UNIT III:  CONSTRUCTION PREPARATION

TOPIC A:  PATTERNS, FABRICS, AND NOTIONS

OBJECTIVE: The student will be able to select the correct pattern type and size, an appropriate fabric, and the notions needed to complete a personal sewing project.

CONCEPT: Before one can begin a project, numerous decisions must be made in order to have a successful outcome. The correct type of fabric must be chosen for the pattern, appropriate notions and interfacing must be selected, and the fabric must be prepared properly. When the groundwork is thoroughly completed, the student is then ready to proceed on the project.

COMPETENCIES:

1. Determine personal pattern type and size.
2. Read a pattern envelope for guidelines in choosing appropriate fabrics for pattern design.
3. Identify the basic types of fibers and fabric construction (i.e., woven vs. knit, natural vs. synthetic, etc.) and some advantages and disadvantages of each.
4. Discuss the importance of using of interfacing and select appropriate types for various weights and types of fabrics.
6. List various types of sewing aids categorized as notions and their functions.
7. Select appropriate type(s) of sewing thread for fabric and purpose.
ACTIVITIES/OPTIONS

1. The Clever Consumer
2. Precision Fit
3. Pattern Envelope
4. Just a Thimbleful of Fabrics and Fibers
5. Fibers: Manufactured and Natural
6. One-Way Fabrics
7. Fabric Forethought
8. Interfacing: Invaluable and Invisible
9. One Thread Doesn’t Fit All
10. Notable Notions

SUPPLIES NEEDED

1. Copies of student activity guide (I-III-11)
2. Copies of student activity guides (I-III-14 and I-III-15)
   Measuring tapes
3. Copies of student activity guide (I-III-16)
   Overhead transparency (I-III-18)
4. Overhead transparencies (I-III-19 through I-III-21)
5. Video
   Video player
   Copies of student activity guide (I-III-22 and I-III-23)
6. Copies of student activity guide (I-III-26)
7. Samples of fabrics/garments where fabric preparation was neglected
   Samples of on-grain and off-grain fabrics
   Copies of student activity guide (I-III-28)
   Overhead transparency (I-III-30)
8. Copies of student activity guide (I-III-38)
   Interfacing samples with labels
   Numbered fabric samples
   Optional: Copies of teacher background information (I-III-31 to I-III-37)
   Overhead transparencies (I-III-40 and I-III-41)
   Copies of student activity guides (I-III-52 through I-III-54)
   Spools of a wide variety of threads
   Product/project samples of a wide variety of threads
10. Samples of different kinds of sewing notions
ACTIVITIES/OPTIONS

Option 1: The Clever Consumer
Direct the students through a discussion and brainstorming session on consumerism techniques related to clothing construction, purchasing fabric and notions, etc. As the discussion progresses, have students complete the student activity guide, THE CLEVER CONSUMER.

Note: The use of this activity can assist in precluding potential problems that might surface with fee waivers or other similar circumstances.

Option 2: Precision Fit
Have the students work with a friend and measure each other to determine each one’s correct pattern size. The students can record their information on the student activity guide, PRECISION FIT—FEMALE/MALE. Some teacher background information is provided for general use.


Option 3: Pattern Envelope
Give each student a copy of the student activity guide, PATTERN PATTERN. Using the overhead transparency provided, go through the various types of information that can be found on a pattern envelope, section by section. (Block out all of the areas except the one being covered with some heavy pieces of paper.) Have the students follow along on their copy as you proceed. Upon completion, have the students answer the questions on their student activity guide.


Option 4: Just A Thimbleful of Fabrics and Fibers
The teacher will need to provide a brief introduction to the basics of textiles.
The major points to be covered are:
• The major methods of fabric construction: woven, knit, non-woven
• The major groups of fibers: natural, synthetic
Some overhead transparency patterns have been provided for use as this material is presented. Have samples of fibers and fabrics available for the students to explore. Then have the students analyze the pieces of clothing they are wearing for fiber content and construction method.


I-III-3
ACTIVITIES/OPTIONS

Option 5: Fibers: Manufactured and Natural
Show the video, FIBERS: MANUFACTURED AND NATURAL, from Meridian Education Corporation. A corresponding student activity guide is provided in the resource section.

Option 6: One-Way Fabrics
Have the students complete the crossword puzzle, ONE-WAY FABRICS.

Option 7: Fabric Forethought
Explain the importance of fabric preparation before placing the pattern on the fabric and cutting. Some things to include would be:

- Preshrinking: It is necessary to preshrink all fabric. The fabric should be pre laundered or dry cleaned the same way and at the same temperatures the garment will be cared for upon completion.

