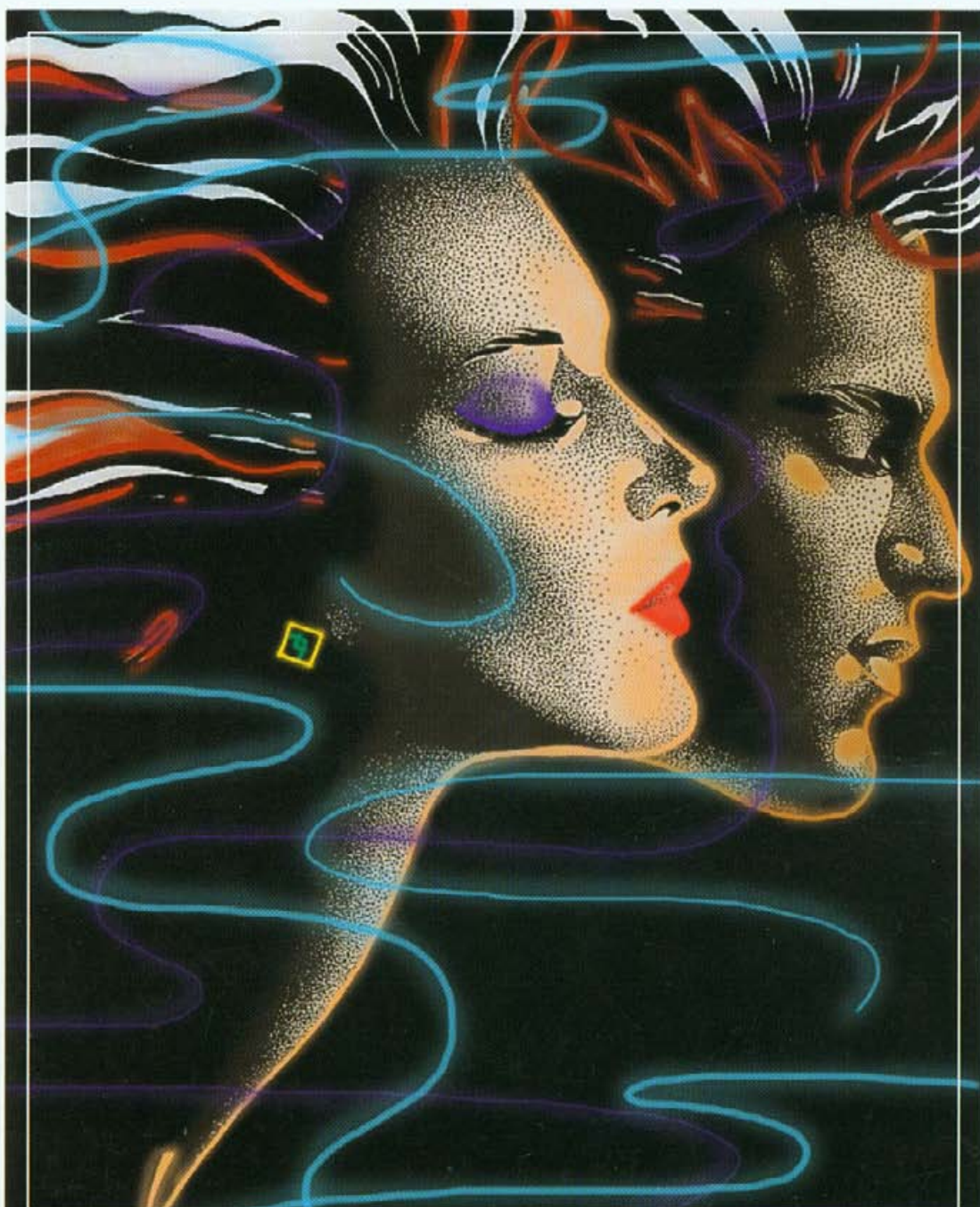




INTERMEDIATE

Purdue University Cooperative Extension Service, West Lafayette, IN 47907

CONSUMER CLOTHING



Intermediate Consumer Clothing

We all invest a lot of time and money in clothing. The Consumer Clothing manuals will help you make wise clothing decisions. This manual is for 4-H'ers ages 13 to 15. You can use it for one to three years.

What you'll learn

- * to identify how clothes help shape your identity
- * to recognize becoming styles for you
- * to recognize quality clothing
- * to learn color terminology
- * to help with the family laundry
- * to gain information about various cosmetics

Exhibit Requirements

* Complete one activity from each group in the manual. Write your results or answers in a notebook. Label each activity. This will help you talk to the judge easily.

* Purchase and accessorize a casual or school outfit. You may purchase accessories or select from items you already own.

* Model your outfit. Tell the judge about your purchases, what you learned, and about the activities you completed. Take your manual and notebook with you because they will help you talk with the judge.

Activities

Complete one activity in each group. Describe your results or findings. If you take Intermediate Consumer Clothing again, you can complete different activities.

Notebook

Find a notebook or scrapbook for describing your activities and answers. Begin this notebook with a title page, include your name, county, project, division or year, and age. Put the activity group number and letter on a separate page with your answers.

The last section of the notebook should tell about the outfit you're modeling. You could also explain how you decided what you needed, why you chose specific items, whether it goes with other things in your closet, and how you feel about your outfit.



