



Textile

Virtual Merit Badge Class Workbook

This workbook can help Scouts to explain certain requirements but they still need participate in the virtual class and read the merit badge book.

Scout's Name: _____ Unit: _____

Counselor's Name: _____ Phone No.: _____ Email: _____

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

Fiber;	

Fabric;	

Textile:	

Give examples of textiles you use every day.

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.

Natural Swatch type:

Origin:

Major characteristics:

General content:

Natural Swatch type:

Origin:

Major characteristics:

General content:

Synthetic Swatch type:

Origin:

Major characteristics:

General content:

Synthetic Swatch type:

Origin:

Major characteristics:

General content:

Cellulosic Swatch type:

Origin:

Major characteristics:

General content:

Explain 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.

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.

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.

- 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.

- 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.

warp,

harness,

heddle,

shed,

aramid,

Textile

Scout's Name: _____

spandex,

sliver,

yarn,

spindle,

distaff,

loom,

cellulose,

sericulture,

Textile

Scout's Name: _____

extrusion,

carbon fibers,

spinneret,

staple,

worsted,

nonwoven,

greige goods.

5. List the advantages and disadvantages of natural plant fibers, natural animal fibers, cellulosic manufactured fibers, and synthetic manufactured

	Advantages	Disadvantages
Natural plant fibers,		

4

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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