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# PATTERNED FABRIC KNOW-HOW (Plaids, Stripes, Checks and Figured Designs) 

Extension Clothing Specialists<br>The Texas A\&M University System

Patterned fabrics provide an interesting dimension to anyone's wardrobe. In a garment or as an accent, patterned fabrics are colorful and exciting. They require more care in cutting and are a challenge to sew because of matching and creative design possibilities. However, the results can be well worth the effort.

## Design Principles and Patterned Fabrics

When selecting patterned fabrics for your wardrobe, choose colors and designs that are becoming and best express your personality.

When large-figured fabrics are used for the major part of the garment, choose a fabric design that is in proportion to your figure type and to the size of the garment. For example, tall figures can usually wear large prints and patterns more successfully than short figures.

For most figure types, large-patterned fabrics may be used effectively as accents in accessories such as scarves, linings or vests.

Vertical stripes generally give the feeling of added height; whereas horizontal stripes may give the illusion of added width. Diagonal stripes may be flattering to any figure type, depending on the degree of slant.

For more information on principles of design relating to line, refer to B-1441, Create the Look You Like-With Line, (Texas Agricultural Extension Service). For information on textures, refer to B-1326, Create the Look You Like-With Texture, (Texaas Agricultural Extension Service).


Using a patterned fabric as an accessory may make the figure appear smaller.

Garments or garment details with bias designs form a point of emphasis and often draw attention to that area. Bias plaids generally give the feeling of added width; however, a bias or diagonal stripe can add width or height depending on the width of the stripe. You may want to consider carefully its effect and placement before using the bias.

Combined with solid colors on a shirt, a bias design on a front band and pockets or yokes provides interesting accent details and eliminates matching.

When many parts of an ensemble have bias designs the effect is often unsettling and the fabric design is lost in the confusion.

A common bias look is the chevron. Chevrons are stripes or prominent lines in plaids that form angles at seamlines. Garment pieces may be cut on the bias to form chevrons. Chevrons on a four-gored skirt pointing down in the front and back give the feeling of added width to the hipline. For most figure types, chevrons that point up at center front and back are more slenderizing.

## Pattern Selection

Because plaids, stripes and large designs should be matched at the seams and closures, it is best to choose a garment pattern that will enhance the fabric. For the best results, choose a simple pattern with few seamlines to minimize matching. The pattern envelope may indicate whether or not the style is suitable for plaids or stripes.

To minimize frustrations with matching, avoid patterns with:

Curved seams, such as circular yokes and slightly flared skirts.

- A-line skirts, because the plaid or horizontal stripe may appear to droop at the seam, causing an unpleasant appearance.
Many gores. Unless the angles of the skirt seams are the same at each seam it will be impossible to match.
Areas of certain patterns are impossible to match, such as:

Seam lines above the bustline dart or princess line curves above the bust.
Raglan sleeves and kimono sleeves will not match. However, you can match at the notch.
Circular yokes.
French darts.
Bias seams on an uneven plaid.
Backs of set-in sleeves. Match the front of the sleeve at the armhole.

Some fabric designs are impossible to match. True Indian Madras is handwoven and often cannot be matched. Uneven plaids cannot be matched at shoulder seams and yokes. Fabrics with uneven diagonal stripes cannot be matched.

## Fabric Construction

The design of a patterned fabric may be woven into the fabric or printed on one side.

When woven, the design is formed by the yarns running lengthwise and crosswise. The yarns may be different colors or the same color but different sizes. Or, they may be woven in a decorative design to form the effect, such as piqué, jacquard and wide wale corduroy.

Woven plaids, stripes and checks always follow the grain, and the design can be seen on both sides of the fabric. The grainline is easy to determine because it follows a distinct line.

When printed on woven or knitted fabric, the design is prevalent on one side. A design may or may not be printed on the fabric straight of grain. When purchasing patterned fabric, check to see if the design runs true with the fabric grain and if the motifs are aligned. If the design is on grain the motifs may be matched. Do not purchase fabric that is noticeably printed off grain, because the design cannot be matched. Fabric printed slightly off grain may be used. For matching purposes, use the design lines instead of the fabric grainline when placing the pattern. A garment slightly off grain will not be as noticeable as an unmatched design.


On grain woven


## Selecting and Preparing Fabric

## Kinds of Plaids and Stripes

Plaids and stripes are classified as even or uneven. Even plaids and stripes have the same colors and designs on either side of a prominent line. This is true in both crosswise and lengthwise directions.