Lois Gotwals, Extension Specialist --
Clothing;

Lois Maddox, Extension Specialist --
4-H and Youth

Clothing choices

Your clothing identifies you as a member of a group. Policemen wear uniforms, so they can be easily identified. And workers at most fast food restaurants wear clothing that identifies them as employees.

Your clothing labels you as a member of your school and age group. You might dress a little differently from friends, but generally your clothing is similar.



It's probably important to you to dress like your friends. Those feelings are normal. At any age, people want to be accepted and have a circle of friends.

Generally, people who dress similarly approve of each other and are critical of people who dress differently. The wider the variation in dress, the harsher the criticism. So wearing the "right" clothing during the teenage years may help you be accepted as a part of a group.

Sometimes dressing like your friends costs a lot. So you may need to compromise with your parents about the clothing you buy. Understand why you want each item. Rank them in terms of importance. Then, you'll have an easier time discussing clothing purchases with your parents. Your friends might decide that it's "in" to buy a certain brand of clothing. But this particular brand

may be more expensive than others. Sometimes the fabric is not as good, or the garment is not as well made as the lower priced items.

Why do you want to buy a particular brand? Does it fit better than other brands? Is the quality as good? Is it as easy or easier to care for? Could you buy two items of good value for the cost of one with this particular brand name? How important is it for you to wear the same brand as your friends? Before buying a particular brand, think through your reasons, and make an intelligent decision.

Line

Line is one of the most powerful design elements both in pictures and clothing. Line indicates shape and movement, expresses feelings, and creates optical illusions. Line also can attract interest, command attention, and completely fool the eye.

There are three types of line. **Vertical lines** give impressions of grandeur and stateliness. They give the illusion of added height. **Horizontal lines** suggest serenity and gentleness. They also give the illusion of greater width. **Diagonal lines** can portray great movement and activity. The more vertical the diagonal lines, the more they give the illusion of height. But the more horizontal they become, the more they suggest breadth.

Why do you want to buy a particular brand? Does it fit better than other brands? Is the quality as good? Is it as easy or easier to care for?



Broken lines also direct the eye. But they are less noticeable than solid lines. Patch and welt pockets usually create horizontal lines across a garment. You probably won't notice the lines created by pockets if the fabric matches. But this line stands out when pockets are made of contrasting fabric. Notice how details within similar garments appear on the same body type.



Apparel details influence the effect of line. Line silhouettes the figure and defines garments. The more vertical the silhouette, the more slender the body appears—if the garments fit properly. Horizontal lines shorten the body and add width. Notice how diagonal lines direct the

eye, depending on the slope of the diagonal. Slightly flared skirts generally do not add width. But very full skirts do.

Study the pictures. Notice how different garments make the same body look fuller or taller. Look at a skirt and jacket in two colors and in one color. Note how the color change makes the horizontal line stand out, and the body appears broader at that point.

A garment's seam and details also create lines. Single rows of buttons down the front of garments create a vertical line. So does a center front seam. Narrow panels down the front of a garment or



an unbuttoned jacket also create vertical lines. Wide panels may create the opposite illusion. The wider the panel, the broader the space appears. And an illusion of added width is created. The eye travels from line to line as well as in the direction of the line. Two vertical lines close together are more slenderizing than two placed further apart.

Using lines can accent a certain area or detract from others. For example, a dominant horizontal line at the bustline adds emphasis and width in that area. This line would be flattering to a figure with a slender bustline and heavy hips. A vertical line placed to one side of the figure adds height and slenderizes. Placing the line off to the side is usually more interesting than placing it in the center. Side placement often disguises figure faults. Gently curved lines usually convey softness, romance, and grace. When gently curved in a horizontal or vertical direction, they have the same effects as horizontal or vertical lines. Sharply curved lines, on the other hand, add extra fullness and weight to the figure.

Combining lines creates varied effects. Depending on the dominant line, combining vertical and horizontal lines often adds height or width. Examples include plaid fabrics and belted dresses with center front closings. Princess lines combine gentle curves and vertical lines. They are usually flattering, add height, and slim the hipline. Depending upon the fit and curve, the princess line may slenderize the waistline or widen the bustline.



Activity Group 1

Choose one of these activities. Tell what you did, and put the results or findings in your notebook.

A. Observe what your friends wear to school. In your notebook, describe how the outfits differ?

B. Discuss clothing with an adult. Ask them to tell you about the clothing they wore as teenagers. Did they ever feel as you do about their clothing or the way they looked? Summarize this conversation and put it in your notebook.

C. With a friend or parent, page through a magazine. Discuss how different garments look. Would the garment look good on you? How does your body type compare with the one in the photograph? You may want to mount some of the pictures of garments that will look good on you in your notebook. Be prepared to tell the judge why these items will make you look attractive.

Color

Color is a part of everything we do—the clothes we wear, the items in our room, and the food we eat. Color has its own language.

Hue is the color name—red, blue, or yellow-green.

Value is the lightness or darkness of a color. A value scale begins with white and ends with



White
High Light
Light
Low Light
Middle
High Dark
Dark
Low Dark
Black

black. When a color is lighter than the brightest hue possible, it is called a **tint** of that hue. You can make tints by adding white to a hue. Pink is a tint of red. A color that appears darker than the brightest hue possible is a **shade** of that color. You make shades by adding black to colors. Brown is a shade of orange.

