

Textiles

Apparel Design and Production 1

Created by: Amber Williams

To be used with Textile Handbook handout.

This lesson is meant to take place over 3 or 4 class periods. Each lesson should take approx. 20 min or less. Students will be given a handout booklet to take notes in. Textiles PPT, Fashion! Textbook and a couple of hands on activities.

Day 1, Introduce the fibers. Day 2, Review Fibers and discuss application/use, Stain Removal notes and discussion. Day 3, Notes and Discussion on Woven and Knit Fabrics, Stretch activity. Day 4, Notes and Discussion on Nonwoven, wool beads felting activity, Fabric sorting activity.

See Notes in PPT slides for additional details. My students are also working on their final project during this time. They get 20 min of instruction and 60 to sew on their projects.

See Notes in PPT slides for additional details.

Amber Williams

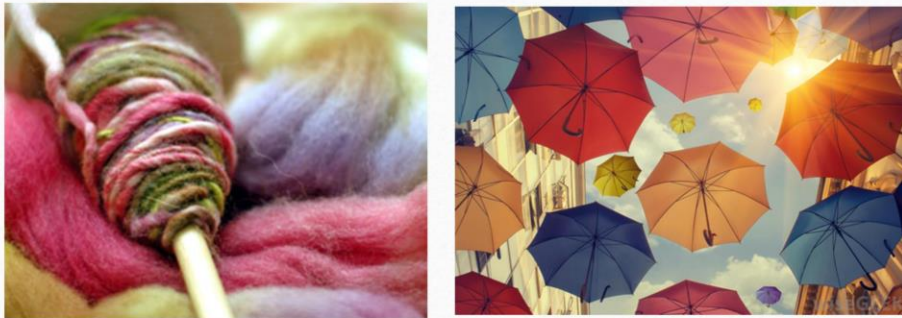
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Define Textiles.....



A type of Cloth or woven fabric

Natural vs Manufactured



Have students list the following fibers in their notes as you list them.

Natural:

Wool

Cotton

Linen

Silk

Manufactured:

Nylon

Polyester

Rayon

Acetate

Acrylic

Spandex

Natural vs Manufactured



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****Pass around the fiber cards for each fiber type (card has a fiber sample, and fabric sample attached to it)****

Manufactured:

Nylon

Polyester

Rayon

Acetate

Acrylic

Spandex

Knowing the characteristics of each fiber type
will help you choose fabric to better meet your
needs



Complete the Table in
your handbook

Write characteristics of
each fiber in your chart

You have 20 minutes!

Have students use the FASHION! text book to complete the chart in their notes.

Blended Fibers

What is the benefit of blending fibers?



Blending fibers creates the best of both worlds.

It can decrease cost, but will give the qualities of the fibers.

Eg. Spandex and cotton blended changed how most people felt about wearing jeans.

Optimum Performance

Choose the right fiber for the job



- Function/Needs
- What Fiber will provide the function/needs?
- What are the characteristics?

For each picture have students choose a fiber they would choose to make the clothing article.

Students needs to tell what the fiber characteristics that make their choose the best selection.

Fill out the information in their handout

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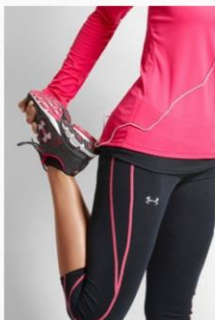
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Laundry Care



What sets a **STAIN**?



&



Heat and Time set a stain

Stain Removal 101

Refer to your Handout

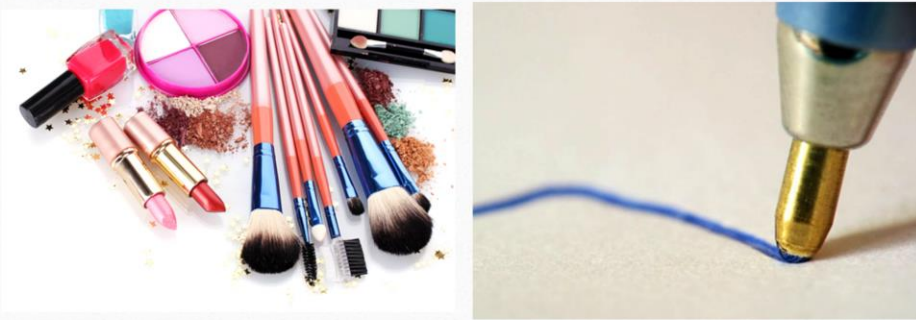


Have students refer to the guide in their handout, discuss how to launder an item that is affected by the following item:

Gum

Grass stains

Stain Removal 101



Have students refer to the guide in their handout, discuss how to launder an item that is affected by the following item:

Makeup/lipstick

Ball point pen

Stain Removal 101



Have students refer to the guide in their handout, discuss how to launder an item that is affected by the following item:

Blood/Protein
Chocolate

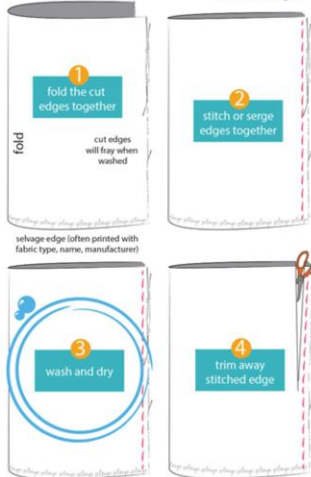


Should I prewash
my fabric?