Uneven plaids and stripes are not alike on both sides of a prominent line. To see if a plaid is even or uneven, fold a corner of the fabric diagonally across the center of a design. If the lines and spaces match in both directions, it is even. If they do not match, it is uneven.

Generally, it is easier to work with even plaid than uneven plaid. Uneven plaids are easier to match when cut on the straight of grain rather than the bias.


Even plaid


Uneven plaid

On a striped fabric, fold a corner of the fabric on the true bias to determine if it is even or uneven. If the lines match where folded (same width and color), it is even. If they are not the same, it is uneven.


Even stripe


Uneven stripe
Prints
A plaid has lines and spaces running at right angles to each other and repeating in a sequence. Stripes run crosswise or lengthwise on the fabric and repeat at intervals. When patterned fabric has one design that does not repeat, it is called an engineered print.

Checks are colored squares alternating with white or other colors. The squares may be pointed as in houndstooth. Plaids are usually larger than checks and require more matching.

Carefully study large printed fabrics to see if the motif has a definite up or down. For example, do the flower stems point in one direction? If so, use the "with nap" pattern lay out. Place the pattern so the bottom of the design points toward the hem.


Pattern layout requires careful planning when using one-way patterned fabric.

## Other Patterned Fabrics

Border Prints. Border print fabrics have a design printed or woven into the fabric along one or both selvage edges. Study the border to see how it might be used. Fashion illustrations of border prints will provide some ideas. Prepare the fabric with a crosswise fold so the border design matches from side to side. The edge of the pattern to be cut along the border must be a straight edge. To make a border fall at the hemline, place the pattern on the fabric so the hemline fold follows the bottom of the border print. Match the pattern notches at the same place on the border design.


Border prints may be used in a variety of ways to create garment interest.

Scarf Prints. Scarf prints provide a unique addition to a fun wardrobe. The scarf look is comprised of scarf patterns with borders continuously printed side by side within the width of the fabric. These may be large scarf prints or small handkerchief designs. Loose and flowing garment designs use scarf prints to their best advantage.

Guidelines to follow in working with large scarf designs include:

1. Determine the scarf motif. Is it a perfect square; is it slightly rectangular; is it bias?
2. Determine the type of garment you want to make. For a pointed hem, the scarf pattern must be square. It may be printed on grain or on the bias.
3. Select a pattern that has a minimum of seams to avoid cutting up the scarf motif.


Scarf prints can be fun accents to a wardrobe.
Engineered Prints. Engineered designs require planning, and look like a picture from one side to the other. When finished, the design may cover the front only, or it may extend around to the back in one design. It does not have a repeat. The rest of the garment is usually plain. Kits for T-shirts and sweaters in engineered prints are available to homesewers.


Engineered prints create a design around the body or on only one part of the garment.

## Combining Patterned Fabrics

Various solids, plaids, stripes, checks or prints may be combined in an ensemble for a pleasing coordinated effect. To coordinate patterned fabrics, choose those with similar colors, textures and designs, or variations of the same design.

When combining two different fabrics:

1. Use the same predominant color in different prints.
2. Use fabrics with the same design but with different background colors.
3. Use a patterned fabric that is greatly subordinated by a second fabric with a more pronounced design.


Solid and patterned fabrics can be combined for pleasing effects.

Companion fabrics often are shown together in the store. Coordination of different fabric designs in an ensemble requires skillful selection if a harmonious effect is to be achieved. Before purchasing, hold the fabrics together and consider the total look or effect your ensemble will have.

## Amount of Fabric Needed

Extra fabric is required for matching plaids, horizontal stripes and large patterned fabrics. If the pattern is suitable for plaids, the envelope generally states "additional fabric is needed for matching plaids." To determine the extra amount of fabric needed, count the number of major pattern pieces (for example, bodice front, bodice back and sleeves). Multiply this number by the size of the repeat in the fabric design. For example, a blouse with three major pattern pieces made from a fabric with a 4 -inch ( 10 cm ) design repeat would require an additional $1 / 3$ yard, or 30.5 cm . This eliminates guessing and unnecessary fabric waste.

## Fabric Preparation

Preshrink all fabrics before starting to sew. Make all fitting alterations on the pattern before cutting the fabric. Altering later may destroy the match.

On woven fabrics, check for straight grain by pulling a crosswise thread and cutting along this line when folded lengthwise. Straighten the fabric by pulling the entire length of the fabric from the short ends.


