How Fabrics are Made

Weaving and knitting are the most common methods of making fabrics. The method that is used affects the way a fabric looks and feels, the amount of care it needs, and the way it is used.

**Weaving**

Woven fabrics are made by crossing yarns over and under each other on a loom. The lengthwise yarn is called the *warp*, and the crosswise yarn is called a *filling yarn*, or *weft*.

Weaving is an ancient method for making cloth. The first looms were very simple. Yarns were hung from a stick and other yarns were woven from side to side, in and out of the hanging yarns.

Through the centuries, people have continually improved the loom. The basic method of weaving has not changed, but modern looms produce fabrics much faster than in the past. Weaving is still the most important method used in making cloth.

The plain weave is the simplest, most common, and least expensive method of weaving. Each filling yarn passes alternately over and under the warp yarns. Plain-weave fabrics are reversible, unless one side is printed or has been given a special surface effect or finish during processing.

Some examples of plain-weave fabrics are percale, muslin, broadcloth, batiste, and gingham. Look at the sheet or pillow case on your bed and you will see an example of plain weave.

A plain weave may be used to make either weak or strong fabrics. The strength of fabric depends upon the quality of the fiber, the size and twist of the yarn, and the closeness of the weave.

**Knitting**

The next most important method for making fabric is knitting. Knitted fabrics are made by needles that form a series of yarn loops that interlock in a single yarn or set of yarns. Lengthwise rows of loops are called ribs, and crosswise rows of loops that cross the ribs are called courses. The needles connect these rows of loops to make a continuous piece of fabric.

Knitted fabrics, like woven fabrics, can be made from any type of fiber or yarn.
Knitting, like weaving, is an old method of making fabric. For many years, all knitting was done by hand.

Today, knitting machines produce fabrics very rapidly. These modern machines can make many different knit fabrics from various weights and types of yarns. As a result, knit fabrics are used for almost any type of wearing apparel.

Non-Woven
Non-woven fabrics are made directly from fibers. The fibers are webbed, or matted, together. Felt is an example of a non-woven material.