Intensity is the brightness or dullness of a color. Full intensity is

the brightest color possible. Low-intensity colors are often called dull, soft, or grayed. They also may look muddy or dirty. To make a color less intense, add either gray or the color's own complement. A **complement** is the color opposite it on the color wheel. (See figure on back cover.)

Colors also are either **warm** or **cool**. Warm colors are red, orange, and yellow. Cool colors are blue, green, and purple. Warm colors remind us of heat and fire. They are stimulating and exciting. Cool colors

remind us of shadows, water, and trees. They are calm and quiet.

You might wear intense colors together in equal amounts. But sometimes it's more interesting to combine bright and soft colors. Combinations of bright and soft colors are



more pleasing when they are combined in unequal amounts. Accent a large area of soft or dull color with a small area of bright color.

For example, combine medium blue with a small amount of red. Equal areas of bright and dull intensity usually aren't pleasing.

To create a focal point or catch the eye with color, use one splash of color. You can draw attention to a particular area of your body with a focal point. For example, wear a bright scarf to draw attention to your face. Let the rest of your clothing serve as a background. Discord results if your outfit has too many centers of interest or focal points. A gray dress with a red hankie in the pocket, red shoes, and a red flower makes the viewer's eye jump from one area to another. The outfit looks spotty. A more pleasing look would be to have only a red flower or a hankie in the pocket, not both.

Color can emphasize the most attractive areas of our body. A focal point near an attractive area, makes it more outstanding. The viewer doesn't see the problem spots or figure flaws. A bright belt or sash calls attention to a slim waistline. A scarf or necktie in a flattering color calls attention away from a heavy hipline.

Activity Group 2

Choose one of these activities. Tell what you did, and put the results or findings in your notebook.



A. Use watercolors or poster paints to make a value scale (see figure on previous page). Start with white. Add a bit of black to make a light gray. Then, add another bit of black to create a darker gray. Continue adding more black until the swatch is completely black. Label and mount the value scale in your notebook. Use your favorite color to make a second value scale. Start with white and add a bit of the color. Add more and more color until the hue is as intense as possible. Then, start adding black to the color. Continue until the swatch is completely black. Label and mount the value scale in your notebook.

B. Try on two to three outfits with movable accessories, such as jewelry or a scarf. Look in a mirror. Squint until little more than the focal point is visible. Move the focal point around on your body. Notice how it makes body proportions change in appearance. Describe this activity and the results in your notebook.

Color Inventory Chart

Garment	Color	Goes well with	Items needed to expand wardrobe
exercise pants	navy	red T-shirt white shirt	yellow sweat top

C. Make a "Color Inventory Chart" (see above figure). Choose one garment that goes with many items in your wardrobe and one that does not. You may wish to make a similar chart using other garments.

Grooming Products

Many grooming products are on the market. Advertisers spend millions of dollars to convince you that a product will enhance your looks. Teenagers make many of these purchases. Now is a good time for you to learn about the products and to become a wise consumer.

Shampoos

Personal preference accounts for most of the differences among personal care products, including shampoos. It is important to remember that all shampoos have three basic ingredients.

Principle surfactants are the detergents that create foam and clean hair. Manufacturers alter surfactants to make shampoos for dry, normal, or oily hair.

Modifying additives are secondary surfactants that increase the effectiveness of the principle surfactants. They improve the condition of washed hair and affect how the shampoo looks.

Additional additives include perfume, colors, water softeners, thickeners, and preservatives. Consumers often base their choices on these subjective factors. These additional additives usually help to sell a simple detergent.

Hair conditioners

When you shampoo your hair, the cuticle—scales forming the outer layer of the hair—becomes ruffled. When the cuticle is ruffled, hair tangles more easily and may look dull. Shampoo also removes the oil from hair. With-

out this coating, hair can become dry and hard to manage. Conditioners reduce the roughness of the cuticle, so hair combs easily, looks shiny, and feels soft. They also coat each hair, which counteracts static electricity and makes hair more manageable.

Conditioners contain an oil or synthetic resin that mimics the lubricating effect of sebum. Sebum is an oil released by glands in the scalp. Most conditioners contain humectants that draw moisture from the atmosphere to make hair feel softer. Quaternary ammonium compounds (quats) bond the conditioner to strands of hair. Quats carry

a slight positive electric charge to counteract static electricity. Emulsifiers keep the oil and water components properly mixed. Conditioners also have thickeners, opacifiers, antioxidants, preservatives, coloring, and perfume.

Hand Lotion

Hand lotions are used to prevent or relieve dryness and protect the skin. Dryness relates to the water content of the skin. Adding oily materials to the skin can help this condition. Hand lotion generally has two phases—oil and water. The oil phase contains a variety of organic substances that are insoluble in water. These organic compounds include fatty acids, glycols, long-chain alcohols, and natural oils.



The greatest proportion of a hand lotion consists of water-soluble ingredients. They may include chemicals such as glycerine and triethanolamine. An emulsifying agent serves as a bridge between oil droplets and the water. This agent prevents the oil and water

phases of the lotion from separating. In addition to oil and water ingredients, most commercial lotions contain an antibacterial agent, preservative, fragrance, and color.

