WEAVES
Weaves

Plain

- Most simple and most common type of construction
- Inexpensive to produce, durable
- Flat, tight surface is conducive to printing and other finishes

Method of Construction:
- Each filling yarn goes alternately under and over the warp yarns

Common Fabrics:
- Cotton calicos, cheesecloth, gingham, percale, voile

Household Uses:
- Draperies, tablecloths, upholstery
Weaves

Basket

A variation of the plain weave
Usually basket or checkerboard pattern
Contrasting colors are often used
Inexpensive, less durable than plain weave

Method of Construction:
  Two or more warps simultaneously interlaced with one or more fillings

Common Fabrics:
  Monks cloth, oxford

Household Uses:
  Wall hangings, pillows
Weaves

Twill

P Creates a diagonal, chevron, houndstooth, corkscrew, or other design
P The design is enhanced with colored yarn
P Is strong and may develop a shine
P Method of Construction:
  < Three or more shafts; warp or filling floats over two or more counterpart yarns in progressive steps right or left
P Common Fabrics:
  < Denim, gabardine, serge, tweed
P Household Uses:
  < Upholstery, comforters, pillows
Weaves

Satin

- Smooth, soft luster
- Excellent drapability
- Floats snag easily

Method of Construction:
- Floats one warp yarn over four or more weft yarns, then tied down with one thread, resulting in a smooth face

Common Fabrics:
- Satin, satin-weave fabrics out of fabrics such as cotton.

Household Uses:
- Draperies, quilts
**Weaves**

*Jacquard*

- Yarns woven into unlimited designs, often intricate, multicolor effect
- Expensive, but the design doesn’t fade or wear out
- Durability depends on the fiber used
- The Jacquard loom was invented by Joseph Marie Jacquard
- **Method of Construction:**
  - Warp is individually controlled with each pick passage creating intricate designs
- **Common Fabrics:**
  - Brocade, damask, tapestry
- **Household Uses:**
  - Upholstery, wall hangings
Weaves

Leno

- A mesh-like fabric
- Method of Construction:
  - A pair of warp threads are passed over and under the filling yarns in a figure 8 or an hourglass twist, creating a geometric pattern
- Common Fabrics:
- Household Uses:
  - Thermal Blankets, curtains
Weaves

Knit

- Soft, stretchy
- Method of Construction:
  - Interlooping yarns
  - In weft knitting, loops are formed by hand or machine as yarn is added in crosswise direction.
  - In warp knitting, loops are formed vertically by machine, one row at a time
- Common Fabrics:
  - Raschel warp knits
- Household Uses:
  - Not used extensively in design with the exception of raschel warp knits which are used in making curtains and draperies
Weaves

Uncut pile

- Loops are possible on both sides of fabric
- Soft and absorbent, relatively inexpensive
- Can snag if loops are caught
- Method of Construction:
  - Generally a plain or twill weave with a third dimension—additional warp yarn or filling yarn is introduced into the basic structure and forms a loop at regular intervals
- Common Fabrics:
  - Frieze, terry cloth
- Household Uses:
  - Upholstery, towels, carpet, area rugs
Weaves

Cut Pile

P Soft and warm, resilient, absorbent
P May have a nap that must be matched
P May be expensive and need professional cleaning
P Method of Construction:
  < Similar to uncut pile, but loops have been cut
P Common Fabrics:
  < Corduroy, velvet, velveteen
P Household uses:
  < Upholstery, stage draperies
Weaves

Non-woven

P Does not have a distinct pattern
P Generally stiff and somewhat scratchy
P Method of Construction:
  < Fibers are bonded by mechanical or chemical means
P Common Fabrics:
  < Pelon
P Household Uses:
  < Bedding, backing for quilts, dust cloths for box springs, carpet backing, and upholstered furniture
**Weaves**

*Felt*

P Soft, non-woven, can pull apart
P Method of Construction:
  & Felting occurs when heat, moisture, agitation, and pressure are applied to wool fibers, causing the fibers to interlock permanently.
P Common Fabrics:
  & Felt
P Household Uses:
  & Padding, sound-proofing, insulation, filtering, and polishing, wall hangings and other decorative items
Weaves

Film

- Plastic-like material, repels liquid, stiff
- Mildews, rots, tears
- Inexpensive, fairly durable
- Method of Construction:
  - Made from synthetic solutions formed into thin sheets
- Common Fabrics:
  - Vinyl
- Household Uses:
  - Tablecloths, shower curtains, draperies, upholstery, and wall coverings
Weaves

Foam

- Soft, air holes, absorbent, resilient

Method of Construction:
- Rubber or polyurethane substance with air incorporated causing foaming, quite inexpensive, rots

Common Fabrics:
- Sponges

Household Uses:
- Carpet backing, padding, pillows and cushions, laminates to other fabrics