Unit 3: Fibers and fabrics

Content Area: **Family and Consumer Sciences**
Course(s): **Fashion Technology**
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Enduring Understandings

Each fiber has its own characteristics and properties which affects a fabrics' performance, appearance and care.

Knowledge of fiber characteristics help you select the fiver most appropriate for its end use.

Fibers are put together to make yarn; yarns are woven, knitted or bonded together to make fabric.

The two main groups of fibers are natural and man made.

The most common methods of making fabric are weaving, knitting and bonding.

Finishes affect a fabrics' appearance, feel and performance.

Essential Questions

How are fabrics classified?

How is fabric construction related to clothing type?

How do finishes affect fabrics?

How does combining fibers make for a better garment?

What is the correlation between the type of fiber and end fabric costs?

How can fiber enhancements help designers create fashion styles?

How has the evolution of man-made fabrics revolutionized the fashion industry?

Content

Vocabulary:

Natural

Man-made

Yarn

Fiber

Spinneret

Filament

Pilling

Dyeing

Fabric Finish

Plain weave

Satin Weave

Twill weave

Knitting

Weaving

Bonding

Quilting

Nap

Warp Weft

Blend

Pile

Skills

Identify fiber characteristics that affect the appearance and performance of fabrics

Summarize the sources, production steps and characteristics of natural fabrics

Outline the process involved in the production of manufactured fibers

Summarize how fibers are combined to make various types of yarns

Describe the three basic weaves and the most common variation of these weaves

Describe the two methods of knitting and the most common variation of weft and warp knits

Summarize the methods used to color or print designs on fabrics

Resources

Apparel

Google search, docs & slides

Standards

16.2	Evaluate textiles, fashion, and apparel products and materials and their use in diverse settings.

16.2.1	Apply appropriate terminology for identifying, comparing, and analyzing the most common generic textile fibers and fabrics.
16.2.2	Evaluate performance characteristics of textile fiber and fabrics.
16.2.3	Analyze textile legislation, standards, and labeling in the global economy.
16.2.4	Analyze characteristics of textile components in the design, construction, care, use, maintenance, and disposal or recycling of products.
16.2.5	Demonstrate appropriate procedures for care and disposal or recycling of textile products, considering diverse needs locally and globally.
16.4.2	Explain production processes for creating fibers, yarns, woven and knit fabrics, and non-woven textile products.