Toothpaste

Toothpaste is the most widely used cosmetic product. More people use soap, but soap is considered a body necessity and not a cosmetic. Toothpaste is actually a soap

with grit and flavoring. Some of the abrasives (grit) used in toothpaste are calcium carbonate, tricalcium phosphate, and silica. These ingredients are cleaners. A typical detergent used is sodium lauryl sulfate. The remaining ingredients include sweeteners (sorbitol, glycerol, saccharin), flavors (peppermint oil and mint), thickeners (cellulose gum, polyethylene glycols - PEGs), and preservatives (sodium benzoate). Many toothpastes also contain stannous fluoride to reduce tooth decay.

Activity Group 3

Choose one of these activities. Tell what you did, and put the results or findings in your notebook. Activities A and B are simple tests

that show the differences and similarities of cosmetic products.

A. Foam Test (shampoo or toothpaste):

1. Put 10 to 20 drops of Shampoo A into a small jar. Put 10 to 20 drops of Shampoo B in another jar. Or squeeze a small amount of Toothpaste A into a small jar. Squeeze a similar amount of Toothpaste B in another jar.
2. Fill each jar 1/4 full of water. Be sure to have equal amounts in the jars.
3. Cover. At the same time, shake both jars 10 times.
4. Which product made the most foam? Foam is needed for ease in cleaning. Which jar had the smallest bubbles? Small bubbles increase cleaning action.
5. Check the second hand of the clock or the seconds on a watch. Note how long it takes for each sample to lose a fourth, half, and all of its foam. The longer the foam lasts, the more time you have to distribute the shampoo easily over your head and do a good job of cleaning.
6. Record the results in your notebook. You might make graphs comparing the foam retention of the samples over a period of time.

B. pH Test (shampoo, toothpaste, or hand lotion). To complete this activity, you will probably need to check with your school's chemistry department to see if you can obtain some litmus paper and a pH chart.

1. Make solutions of shampoo or toothpaste as described in Step 1 for



the Foam Test. For hand lotions, drop two drops of Lotion A in a jar. Add 2 tablespoons of water. Swirl until most of lotion is dissolved. Use another jar and repeat with Lotion B.

2. Test each solution with litmus paper. Use the pH chart to determine the pH. Many cosmetics are neutral.

3. Record findings in your notebook. Another method using red cabbage is a less scientific (and less accurate) test. Using distilled water, bring shredded cabbage to a boil. Cook for 5 to 10 minutes. Allow cabbage to cool. Drain and save the liquid. Use the liquid as an indicator. Neutral juice is blue. Decreasing the pH turns it purple, then red. A pH above 7 yields blue-green, then green.

C. Cost Comparison. Choose a product available in at least three sizes. Toothpaste is a good choice. Compare the prices of the three sizes at three different stores. Compare the price per ounce for each tube or package. Use this formula to make your comparisons.

$$\frac{\text{Cost of product}}{\text{Size of product}} = \frac{\$}{\text{ml}} \text{ or } \frac{\$}{\text{oz}} = \text{cost/ml or cost/oz}$$

D. Foam test with hard and soft water.

1. Drop 10 to 20 drops of shampoo into each of two small jars.
2. Fill each jar 1/4 full of water. Use soft water in one jar and hard water in the other. Be sure to have equal amounts in jars.
3. Cover. At the same time, shake both jars 10 times.
4. Did the product dissolve more

quickly in one jar? Did one jar have more foam than the other? Did the foam last longer in one jar?

Managing clothes Where will you shop?

There are many different clothing stores. No one store is right for everyone or every clothing purchase. The more you know about the differences, the better you will be able to shop.

Perhaps the first thing to consider is price. Are the prices high, medium, or low? Also, think about selection. How many different categories of clothing (sweaters, coats, shoes, jeans) does the store carry? How good is the selection in any of these categories? Are many different styles, colors, and sizes available? Does the store carry one brand of sweaters, for example, or many?

Second, consider the store's services. Are charge accounts available? Layaway? Gift wrapping? Delivery? Alteration services? Are any of these services free? Is there an additional charge?

One of the most important services is the store's return policy. Can merchandise be returned? Under what conditions? Will you need the sales receipt? Usually you do, so it's a good idea to keep sales slips until you're sure you are satisfied with the purchase. If you can return a purchase, will the store give a cash refund? Will they make an exchange for other merchandise?

Make a point to find out about a store's services. Will you use all of these services?



Department stores usually offer clothing in the medium- to high-price ranges. They carry everything from shoes to sportswear to underwear. They offer a variety of colors, sizes, styles, and brands. In addition, department stores offer many services, but they may charge for some of them. Most department stores have liberal return policies. But you should ask before you buy. Examples of department stores are L.S. Ayres, Lazarus, and Bloomingdales.

Specialty stores sell only one type of clothing (jeans or shoes) or clothes for a particular group (men, children, or women). Prices in specialty stores usually range from medium to high. They sell fewer types of clothing categories than department stores. However, the selection of colors, sizes, styles, and brands may be quite large. For example, a jeans store usually offers many sizes and styles. Inquire about return policies because they may not be as liberal as department stores. Some examples of specialty stores are The Gap, Just Pants, and Benetton.

Mass merchandisers like Sears and J.C. Penney have many stores. They sell to a large number of people. Similar to the medium-priced department store, mass merchandisers carry fewer brands. Their policies on services and returns are usually the same nationwide.

Discount stores like Target, K-Mart, and WalMart usually have lower prices than department stores or mass merchandisers.

Each store carries a wide range of clothing for women, children, and men. They usually offer many colors and sizes. Discount stores offer fewer services than department stores, specialty stores, or mass merchandisers.

Off-price stores are a fairly new kind of clothing store. Some carry the same name brands as department stores but at lower prices. The selection in off-price stores can be limited, especially size and color choices. Many off-price stores get merchandise from manufacturers' canceled orders, overruns, and end-of-season closeouts. Off-price stores usually offer few services. And most have strict return policies.

Factory outlets are owned and operated by clothing manufacturers. Instead of selling their closeouts, canceled orders, and discounted merchandise to off-price stores, manufacturers open their own retail stores. Frequently, factory outlets carry only one brand of merchandise. So the selection is limited. Services are nonexistent or very limited. Returns may not be allowed.

Secondhand stores have become more popular recently. They offer low prices to customers, but the selection may be very limited. However, you may be able to find some unique or like-new clothing in these stores. Services are usually nonexistent. Returns are not allowed. If you shop at secondhand stores, your sewing skills may come in handy for making needed repairs.

Look for quality

Answer these questions when deciding if a garment is a good buy. How does the



garment look on you? Does the design compliment your figure? Do the color and fabric complement your skin and hair coloring? Is the garment comfortable? Does it fit properly?

A new or exclusive design is one factor of quality. High fashion is a good buy only if the garment fits your present needs and promises to stay in fashion as long as you want to wear it. Your friends might wear designer clothes because of the designer's reputation or because "everyone is wearing it." They may not be considering the quality of the design. Learn to evaluate a design by how it looks on you.

Judge the fabric's quality by its appearance and performance capabilities. Fabrics should last throughout the time you use them. Fabrics should be comfortable at the temperatures you'll wear them. They should be reasonably easy to care for and compatible with the garment design. Fiber content and how the fabric is made determines durability, comfort, and appearance. Read labels and handle the fabric to determine its quality. Also, consider how often and how long you expect to wear the garments.

Workmanship in construction is another factor. To identify quality workmanship, you need to look at these point.

- * Garments should be cut on the grain. In most garments, the yarns or threads of the fabric run straight from top to bottom at the center front and center back.

- * There should be no unnecessary pulling, bagging or sagging at the hem, collar,

facings, or other parts of the garment.

- * There should be no unnecessary wrinkles in the collar, facing, or other parts.

- * Seams should be even in width, free of puckers, and finished so that the fabric won't ravel when laundered or dry-cleaned.

- * Stitching should be even in width and length. The thread color should match or blend with the fabric. Stitches should be secure and unbroken. Stress points (at pockets, bottom of zippers, etc.) should be reinforced.

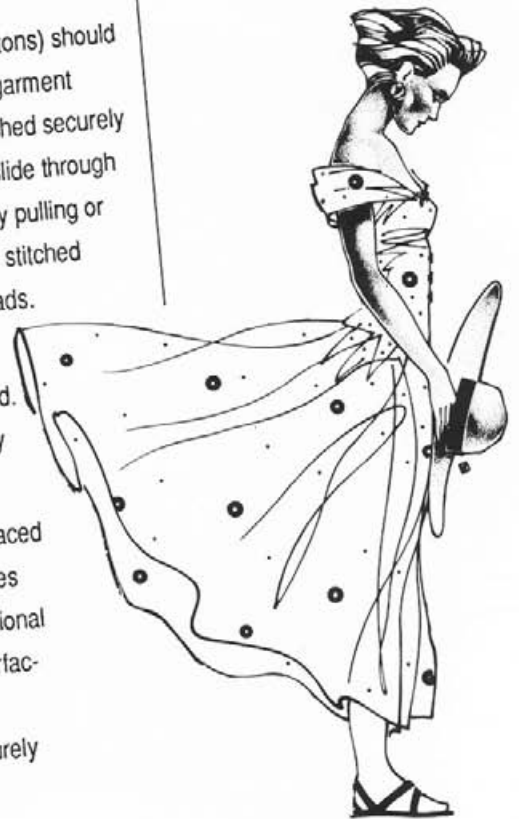
- * Hems should be even in width, evenly stitched, and not too evident from the outside of the garment. They should be finished so the raw edge won't ravel.

- * Fasteners (hooks, snaps, buttons) should be in the proper location, so the garment doesn't pull. They should be stitched securely to the garment. Buttons should slide through buttonholes without unnecessary pulling or pushing. Buttonholes should be stitched securely, with no dangling threads.

- * Zippers should operate easily, and be securely stitched. The zipper tape should closely match the color of the fabric.

- * Interfacings should be placed under buttons and buttonholes and other areas where additional support is needed. The interfacing should be flat without unnecessary bulk and securely attached to fabric.

Your friends might wear designer clothes because of the designer's reputation or because "everyone is wearing it." They may not be considering the quality of the design. Learn to evaluate a design by how it looks on you.



* Linings should be smooth and evenly stitched. The color should match or blend with the outer fabric.

A high price does not always guarantee good quality. You must know how to recognize and judge quality to get the best buy. Sometimes, you don't need the best quality in a garment. Before you buy, think how often you'll wear the item and for how

many years. Sleepwear and jeans are frequently worn items that have to be replaced often. But you will seldom wear a prom outfit. It's wise to pay less for the infrequently used items. Spend more for shoes or a good winter jacket that you'll wear daily.

