



Natural Resources Secondary



Historic Homes • Gardens • Artifacts • Costumed Crafts People
Boat Tours • Gift Shop • Restaurant



Standards

Standards as developed by the Louisiana Department of Education. Available online at <http://www.vermilionville.org/vermilionville/educate/lesson-plans>.

Grade 8

Physical and Human Systems

- **GLE #12:** Describe the causes and effects of cultural diffusion and the effects of cultural diversity in Louisiana (G-1C-M5)

Environment and Society

- **GLE #14:** Analyze, evaluate, and predict consequences of environmental modifications on Louisiana landforms, natural resources, and plant or animal life (G-1D-M1)

Individuals, Households, Businesses, and Governments

- **GLE #52:** Explain how supply and demand affect prices (E-1B-M1)
- **GLE #53:** Explain and analyze factors affecting production and allocation of goods/services in Louisiana and the United States (E-1B-M2)

Louisiana History

- **GLE #74:** Describe the causes and effects of various migrations into Louisiana (H-1D-M1)

Objectives

1. Students will explain how cotton, as a natural resource, affected the people living in southwest Louisiana.

Pre-Visit Activity

Teachers. We have made two introduction documents available to you on our website – a word document as well as a PowerPoint with pictures depicting the cultures that we represent. Please take some time to review these two documents with your class prior to your visit here. You can access them [here](#), by clicking on

- Introduction to Vermilionville and
- Vermilionville PowerPoint

Explain to students the difference between natural and artificial materials.

Natural fibers are made from plant, animal and mineral sources

After World War II, the build-up of synthetic fibers significantly decreased the use of natural fibers. Now, with the increase of oil prices and environmental considerations, there has been a revival of natural fiber use within the textile, building, plastic and automotive industries.

The most used plant fibers are cotton and flax, although sisal, jute, kenaf, bamboo and coconut are also widely used.



The first **synthetic fiber** was invented in the early 1880s by Sir Joseph Swan. It was unveiled at the International Inventions Exhibition in London in 1885.

Then, Hilaire de Chardonnet, a French engineer, displayed his newly invented artificial silk during the Paris Exhibition of 1889. Unfortunately, that material was extremely flammable and was subsequently replaced with more stable materials.

Fast forward 40 years and we finally had nylon. It was in the 1930s that Wallace Carothers, working for DuPont, invented the revolutionary fabric.

Synthetic fibers possess unique characteristics which make them popular dress material:

- Synthetic fibers do not depend either on an agricultural crop or on animal farming.
- They are generally cheaper than natural fiber.
- Easy to wash and dry up quickly.
- More stain resistant than natural fibers.
- Resistant to insects, fungi and rot.

Most of synthetic fibers disadvantages relate to their low melting temperature:

- Synthetic fibers burn more readily than natural.
- Prone to heat damage. Melt relatively easily.
- Prone to damage by hot washing.
- More electrostatic charge is generated by rubbing than with natural fibers.
- More uncomfortable

Common synthetic fibers include:

- Nylon (1931)
- Modacrylic (1949)
- Olefin (1949)
- Acrylic (1950)
- Polyester (1953)
- Carbon fiber (1958)

Anchor Lesson

Materials needed: raw cotton, markers, small pieces of fabric

Bring the students to the Beau Bassin house if possible and see about having Ms. Brenda Lalonde work that day so she can give the lesson on cotton.

Raw cotton activity

As students are welcomed in the right side of Beau Bassin house, they are given a handful of raw cotton. The students are instructed to sit on the floor and begin removing the seeds from the cotton while they are given a lesson on the process of taking the cotton from the field to fabric, including picking the seeds out, carding the raw fibers, spinning the cotton into yarn, and finally weaving the yarn into fabric. Ms. Lalonde is a cotton spinner and will demonstrate that craft for you, if you call Vermilionville in advance and find out on which day she is working.



Quilt activity

After the weaving demonstration is complete, the students will learn the process of using natural materials as dyes for the cotton. After the lesson, the students will be given a small piece of fabric along with markers to use to draw a representation of what they have learned during the lessons. They could also draw something that represents their life. All the pieces of fabric will be put together to create a quilt to bring back to class as a souvenir of the Vermilionville visit.

Post-Visit Activity

Have students brainstorm about modern uses of natural dyes.



