to identify fibers, using microscope identification or the breaking test.

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, greige goods.

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| ⬜ | warp, |  |
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| ⬜ | harness, |  |
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| ⬜ | heddle, |  |
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| ⬜ | shed, |  |
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| ⬜ | aramid, |  |
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| ⬜ | spandex, |  |
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| ⬜ | sliver, |  |
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| ⬜ | yarn, |  |
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| ⬜ | spindle, |  |
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| ⬜ | distaff, |  |
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| ⬜ | loom, |  |
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| ⬜ | cellulose, |  |
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| ⬜ | sericulture, |  |
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| ⬜ | extrusion, |  |
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| ⬜ | carbon fibers, |  |
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| ⬜ | spinneret, |  |
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| ⬜ | staple, |  |
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| ⬜ | worsted, |  |
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| ⬜ | nonwoven, |  |
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| ⬜ | greige goods. |  |
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5. List the advantages and disadvantages of natural plant fibers, natural animal fibers, cellulosic manufactured fibers, and synthetic manufactured

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|  | Advantages | Disadvantages |
| Natural plant fibers, |  |  |
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| Natural animal fibers, |  |  |
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| Cellulosic manufactured fibers |  |  |
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| Synthetic manufactured fibers |  |  |
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Identify and discuss at least four ecological concerns regarding the production and care of textiles.

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6. Explain to your merit badge counselor, either verbally or in a written report, five career possibilities in the textile industry.

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Tell about two positions that interest you the most and the education, cost of training, and specific duties those positions require.

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| Education: |  |
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| Cost of Training: |  |
| Specific Duties: |  |
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| Position 2: |  |
| Education: |  |
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| Cost of Training: |  |
| Specific Duties: |  |
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**Requirement resources can be found here:**

[http://www.meritbadge.org/wiki/index.php/Textile#Requirement resources](http://www.meritbadge.org/wiki/index.php/Textile#Requirement_resources)

**Important excerpts from the** [***Guide To Advancement - 2013***](http://www.scouting.org/filestore/pdf/33088.pdf)**, No. 33088 (SKU-618673)**

**[1.0.0.0] — Introduction**

The current edition of the *Guide to Advancement* is the official source for administering advancement in all Boy Scouts of America programs: Cub Scouting, Boy Scouting, Varsity Scouting, Venturing, and Sea Scouts. It replaces any previous BSA advancement manuals, including *Advancement Committee Policies and Procedures*, *Advancement and Recognition Policies and Procedures*, and previous editions of the *Guide to Advancement*.

**[Page 2, and 5.0.1.4] — Policy on Unauthorized Changes to Advancement Program**

***No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.*** There are limited exceptions relating only to youth members with special needs. For details see section 10, “Advancement for Members With Special Needs”.

**[Page 2] — The** [**“Guide to Safe Scouting”**](http://www.scouting.org/scoutsource/HealthandSafety/GSS/toc.aspx) **Applies**

Policies and procedures outlined in the ***Guide to Safe Scouting****,* No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects.

**[7.0.3.1] — The Buddy System and Certifying Completion**

A youth member must not meet one-on-one with an adult. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge—along with him attending the session.

When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult verification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.

Note that from time to time, it may be appropriate for a requirement that has been met for one badge to also count for another. See “Fulfilling More Than One Requirement With a Single Activity,” 4.2.3.6.

**[7.0.3.2] — Group Instruction**

It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout —actually and *personally*— completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions.

It is sometimes reported that Scouts who have received merit badges through group instructional settings have not fulfilled all the requirements. To offer a quality merit badge program, council and district advancement committees should ensure the following are in place for all group instructional events.

* Merit badge counselors are known to be registered and approved.
* Any guest experts or guest speakers, or others assisting who are not registered and approved as merit badge counselors, do not accept the responsibilities of, or behave as, merit badge counselors, either at a group instructional event or at any other time. Their service is temporary, not ongoing.
* Counselors agree not to assume prerequisites have been completed without some level of evidence that the work has been done. Pictures and letters from other merit badge counselors or unit leaders are the best form of prerequisite documentation when the actual work done cannot be brought to the camp or site of the merit badge event.
* There is a mechanism for unit leaders or others to report concerns to a council advancement committee on summer camp merit badge programs, group instructional events, and any other merit badge counseling issues—especially in instances where it is believed BSA procedures are not followed. See “Reporting Merit Badge Counseling Concerns,” 11.1.0.0.
* There must be attention to each individual’s projects and his fulfillment of all requirements. We must know that every Scout—actually and personally—completed them.

**[7.0.3.3] — Partial Completions**

A Scout need not pass all the requirements of one merit badge with the same counselor. It may be that due to timing or location issues, etc., he must meet with a different counselor to finish the badge. The Application for Merit Badge has a place to record what has been finished—a “partial.” In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, the counselor does not retain his or her portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his unit leader to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partials have no expiration except the Scout’s 18th birthday. Units, districts, or councils shall not establish other expiration dates for partial merit badges.

**[7.0.4.8] — Unofficial Worksheets and Learning Aids**

Worksheets and other materials that may be of assistance in earning merit badges are available from a variety of places including unofficial sources on the Internet and even troop libraries. Use of these aids is permissible as long as the materials can be correlated with the current requirements that Scouts must fulfill. Completing “worksheets” may suffice where a requirement calls for something in writing, but this would not work for a requirement where the Scout must discuss, tell, show, or demonstrate, etc. Note that Scouts shall not be required to use these learning aids in order to complete a merit badge.