

## TEXTILES | MIDTERM REVIEW

### Some synthetic fibers are textured – why???

- may be done to produce bulkier yarns, used for warmth
- Opaque yarns, which provide better cover
- Yarns with elastometric qualities for use in sportswear and hosiery

### Synthetics:

Poor absorbency – positive and negatives?

- Positive: Fibers and yarns can be:
  - Usually dry quickly
  - Resist waterborne stains
  - Are dimensionally stable in water.

Negative: Fibers and yarns can be:

- More difficult to dye
- Fabrics are uncomfortable in warm, humid conditions
- Static cling – has low conductivity
- Increased pilling
- Are oleophilic – which means they have an affinity for oil. Tend to hold oilborne stains.
- Poor wicking (except for olefin)

Heat sensitivity – positive and negatives?

- Positive: Fibers and yarns can be:
  - Textured
  - Stabilized to reduce shrinkage
  - Fur-like fabrics can be made
  - Creases and pleats permanently set
  - Glazed or embossed permanently
- Negative: Excessive heat - shrinkage and holes
  - Undesirable glazing when pressing

- Fig 6.2 on p. 78
  - Special care during manufacturing
  - Special care during home and commercial cleaning
  - Altering garments may be difficult
  - Garment patterns may need to be adjusted

Fiber blends – why have them? What is good about them?

Why do we like white fibers?

You can blend fibers to have both characteristics of what ever materials compose the blend.

Name 4 things that should be on labels in the US.

### **Define**

**pill:** formation of little balls of loose fibers on the surface of the fabric.

**Elastometric:** natural or manufactured fibers that can be stretched repeatedly to at least 2 times their original length and then return approximately to their original length.

### **3 main fibers in the US**

- Cotton
- polyester
- nylon

## TEXTILES | FINAL REVIEW SHEET

### If you want a garment to:

“shape” to the body naturally choose a ( **Knit or Woven** ).

be highly tailored (suit jacket) use a ( **Knit or Woven** ).

### If you want the fabric to:

resist wind and rain use a ( **Knit or Woven** ).

be durable and wear resistant use a ( **Knit or Woven** ).

have “give” for movement use a ( **Knit or Woven** ).

with “loft” for insulation use a ( **Knit or Woven** ).

create a “fake fur” look use a ( **Knit or Woven** ).

with better air circulation in hot, humid weather use a ( **Knit or Woven** ).

be more wrinkle resistant choose a ( **Knit or Woven** ).

be a better choice for sharp pleats choose a ( **Knit or Woven** ).

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Colorfastness is the ability of a fabric to resist color loss from \_\_\_\_\_.

- A. sunlight
- B. cleaning
- C. environmental conditions
- D. all of the above

A **blotch print** is where the background color is printed instead of dyed.

**screen prints** often have the color order printed in a band on the selvage edge.

To get the best result when dyeing a fabric use a class of dye that has an **affinity** for the fiber.

Dye would be a better choice if you want to **cross dye**.

The horizontal rows in knitting are the **courses**

To make intricate warp knits with interesting surfaces or lace looks you need a **Raschel** machine.

The yarns running lengthwise in a fabric are the **warp**

Manufactured fibers are made from petrochemicals and will not absorb water so are **hydrophobic**.

The lengthwise edges of a woven fabric are the **selvage**.

Small repeating geometric shapes created with a special attachment result in a **dobby** weave.

To get a chevron pattern you would use a **broken twill**.

**Dye:**

- is water soluble and becomes part of the fiber.
- does not change the hand of the fabric.
- can be added to manufactured fibers before spinning to give locked in color.

**Pigment:**

- sits on the surface of the fiber using a binder as adhesive.
- Is more likely to rub off or crock.

Tell at what stage you would add color to get the desired effect. Choose from (solution), (fiber-stock), (yarn), (piece), (garment or product)

**Yarn:** to get a plaid fabric

**Solution:** to get a solid color on a manufactured fiber

**Piece:** to get a solid color on a natural fiber

**Stock:** to get a heather or tweed effect

**Product:** to take advantage of a fashion trend on a basic garment

**DYE**

Batik	Dye Type: <u>piece</u>
Brocade	Dye Type: <u>yarn</u>
Damask	Dye Type: <u>yarn</u>
Denim	Dye Type: <u>stock/yarn</u>
Gingham	Dye Type: <u>yarn</u>
Herringbone	Dye Type: <u>stock</u>
Madras	Dye Type: <u>yarn</u>
Tie-Dye	Dye Type: <u>piece</u>

**PRINT**

Calico  
Chintz  
Roller

**Fill in the blank with the correct term from the word bank.**

**roller printing**      engraved copper rollers are used for large runs of fabric

**Herringbone**      most commonly this fabric would be yarn dyed

**calico print**      the small fine details in this fabric are roller printed

**thermal transfer**      first printed on paper with disperse dye

**batik**      use layers of wax resist to build up a pattern

**flock print**      print with adhesive and use short fibers to get plush surface-all over or in a pattern

**union dye**                    2 dyes are used on 2 fibers to get one color in one dyebath

**burn out**                    printed with a caustic to destroy the cellulosic fibers  
in a blend fabric to create sheer areas

Fill in the blank with **True** or **False**

False Plain weave only has floats on the back.

True The term wale is used in knits and in wovens.

False Jacquards are available only in woven fabrics.

True A shuttleless loom will leave a fringe on the selvage of the fabric.

True A float does not interface with the next adjacent yarn.

True If a fabric has direction it needs to be cut with a one way layout.

True Non wovens may be entangled with needles.

False Novelty yarns are added to increase stretch in the fabric.

True Crepe weaves have a pebbled surface and are created with tightly  
twisted yarns.

False Pile weaves may have extra yarns only in the warp direction.

**BONUS POINTS/ Partial Credit given for partial answers**

1. Name 3 ways to print fabric:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

2. What does the term dyelot mean and why is it important? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

3. What does a leno weave do? \_\_\_\_\_

\_\_\_\_\_

4. What distinguishes a Chantilly lace? \_\_\_\_\_

\_\_\_\_\_

5. List four reasons you would add a finish to a fabric: