



Name _____ Period _____ Date _____

FIBERS: MANUFACTURED AND NATURAL

Directions: Answer the following questions as the material is presented.

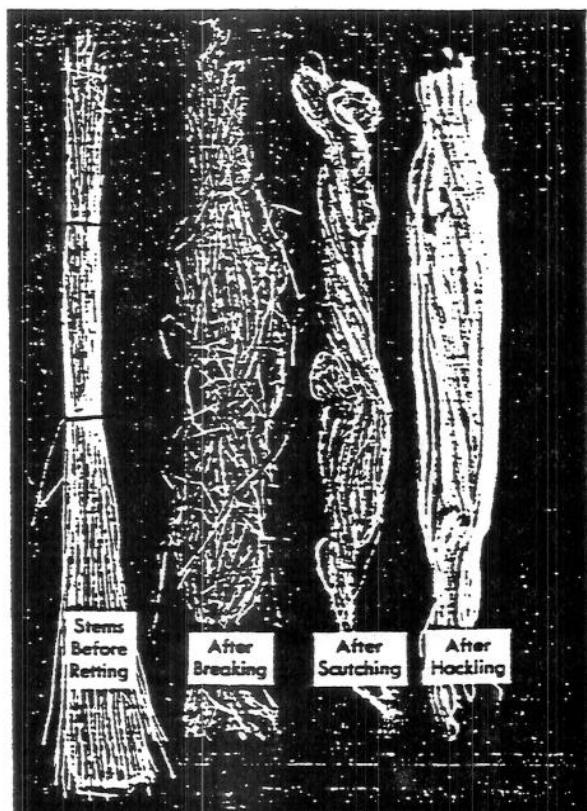
1. What is fabric made of? Strands of fibers woven or knitted together
2. The two (2) groups of fibers are: manufactured and natural
3. There are three terms commonly used for non-natural fibers. They are:
manufactured synthetic man-made
4. List two (2) categories of synthetic (man-made) fibers and give an example of each.
Categories: 1. cellulose (wood pulp) 2. rayon, acetate
Examples: 1. non-cellulose (petroleum chemicals) 2. nylon, polyester
5. Briefly describe how synthetic fibers are made.
The chemical compound is forced through a spinnerette and allowed to dry.
6. Name several characteristics of synthetic fibers.
Durable, strong, clean easily, hold shape, take color well
7. What are some commonly used products made of synthetic fibers?
Carpet, upholstery, clothing, umbrellas, draperies, camping and sports equipment
8. Some advantages of synthetic fibers are:
Always available, less expensive, can be altered to meet any need, stronger
9. Some disadvantages of synthetic fibers are:
Don't allow air to pass through, hot to wear, static electricity build-up
10. How are the disadvantages of synthetic fibers generally overcome?
By blending with natural fibers for a balance of characteristics
11. Explain the difference between the generic name and the trade name. Give an example of each.
A generic name is the name of the chemical compound Polyester, spandex
A trade name is the name given by the manufacturer Dacron, lycra
12. List five (5) natural fibers and the source of each.
Fibers: cotton linen wool silk leather/fur
Source: cotton plant flax plant sheep/lama silkworms animals



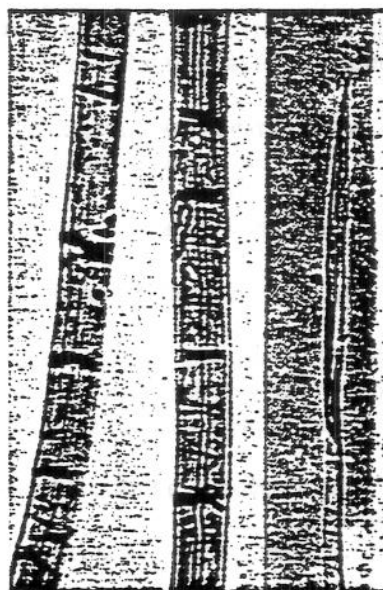
Name _____ Period _____ Date _____

FIBERS: MANUFACTURED AND NATURAL - PAGE 2

- 13. What are some advantages of natural fibers?
__They allow air to pass through, more comfortable to wear, feel good to touch__
- 14. What are some disadvantages of natural fibers?
__Not always available, more expensive, wrinkle easily, more difficult to care for__
- 15. Briefly describe how wool is made. _____
__Sheep sheared, wool cleaned and dyed, wool spun into yarn, fabric made__
- 16. Explain what happens to natural fibers when laundered incorrectly.
__Fabric shrinks, wrinkles, fades, gets stiff, crinkles up__
- 17. Why are natural fibers often more expensive?
__The manufacturing process is more difficult and time consuming__
- 18. Why is it important to check the label of a garment for the fiber content?
__So you can care for the garment correctly__



Flax fiber at different stages of processing.



Photomicrograph of flax showing nodes.