

Clothing Rack Consumer and Historian

Your jeans, shirts, socks and sweaters are all made from textiles. Textile is another word for a fabric that is woven or knitted. Textiles are made from fibers, thin threads of natural or artificial material that can be twisted into a continuous strand called yarn. Some textiles are made from the natural fibers of plants and animals. Cotton is made from fibers gathered from the seed pod or boll of the cotton plant. Wool fabric is made from the wool of sheep and llamas. Mohair is made from the long hair of goats. Silk comes from the long threads that the silkworm produces when it weaves its cocoon. Other textiles are made from synthetic fibers. Synthetic fibers are made by people.

Before the 20th century, all textiles were made from natural fibers. Since natural fibers decompose over time, very little evidence has survived to show what kinds of clothing people wore many thousands of years ago. The earliest known textiles were linen. Linen is woven from the fiber of the flax plant. In Switzerland, archaeologists dug up bundles of flax fibers and yarns and pieces of woven linen fabric. They think these objects are about 7,000 years old. In Mesopotamia, wool fabrics were found that are estimated to be about 4,000 years old. Cotton was first used to make clothing in India, Egypt, China, Mexico, and Peru. Silk has been used in China for over 4,000 years.

Late in the 19th century scientists started trying to imitate silkworms in order to create a fiber that was similar to silk. In 1884, the French inventor Hilaire de Chardonnet created rayon, the first synthetic fiber. Rayon is made from wood pulp that has been chemically treated.

Nylon was the first fiber made completely from chemicals. In the production of nylon and other synthetic fibers, certain by-products of oil refining are combined into a syrupy substance.

This substance is forced through the tiny holes of a plate called a spinneret to create fibers that can be spun and then woven into fabric.

Today, textiles are made from both natural and synthetic fibers. Sometimes natural and synthetic fibers are blended together. The most commonly used plant fiber is cotton. Cotton is an important US crop grown on farms in the southern part of the country from Georgia to southern California where the climate is warm.

The short, fluffy fibers of the cotton boll must be separated from the seeds and seed hulls before they can be used. This was difficult until Eli Whitney invented the cotton gin in 1793. The cotton gin made it easier and faster to clean cotton after it had been picked. After that, people all over the United States and Europe began wearing clothes made from cotton.

Before the invention of the cotton gin, most people wore clothes made from wool or linen. Wool is still a popular fiber for making clothes. Sheep and alpacas are raised on Utah farms for their wool, but much of the wool used in the United States is imported from Australia. Alpacas are related to camels and provide very soft fiber. Linen is also still in use but is expensive because it is difficult to make.

Clothing Rack Consumer

Read the information on the “Clothing Rack Consumer and Historian” information sheet. Then match the words with the definitions by writing the correct number in the space provided.

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|---------------------|-------|---|
| 1. cotton gin | _____ | Fibers obtained from plants or animals |
| 2. petrochemicals | _____ | Man-made fibers |
| 3. yarn | _____ | A plant grown in warm climates for the fiber surrounding its seeds |
| 4. rayon | _____ | A machine that separates the seeds, seed hulls, and other small objects from the fibers of cotton |
| 5. natural fibers | _____ | A woven fabric made from the fiber of the flax plant |
| 6. cotton | _____ | A plant grown for its fiber, used in making linen, and for its seed, used to make linseed oil |
| 7. textiles | _____ | A continuous strand of twisted threads of natural or synthetic materials |
| 8. spinneret | _____ | A synthetic fiber produced from wood pulp that has been chemically treated |
| 9. archaeologist | _____ | The fine, soft, wavy, protective coat of domestic sheep and certain other animals |
| 10.wool | _____ | South American animal related to the camel and raised for its soft fiber |
| 11.alpaca | _____ | Chemicals made from petroleum products |
| 12.synthetic fibers | _____ | A plate pierced with holes through which plastic material is pushed to produce synthetic fibers |
| 13.linen | _____ | Cloth made by interlacing yarns on a loom |
| 14.woven | _____ | Fabric that is woven or knitted |
| 15.cotton boll | _____ | The rounded seed pod of the cotton plant |
| 16.flax | _____ | Someone who looks for and studies material evidence from past human life and culture |

Clothing Historian

Read the information on the “Clothing Rack Consumer and Historian” information sheet to answer the following questions.

1. Cotton was first used to make clothing in what five countries? Find these countries on the world map.
2. What invention helped make cotton more important than linen or wool as a material used to make clothing?
3. Find Switzerland on the world map. Archaeologists found ancient evidence of which fiber in Switzerland? How many years old do archaeologists think this material is?
4. Look up Mesopotamia in an encyclopedia. Name the country that is located where Mesopotamia once was located. Find that country on the world map. Archaeologists found ancient evidence of which fiber in Mesopotamia?
5. What were scientists trying to imitate when they first began developing synthetic fibers?