

Chapter 13

Lesson 1

Fibers suitable for making yarn or qualities of fibers

Qualities of textile fiber

1. The length of the textile fiber will be more than its width. As much as the fiber is thin, the fabric will be smooth and soft.
2. The textile fiber should have strength.
3. The textile fiber can be twisted to make yarn.
4. The small fibers should have the tendency to stay twisted together.
5. After folding or twisting, the fiber should have the ability to come back to the previous condition.
6. The textile fiber should have its own brightness.
7. Capable of absorbing moisture.
8. The textile should have elasticity.

Lesson 2

Classification of Fibers

According to the source of fiber, it can be divided into two types.

1. **Natural fiber:** Natural fibers are categorized in the following ways.
 - a. **Plant Fiber:** Plant fiber is available from plant's seed, bark, stem, leaf etc. Cotton fiber is the outer sides of the seed of the carpas tree, jute fiber is obtained from the bark of the jute plant, flax fiber is derived from the stem of the flax plant, pina fiber is extracted from pineapple leaf.



Image 1: Cotton seed



Image 2: Flax Plant



Image 3: Jute Plant



Image 4: Pineapple leaves

- b. **Animal fiber:** We get animal fiber from the hair, fur or saliva of the animal.



Image 5: Fur fiber from the sheep's fur



Image 6: Silk fiber from the saliva of cocoon

- c. **Mineral fiber:** This fiber is available under the soil in the steps of the hard rock. The yarn is made after refining the mineral fiber. The asbestos yarn is made from the fibers of the asbestos.
- d. **Rubber Fiber:** Different types of fibers and threads are made from the concentrating natural rubber through a special process.

2. **Artificial fiber:** People make fibers by mixing chemicals with the natural fibers or just with the chemicals which are artificial fibers. Such as nylon, rayon etc.

Tasks:

1. Categorized the fibers through a chart.
2. Write the qualities of textile fiber.