All clothing sold in the U.S. is required to have a fiber identification label to name the fiber(s) used in the clothing. Once you know what the clothing is made of, you can predict how the clothing will perform (absorbency/comfort, will it wrinkle or not, how will it stand up to wear, will it be easy to care for).

Care Labels permanently attached to clothes tell you how to care for clothes.

Fiber Chart

<table>
<thead>
<tr>
<th>Fiber Name</th>
<th>Durability</th>
<th>Wrinkle resistance</th>
<th>Absorbency</th>
<th>Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetate</td>
<td>Poor</td>
<td>Poor</td>
<td>Good</td>
<td>Dry clean</td>
</tr>
<tr>
<td>Acrylic</td>
<td>Moderate</td>
<td>Good</td>
<td>Poor</td>
<td>Machine wash</td>
</tr>
<tr>
<td>Cotton</td>
<td>Very good</td>
<td>Poor</td>
<td>Excellent</td>
<td>Machine wash</td>
</tr>
<tr>
<td>Nylon</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Poor</td>
<td>Machine wash</td>
</tr>
<tr>
<td>Polyester</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Poor</td>
<td>Machine wash</td>
</tr>
<tr>
<td>Rayon</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Good</td>
<td>Machine wash</td>
</tr>
<tr>
<td>Wool</td>
<td>Moderate</td>
<td>Excellent</td>
<td>Slow/good</td>
<td>Dry clean</td>
</tr>
</tbody>
</table>
Fiber/Fabric Characteristics

**DURABILITY:** how long it will stand up to wear

**WRINKLE RESISTANCE:** fabric will not look wrinkled

**ABSORBENCY:** will soak up water or moisture (perspiration)

**COLORFAST:** does not lose color when washed

**Definitions:**

FIBERS - tiny strands *(the “atom” of clothing)*

THREAD/YARN – fibers twisted together

BLEND – threads made from two or more different fibers
  *(for example: polyester & cotton -> to get best qualities of both)*

FABRIC – cloth made from threads – woven (interlacing), knit (interlocking loops), non-woven (matted together)

FINISH – a chemical treatment added to fabric to improve its qualities
  *(for example: water-resistant, flame retardant, stain resistant, wrinkle resistant)*

**Learning About Fabrics**

**Station 1 – Different Types of Fabric:**

Woven fabric – Fabric formed by interlacing yarns at right angles *(Warp- lengthwise yarns; Filling- crosswise yarns)*

- Plain weave- evenly woven, like the strings of a tennis racket; strongest weave
- Twill weave- woven to form a diagonal pattern in the fabric
- Satin weave- woven with “float yarns” to make fabric with a shiny surface
Knit fabric – Fabric made by interlocking loops of yarn
• Can stretch and recover (return to original shape)
• Doesn’t wrinkle easily
• Doesn’t fray
• May “run” if snagged

Non-woven fabric – Fabric made by matting or binding fibers together
• Edges do not fray or unravel when cut

Station 2 – Fabrics from Natural Fibers:

COTTON – from cotton plants
Advantages: soft, durable, comfortable, absorbent, strong, washable
Disadvantages: wrinkles, shrinks

LINEN
Advantages: durable, comfortable, absorbent, washable
Disadvantages: wrinkles, shrinks

WOOL – comes mainly from sheep
Advantages: warm; resists wrinkles
Disadvantages: shrinks; can be damaged by moths; may have to dry clean

SILK – comes from a silkworm’s cocoon
Advantages: lightweight; flexible; strong; luster
Disadvantages: damaged by perspiration & sunlight; may have to be dry cleaned
Station 3 – Fabrics from Man-made Fibers:

**ACETATE**
**Advantages:** soft; drapes well; looks like silk
**Disadvantages:** wrinkles, fades, heat-sensitive, loses strength when wet; poor abrasion resistance; keep away from perfume & nail polish remover (dissolves in acetone); dry clean

**ACRYLIC**
**Advantages:** soft, lightweight, warm, resists wrinkles; blends well with other fabrics; non-allergenic; often resembles wool
**Disadvantages:** may “pill” with abrasion; sensitive to heat

**NYLON**
**Advantages:** STRONG; holds shape well; washable; dries quickly
**Disadvantages:** does not absorb moisture; sensitive to heat; can pick up dyes when washed with colored items; static electricity

**POLYESTER**
**Advantages:** resists wrinkles; blends well with other fibers; washable; dries quickly
**Disadvantages:** holds oily stains

**RAYON**
**Advantages:** soft; comfortable; highly absorbent
**Disadvantages:** wrinkles easily; loses strength when wet; usually dry cleaned

**SPANDEX**
**Advantages:** high degree of stretch and recovery; combines well with other fibers
**Disadvantages:** weakened by chlorine bleach
Station 4 – Specialty Fabrics (part one):

**BURGAL**
A loose weave material
Blend of thick and thin yarns woven together to get a rough look

**CALICO**
Small print – usually on cotton woven fabric

**CORDUROY**
A pile fabric of plain or twill weave
May have wide or narrow cords or ribs

**DENIM**
Strong, coarse, washable twill weave fabric

**FLANNEL**
Plain or twill weave fabric with a soft brushed surface

Station 5 – Specialty Fabrics (part two):

**FLEECE**
Pile fabric
Soft and warm
Knit fabric

**GINGHAM**
Warp and filling threads dyed different colors to create a check design

**LACE**
A fine open-work fabric with patterns of twisted, knotted or looped threads on a background of mesh or net

**TERRY CLOTH**
A woven or knit fabric with loop pile on one or both sides
Absorbent (towel fabric)

**VELVET**
A pile fabric with short, closely-woven cut pile
(Usually made of silk or rayon)
PURCHASING CLOTHING:
What factors do you need to consider when purchasing clothing?
- Decide what you need (need vs. want) – take inventory
- Cost – can you afford it?
- Quality – compare (fabric, design, construction) – zippers work, seams don’t pucker, sturdy, hangs straight
- Care (check care label) – hidden costs of “dry clean only”
- Fit (too tight or too loose? Can you sit, bend comfortably?)
- Do you have anything to wear it with?