Activity Group 4

Choose one of these activities. Tell what you did, and put the results or findings in your notebook.

A. Choose a specific kind of garment, such as jeans, shirts, coats, or jackets. Look at three examples of the garment in one or more stores. Make a "Quality Chart" to compare the garments (see chart in previous column). Use this rating scale: 1 = unacceptable, 2 = less than acceptable, 3 = acceptable, 4 = good, and 5 = excellent. Which of the three garments would you be willing to buy? Explain your reasons.

B. Make a "Cost-per-wearing Chart" (see chart in previous column). Compare the cost-per-wearing of three garments. For example, you could compare jeans, an item you wear to school, and a special-occasion garment.

C. Choose a different set of garments than those you used in Activity A. Select them from three different stores. Explain what you compared and the type of store. If there is a difference in price, can you explain the differences? Were there differences in the stores' services? Record your answers in your notebook.

Quality chart

	Garment A	Garment B	Garment C
Kind of Garment
Design of the garment
Quality of the garment
Quality of construction
Overall appearance
Fit
Acceptable for intended use
Price
Total points			

Cost-per-wearing

	Garment A	Garment B	Garment C
Name of garment
Cost or purchase price
Number of wearings* (Number of wearings-per-week x number of years)
Cost-per-wearing (divide total cost by number of wearings)

* Use actual or expected numbers.

Fit determines comfort

Good fit is essential for comfort. Try on garments. Look in a three-way mirror.

Does the garment allow you to move freely? Few garments, other than bathing suits, fit skin-tight. This extra fabric is called ease. Wearing ease keeps garments from binding when you breathe, reach, bend, or stoop. If you are buying active sportswear, simulate the movements that you'll make when wearing the clothing. Swing an imaginary tennis racquet if you are buying a shirt for tennis. This may sound funny, but remember that you won't be standing like a statue out on the tennis court.

Designers add additional fabric to achieve a special look. Design ease is added beyond what's needed for wearing ease. Full, gathered skirts and pleated, baggy pants have several inches of design ease around the hipline. Oversized jackets contain a lot of design ease across the shoulders and through the chest and waistline.

The amount of wearing ease depends on the fabric. With stretch fabrics or knits, the garment may need very little wearing ease. Racing pants for bicycling have very little wearing ease. The knit construction and the nylon and spandex fibers stretch and give with body movements. Racing pants do not have any design ease because extra fabric creates wind drag. Aerodynamically styled clothing can add winning seconds to the racer's speed.

When buying clothes, look for enough ease for comfort, but not so much that the garment looks too big or inhibits your activity.

Activity Group 5

Choose one of these activities. Tell what you did, and put the results or findings in your notebook.

A. Try on a new sports outfit. Simulate the motions involved in the sport. Is there enough ease for you to move freely? Or does the garment bind and restrict movement? In your notebook, describe where ease is needed and why it's needed for your sport.

B. Interview members of the basketball team. Ask them how the uniforms fit. Do any of the players complain that the jersey or trunks rub or bind? If so, can you determine why other players feel comfortable in the uniform? Do the reasons have anything to do with body build? Describe these findings in your notebook.

C. Try on pleated and tailored pants. Describe the difference in the amount of ease around the hipline.

Caring for clothes

Simply rinsing clothes in water will not clean them. Without soap or detergent, water remains on the surface of the fabric. The water drops clump together and do not spread, mix with dirt, or penetrate the fibers. Water hardness affects how well soaps and detergents work.

Water hardness is measured by the amount of calcium and magnesium (minerals)



in the water. This measurement is usually expressed in "grains" per gallon. Generally, water with 0 to 3 grains hardness is considered soft. Water with more than 10 grains is very hard. Over 18 grains of hardness is so extremely hard that no amount of detergent will provide thorough cleaning. Indiana's water hardness ranges from about 4 to 38 grain-per-gallon. If the water hardness exceeds 10 grains, it helps to install a water softener. Or you can add a water softening product to the wash water.

Pretreating. Accidents will happen! Frequently, garments become stained and

need special attention. The earlier you treat spots or stains, the easier they are to remove.

For greasy stains, like shirt collars, treating with one of several commercial pre-wash products may be helpful. They are available as sprays, liquids, or sticks. Pre-wash products are effective for food and oily stains. Applying a liquid detergent or rubbing with bar soap is another useful technique.

Detergents have several functions. They remove, emulsify, dissolve, and suspend soil in a washing solution. Detergents contain two important ingredients—surfactants and

Stain removal chart

Some stains respond to special treatment. Listed below are some common stains and treatments.

Ball-point ink—Sponge with rubbing alcohol or spray with hair spray. Rub with detergent. Launder garment.

Blood—Soak in cool water. Rub with detergent. Rinse. If stain remains, add ammonia and repeat detergent treatment. Launder garment.

Catsup—Scrape. Sponge and/or soak in cool water. Rub with detergent. Launder garment.

Chewing gum—Rub with ice to harden. Scrape. Let soak in heavy duty detergent and grease solvent overnight. Rinse. Launder.

Chocolate—Sponge and/or soak in cool water. Rub with liquid detergent. Rinse. Let dry. Use spot remover to remove greasy stain. Launder garment.

Cosmetics—Dampen stain. Rub in detergent until suds are thick and outline of stain is removed. Use spot remover to remove greasy stain. Launder garment.