- Straightening the grainlines: The grainlines, up/down and across, should be at true right angles to each other. When this does not occur, the garment does not hang correctly and/or fit comfortably.

- Plaids/patterns: To eliminate shifting during cutting and to facilitate plaid/pattern matching, the plaid or pattern of the top fold should be pinned to the matching plaid or pattern of the bottom fold.

- Napped fabrics: Care must be taken that the pattern pieces are all laid in the same direction on any type of napped fabric. Many fabrics have an obscure nap or direction, and it is best to lay all pattern pieces the same direction whenever possible.

A student activity guide, FABRIC FORETHOUGHT, is provided to acquaint the students with basic fabric terms and fabric preparation procedures. A diagram that identifies the parts of fabric is included for an overhead transparency or a bulletin board to support the introduction of fabric terminology.

ACTIVITIES/OPTIONS

Option 8: Interfacing: Invaluable and Invisible
Give each student a copy of the student activity guide, INTERFACING: INVALUABLE AND INVISIBLE. Using the teacher background information provided, present to the students the reasons for using interfacing as well as the sections of a garment where it is commonly used. Using samples of various types of interfacing, discuss the main types of interfacing and their uses. Then place the samples on a table for the students to inspect, with each labeled as to type, etc. Also, place a number of fabric samples on the table, with each one numbered. Then have the students complete the student activity guide, matching the correct interfacing to each fabric sample. It may be helpful to make several copies of the teacher background information to have available for student reference. When the students have completed their guides, go through the correct selections with them, explaining why each selection is appropriate for that fabric.


Option 9: One Thread Doesn't Fit All
Introduce some basic concepts about choosing and using thread to the class, using the bulletin board, THREAD TAILS AND TALES. Then break the class into three groups—General Sewing, Decorative, and Specialty. Give each group copies of the corresponding student activity guide, ONE THREAD DOESN'T FIT ALL, and a spool of thread for each type in each group's category (if possible), along with fabric or product samples of correct use. See if the students can match the types to the descriptions, and the spools and/or samples. When the groups have completed their activity guides, check to see that each group has done its work accurately. (The descriptions on the student activity guides are in the same order as in the teacher background information. Therefore, these can be used as the teacher keys.) Then have someone from each group explain the correct use(s) for each type to the rest of the class.

Option 10: Notable Notions
Prepare a large board with samples of as many kinds of notions as possible. Label each notion on the board. Explain that notions are items that become integral parts of the garment vs. equipment used to construct the garment. Go over the notions with the students, describing purposes, uses, etc. Refer to the back of the pattern envelope where the notions are listed.

Some notions that might be included are:
- Seam tape
- Buttons
- Ric-rac
- Piping
- Bias tape
- Zippers
- Twill tape
- Thread
- Lace
- Trim
- Snaps, hooks, and eyes
ACTIVITIES/OPTIONS

RESOURCES

Textbook/Construction Guide


Video

Fibers: Manufactured and Natural, Meridian Education Corporation, Dept. H-92, 236 E. Front Street, Bloomington, IL 61701. 1-800-727-5507. Catalog No. 2110.
ASSESSMENT/EVALUATION QUESTIONS

1. Determine personal pattern size.

1. When making a top or jacket, you should pick the pattern by which measurement?
   Answer = bust/chest/shoulders

2. If a person is going to make shorts, he/she would choose a pattern that corresponds to his/her __________ measurement.
   Answer = hip

3. When taking measurement for a man's sleeve length remember to _____ the elbow.
   Answer = bend

4. If your measurements fall between two sizes, which one do you choose and what influences this answer?
   Answer = Take the smaller size if your are small boned and want a snug fit; the larger size if you prefer a loose fit.

5. Where can you find the charts in this classroom to compare your measurements?
   Answer = Answers will vary according to classroom

6. When selecting a pattern and deciding about the size to buy, one should:
   A.* Buy the pattern size nearest your horizontal measurements
   B. Buy the pattern size nearest your vertical measurements

7. Oversized hips may require purchasing a pattern larger than needed for the waist.
   A.* True
   B. False

8. When measuring the chest, the tape should be:
   A. Slanted down in the back about 1 1/2 inches
   B.* Parallel to the floor all the way around
   C. Placed about 1 inch above the fullest part of the bust

9. Full length sleeves should stop:
   A. Below the wrist bone
   B. Above the wrist bone
   C.* At the wrist bone
ASSESSMENT/EVALUATION QUESTIONS

10. Measuring the body circumference 7 to 10 inches below the waist gives the:
   A.* Full hip measurement
   B. High hip measurement
   C. Waist measurement
   D. Pant length

11. Measuring from the prominent bone at the neck down the center back to the string at the waistline gives the:
   A.* Back neck to waist measurement
   B. Bust measurement
   C. Chest measurement
   D. Waist measurement