Preshrink your fabric by washing, drying and ironing (if needed) exactly how you would care for the finished item before you begin. Knits are notorious for shrinking!

How to **PRE-WASH FABRIC**

Without Losing Valuable Yardage
craftaholicblog.com



Sew Be It

**Quick
tip!**

When pre-washing fabric, to get less fray - put it in a pillowcase and tie a knot at the top. Wash on gentle and dry on low. Less mess!

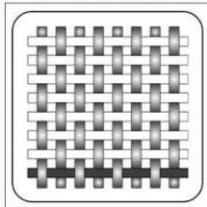


The
MOTHER
HUDDLE

Preshrink your fabric by washing, drying and ironing (if needed) exactly how you would care for the finished item before you begin. Knits are notorious for shrinking!

Fabric Construction

Woven Fabric



- Interlacing yarns
- Plain, Satin and Twill
- Selvage
- Lengthwise, Crosswise, and Bias

Give students a piece of cloth and have them label the parts of the fabric (selvage, lengthwise, crosswise, bias)

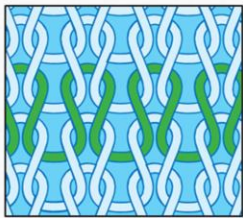
Discuss how the type of weave affects the fabric types (broadcloth, denim, crepe de chine)

There are different types of weaves, Plain, satin, and twill. We go into more detail on the types of weaves in fashion strategies and clothing 2

Resource: Fabric Guide: The Ultimate Fiber Resource, by Simplicity

Fabric Construction

Knit Fabric



- Interlocking loops
- Weft and Warp Knits
- Stretchy

Knits have much more give and flexibility than its more rigid woven cousin.

There are two types of machine knitting construction: weft and warp.

Weft knits: Jersey or plain knits, Double Knits, Rib Knits (developed to copy the look of hand knitting)

Warp knits: Tricot, Raschel knits (more durable than a weft knit, and less susceptible to running)

If a knit has spandex added to it, it has even more stretch!

Show students how to check stretch capability for knit.

Resource: Fabric Guide: The Ultimate Fiber Resource, by Simplicity

Stretch Capabilities



Why should one be concerned with how much a knit can or can not stretch?

Not all knit fabrics stretch the same amount, use the following ruler to determine the stretch of your fabric. We recommend fabrics that have a 2-way stretch and moderate (35% -- jersey knit and interlock) to super (75% -- rib knit and fabric with spandex/lycra) stretchability. Fold the knit perpendicular the grainline (along the direction of stretch). Place pins 4" apart. Hold knit firmly at edge of gauge and stretch without distorting the fabric. If distortion (parallel folds) appears, relax tension. Note the distance the knit stretched beyond its original length. Release the pulled end; if it returns to its original location, it has excellent recovery.

Measure on the crossgrain

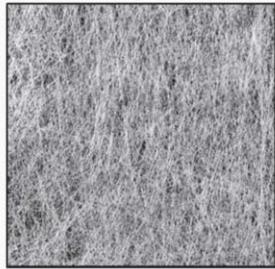
<http://www.jocole.net/pdf/KnitTips&Tricks.pdf>

<http://stitch-n-smile.com/how-to-thursday-measuring-your-fabric-stretch/>

Give students a knit sample and have them measure their fabric stretch (pinsm

Fabric Construction

Non Woven Fabric



- Netting, Bonding, Fusing, Felting
- Felting forms a permanent bond between fibers

Netting: is an ancient construction that's been adapted to generate many types of fabrics. Lace and Tulle are examples

Bonding: joins two separate layers of cloth, plastic or vinyl together with a chemical agent. Faux leather is an example

Fusing: creates a matted web by joining fibers together with an adhesive or bonding agent. Interfacings are a good example

Felting: uses a combination of moisture, heat, and friction to produce a thick, warm fabric from wool fibers. The wool fibers are immersed in water, causing the scales on the fiber to swell; agitation or friction is then applied to entangle the scales together. Next, heat is applied to shrink the scales back down.

Resource: Fabric Guide: The Ultimate Fiber Resource, by Simplicity

Woolen Beads



Have students make a woolen bead to experience felting!

Have students identify what they did to reflect the steps of the felting process:

Immerse in water---cut woolen string into small pieces and saturate in water

Agitation---pull cut pieces apart

Heat---roll pulled pieces between your palms

Tutorial link shows how to make a necklace with woolen beads.

<http://www.nowimaginethis.blogspot.com/2010/01/texture-woolen-beads.html>

Fabric Sort Activity

The student will be able to correctly identify fabric types.

Sort fabrics into 3 categories:

Woven, Knit, Nonwoven

Have 10-12 Ziploc bags prepared with 6"x6" squares of woven, knit and nonwoven fabrics.

Give a group of 2-3 students a zip lock bag and have them sort the fabrics into the correct categories.

Have them check off their sorting when they are finished.

Questions:

Was it hard to sort the fabrics?

What were you looking for to classify woven/knit/nonwoven?

How will you use this knowledge to help you select fabrics in the future?