Cream, ice cream, milk—Sponge and/or soak in cool water. Rub in detergent. Rinse. Let dry. Use spot remover to remove greasy stains. Launder garment.

Deodorants, anti-perspirants—Rub with detergent. Launder garment. Rinse. Let dry. Use spot remover to remove greasy stains. Launder garment.

Fingernail polish—May be impossible to remove! Sponge with nail polish remover unless the fabric is acetate. Let dry. Rub with detergent. Launder.

Grass—Sponge and/or soak in cool water. Rub with detergent. Launder garment. If stain remains, sponge with rubbing alcohol (if safe for fabric).

Grease, oils, mayonnaise—Rub in detergent. Rinse. Dry. Use grease solvent, if stain remains. Let dry. Launder garment.

Mud—Brush off after drying. Sponge and/or soak in cool water. Rub with detergent. Launder garment.

Mustard—Rub in detergent. Rinse. If stain remains, soak in enzyme presoak. Launder garment.

Perfume—Sponge and/or soak in cool water. Rub in detergent. Launder. If safe for fabrics, sponge with rubbing alcohol.

Perspiration—Rub with detergent. Launder garment. If odor remains, rub in deodorant soap and launder again. If the color has changed, try to restore it with ammonia (new stains) or vinegar (old ones). Rinse. Use grease solvent to remove grease stain.

Soft drinks—Some of these stains are invisible after they dry, but they turn yellow with age or heat. This yellow stain may be impossible to remove! Sponge and/or soak in cool water. Rub with detergent. Launder. If stain remains, soak in oxygen bleach and hottest water that is safe for fabric. Launder.

builders. Surfactants are wetting agents. They lower the surface tension of water. Wetting agents permit water to spread out, penetrate fabrics more evenly, and remove many water-soluble soils.

Builders upgrade or protect the cleaning efficiency of surfactants. They also soften water, emulsify oil, suspend loosened dirt, and maintain the desired alkalinity. Phosphates, carbonate, silicates, citrates, and aluminosilicates are examples of builders.

Detergents come in several forms—liquids, powders, and tablets. They may be low or high sudsing. Detergents, not the amount of suds, get clothes clean. Too many suds can interfere with the washing action and be difficult to rinse from clothes. Use the amount recommended on the package. To be sure of your amount, you measure the detergent.

Use enzyme products for protein-based stains, such as grass, blood, food, ground-in dirt, and perspiration. Dissolve powders completely before use, or they may leave small white spots on fabric.

Laundry additives may also be helpful in laundering. Bleach helps remove problem stains, keeps white fabrics white, disinfects, and deodorizes. Chlorine bleach performs all of these functions. Oxygen bleach does not offer as much bleaching power as chlorine bleach, but it is safe to use on most washable fabrics, finishes, and colors. All bleaches are designed for use with detergents.

Fabric softeners help make clothes softer, minimize wrinkling, and reduce static cling. They come in liquid or disposable sheets. Liquid fabric softener poured directly

on garments, may cause greenish blue or blue-gray stains. Fabric softeners can build up on the fabric if you use too much or if used every time the fabric is laundered. Using too much fabric softener reduces the absorbency of the fabric.

Setting the washing machine isn't an exact science. The clothes need to circulate freely in the wash basket during washing and rinsing. Varying the size of items in the wash load helps washing action. A load made up of two sheets plus a number of small garments allows items to circulate freely.

To save water and detergent, adjust the water level to fit the size of the load. Experience will help you decide what level to select. Read the owner's manual or ask an adult how to select the water temperature and wash cycle for the machine.

Read permanent care labels when selecting the water temperature and wash cycle. Use hot water (approximately 130° F) for sturdy, all-white items, such as socks, T-shirts, underwear, and towels. Hot water is best for removing most soils from fabric. Also, detergents and bleaches are most effective in hot water.

Warm water is a 50/50 mix of hot and cold water. It should be about 100° F. Although not as effective in removing soil, warm water is best for delicate fabrics and permanent press items. Cold water is ineffective for removing heavy, greasy soil. If you

Read the owner's manual or ask an adult how to select the water temperature and wash cycle for the machine.



want to save energy, use cold water for lightly soiled, delicate fabrics. Cold water is less than 60° F, and it can be much colder in winter.

While some loads of heavily soiled garments may require a hot water wash, most loads can be washed effectively in warm water. Some lightly soiled garments can be washed in cold water. You can compensate for the reduced effectiveness of detergents in cold water. Simply increase the amount of detergent used, bleach whenever possible, and pretreat stains.

Many washing machines have set rinse water temperatures. When selecting a hot wash, you also select a warm rinse. When selecting a warm wash, you get a cold rinse. A cold rinse is best for permanent-press, wash-and-wear, and synthetic fabrics because it minimizes wrinkling.

The "regular" agitation and spin speeds are designed to give the best cleaning and water extraction for sturdy fabrics and well-made garments. Some washers have a "gentle" or "delicate" cycle. A "gentle" cycle shows both the spin and agitation speeds. A "delicate" cycle automatically divides the wash and rinse times into brief periods of agitation, alternated with soaking periods. Garment construction and fabric sturdiness are the best guides for

determining which cycle to use, if that information isn't on the permanent care label.