12. To check to see if a pattern fits well:
   A.* Pin the pattern together along the stitching line
   B. Pin the pattern together along the cutting line
   C. Pin the pattern together along the cutting line without pinning out the darts

2. Read a pattern envelope for guidelines in choosing appropriate fabrics for pattern design.

1. If you are using a broadcloth fabric and the pattern key indicates "without nap," you should:
   A. Allow for extra yardage
   B. Place the pattern pieces in the same direction
   C. Plan for special cutting layouts
   D.* Not plan for extra yardage

2. In determining the amounts of fabric yardage required, one should use the "with nap" pattern key for:
   A. Broadcloth, suiting, and chambray
   B. Gabardine, denim, and serge
   C. Gingham, poplin, and kettlecloth
   D.* Velvet, velveteen, and corduroy

3. If the pattern envelope suggests soft, draping fabrics, but you prefer something with more body, the garment will probably look okay if you change types of fabric.
   A. True
   B.* False
3. Identify the basic types of fibers and fabric construction (i.e., woven vs. knit, natural vs. synthetic, etc.) and the advantages and disadvantages of each.

1. When fibers are matted together and set with heat to make fabric, this is known as:
   A. Knitting
   B.* Felting
   C. Weaving

2. When yarns are fashioned by needles into a series of interlocking loops to make a fabric, it is called:
   A.* Knitting
   B. Felting
   C. Weaving

3. When two or more yarns are interlaced at right angles to make fabric, this is called:
   A. Knitting
   B. Felting
   C.* Weaving

4. Woven fabrics consist of warp yarns and filling yarns.
   A.* True
   B. False

5. Felt is an example of a:
   A. Woven fabric
   B. Knit fabric
   C. Bonded fabric
   D.* Non-woven fabric

6. Examples of natural fibers are:
   A.* Cotton, linen, and wool
   B. Nylon, polyester, and acrylic
   C. Felting, non-woven, knitting, and weaving
   D. All of the above

7. Examples of synthetic fibers are:
   A. Cotton, linen, and wool
   B.* Nylon, polyester, and acrylic
   C. Felting, knitting, and weaving
   D. All of the above
ASSESSMENT/EVALUATION QUESTIONS

8. Natural fibers:
   A. Come from plants and animals
   B. Are absorbent
   C. Are not man-made
   D.* All of the above

9. The characteristics of cotton fibers make it the most suitable for:
   A. Women's tailored suits
   B. Upholstery fabrics
   C.* Children's sunsuits
   D. Formal wear

4. Discuss the importance of using interfacing and select appropriate types for various weights and types of fabrics.

1. The three most widely used types of interfacing are:
   A. Canvas, hair-canvas, and non-woven
   B. Woven, non-woven, and all-bias non-woven
   C.* Woven, non-woven, and fusible

2. Interfacings serve many purposes in a garment such as:
   A.* Adding body, reinforcement, shape retention, and design emphasis
   B. Finishing and reinforcing edges of the garment
   C. Adding to the garment's life expectancy, creating fashion effects

3. A woven or non-woven material used inside certain garment parts for reinforcement is called:
   A. Facing
   B. Lining
   C.* Interfacing


1. Off-grain fabrics:
   A. Require extra consideration during pattern layout and cutting
   B. Can cause the garment to hang and fit funny on the body
   C. Are easy to work with and can be cut as usual
   D.* Both A and B answers are correct
ASSESSMENT/EVALUATION QUESTIONS

2. To make a fabric grain perfect, one should:
   A. Pull the fabric on the diagonal
   B. Pull one or two crosswise threads
   C. Cut along a prominent thread
   D.* Both A and B answers are correct

6. List various types of sewing aids categorized as *notions*.
   1. The notions needed for a project are listed on:
      A. Inside the pattern on the pattern pieces
      B. In the pattern book
      C.* The back of the pattern envelope
      D. All of the above
   2. Five (5) examples of notions are:
      - zipper  - thread  - buttons  - lace
      - bias tape  - trim  - etc.

7. Select appropriate type(s) of sewing thread for fabric and purpose.
   1. Mercerized cotton thread should be used when sewing:
      A. Knit fabrics
      B.* Cotton fabric
      C. Synthetic fabrics
   2. Polyester or cotton/polyester blend thread is recommended for use with:
      A. Cottons
      B. Linens
      C.* Synthetics
   3. Buttonhole twist can be used to sew seams and make them extra strong.
      A. True
      B.* False
   4. Silk thread should be used on very lightweight and delicate fabrics.
      A.* True
      B. False
   5. Quilting thread can be used to sew seams and make them extra strong.
      A. True
      B.* False