Woven fabric should be straightened before you start to sew.

Off grain durable press fabrics and knits cannot be straightened, because when relaxed the grain goes back to its original position.

## Pattern Placement

## For Pleasing Effect

For a pleasing appearance, match the pattern going around the body as well as up and down. Match from garment to garment, such as bodice to skirt, and pockets, yokes and pieces within the garment. Match along the stitching line at:
all seams - front, back, side and shoulders
yokes
center back of collar to garment
facings
jacket to skirt
pocket to garment
sleeve cap front to armhole (back will not usually match)


Lay pattern pieces on the fabric one at a time, matching as you go, so that the seams will be matched from side to side and top to bottom.

Remember, in some cases, matching at all seams may be impossible.

To best utilize the patterned fabric, place the dominant part of the design so it will fall at a pleasing part of the body. Plan the effect you want to achieve before you start. You may find it helpful to experiment with the fabric by holding it up to you or folding it into seams to see the effect.

When placing the pattern on the fabric, consider the following:

The center of a large motif or plaid is generally more pleasing when placed down the center front and back.
Place a vertical stripe down the center front or back.
The use of a dominant horizontal line across the shoulder line or bustline and hipline gives a feeling of added width.
Try to match pockets, collars and yokes to the major pattern piece they fasten to. Consider using the bias for pockets, collar and yoke when matching is not possible.
A chevron effect is flattering and a novelty to sew.


Chevron an uneven stripe for a flattering look.

## For Matching

Fabrics with even plaids and stripes may be folded lengthwise or crosswise for cutting. Follow the recommended pattern layout for the pattern you are using. Pin the selvages and the cut edges together matching lines, spaces or patterns lengthwise and crosswise as you go. Place additional pins throughout the center of the fabric, matching lines and spaces on both sides.

When using an even plaid, use the regular pattern layout and adjust the pattern pieces enough to match the design at the seamlines.

Begin by placing on the fabric the largest piece that goes on the fold. Match the notches at the seamline on the connecting pattern piece at the same color lines in both horizontal and vertical directions. Then match the third pattern piece to the second and so on.

When using an uneven plaid, uneven horizontal stripe or chevron design, lay the pattern on a single thickness of fabric. Use the "with nap" pattern layout so the pattern pieces will lie in the same direction. When cutting the pattern piece the second time, remember to turn the pattern piece over so you will not have two just alike.

Remember to match facings to the garment pieces to which they connect.

For perfect matching, draw lines on the pattern piece that correspond to the fabric design lines.

Lay the connecting pattern piece on top of the first, matching the seam notches. Trace the lines on the second piece. Lay the pattern on the fabric, matching lines with fabric design lines.

Before cutting, double-check all points of matching in the order the pattern was laid out.


Pattern pieces must be positioned carefully to create a chevron design.


For perfect matching, mark the corresponding lines on connecting pattern pieces before laying the pattern on the fabric.

## Assembling the Garment

For perfect matching the first time when sewing the pieces together, slip pin, slip baste or use two-way stick tape. To slip baste, turn one side of the seam down along the seam allowance. Pin it along the seamline of the connecting piece to make lines match. Baste from the top by hand by catching a few threads through the fold and stitching through the wrong side of the seam. After basting, open the fabric and stitch the seam as usual. Press seams open.


Slip pin or slip baste seams together for a perfect match before machine stitching.

To use two-way tape when matching, place a piece of tape on one side of the garment inside the seamline. Turn under the seam allowance on the connecting piece and press it against the tape, matching the fabric designs. Keep the seam edges together. Lay the seams flat and sew the seam allowance. Remove the tape before pressing.


Two-way tape is handy for matching seams before stitching.

## Fabric Care

Patterned fabrics may require special care because of the many dyes used to create the designs. Generally it is safe to wash colored fabrics in lukewarm water with a mild detergent on a gentle cycle. For best results, follow the recommended care instructions on the bolt end or label.

Crocking (color rubbing off under friction) and color bleeding are more common with print fabrics. The dyes often stabilize after the first washing, but the garment should be washed alone the first time.

Imported patterned fabrics may need special attention when laundered, because the dyes may not be resin-treated and may fade after repeated washing. It may be necessary to hand launder them separately.

When working with patterned fabrics, if the preliminary steps of planning the design, preparing the pattern and fabric, making the pattern layout and cutting are followed, then the final steps of sewing together and fitting should be relatively easy. The result will be a beautifully constructed garment.

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