Don't overdry. Overdrying can shrink garments. To avoid wrinkling, hang or fold them immediately. Most dryers give you several choices of heat selection and drying time. Permanent press cycles allow for cool-down periods. End-of-cycle signals prompt you to remove garments immediately. Follow care labels to determine drying requirements. Heavy fabrics are best dried together because they require a longer drying period than lighter items. Use small loads when drying large, bulky items. When drying small loads of lightweight items, add one or two bath towels to get the best tumbling action.

Iron and press if needed. Many permanent press fabrics and those with special fabric finishes may not need ironing. Or they may require only a touch-up pressing. However, many fabrics made of natural fibers like cotton do require ironing for a smooth, neat appearance.

If garments need ironing, remove them from the dryer while they're slightly damp. Or dampen them with a sprinkle bottle or mister (the kind used to spray plants). Iron delicate garments and clothing requiring low iron temperatures first. It can take 10 to 12 minutes for an iron to cool from a high to a low temperature. But it only takes a few seconds to increase the heat.

To avoid stretching, always follow the direction of the yarns in the fabric. Full skirts may become uneven at the hemline if they're not ironed properly.



Some garments may need touch-up pressing between wearings. Never press a dirty or stained garment.

Activity Group 6

Choose one of these activities. Tell what you did, and put the results or findings in your notebook.

A. Assemble a spot and stain removal kit. Include the most frequently used types of removers. List what you put in the kit.

B. Be responsible for doing the family wash for one week. Write about your experiences. Tell about the number of loads, how you sorted clothes and set the machine, laundry products used, drying procedures, and pressing needed.

C. Examine labels on several different brands of detergents. Compare the amounts each detergent recommends for washing clothes. What other additives are listed on the detergent? Record the information in your notebook.





Notes

Record Sheet

4-H 751

CONSUMER CLOTHING

DIVISION ____ NUMBER OF YEARS IN THIS DIVISION ____
INDIANA 4-H CLUB RECORD

Name _____ Age _____ Year To _____

Name of Club _____ Number of years in 4-H _____

I have reviewed this project and record and have made comments about progress and project completion.

Signature of leader _____ Date _____

Record of Activities

Activities	What I Learned

front

Record of Purchases

What Bought	Fabric/ Material	Care Required	Total Cost	Reason(s) for Purchase

Consumer Clothing skills I learned this year

What I did to improve my appearance, grooming, and care of clothing

back

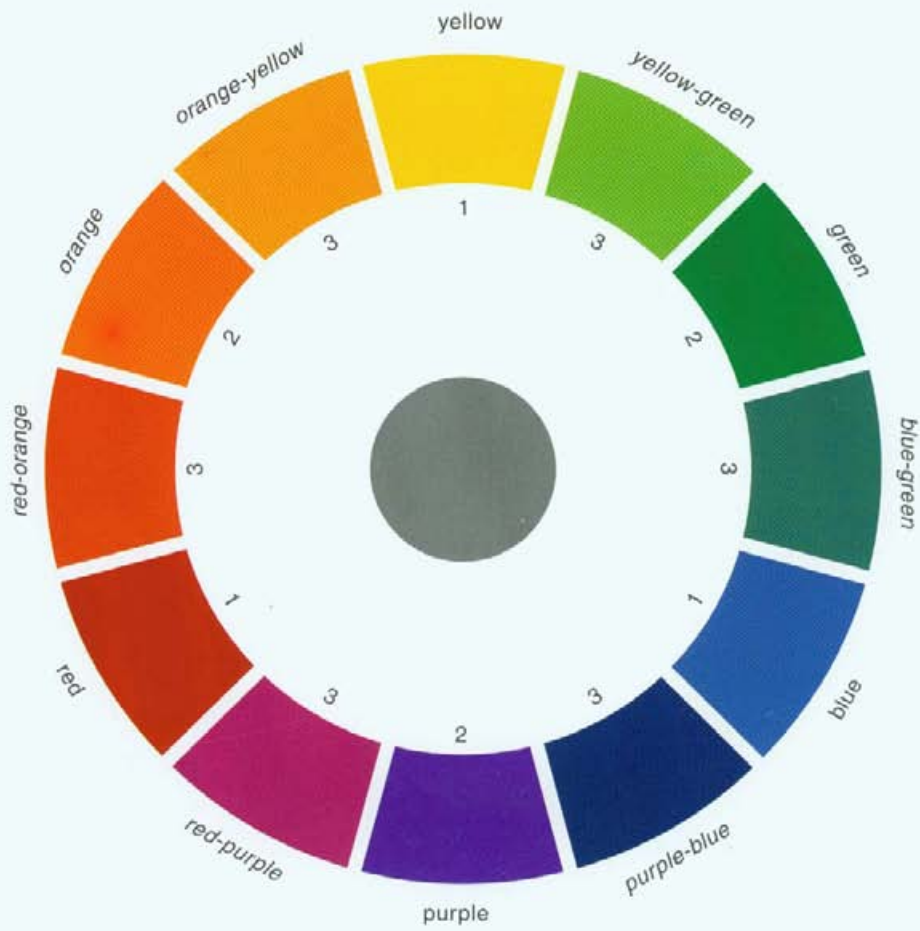
Scorecard

4-H 752

CONSUMER CLOTHING SCORECARD

	Excellent	Good	Fair
The Notebook (40%)			
* Includes one activity from each group			
* Answers are complete and well-written			
* Reflects apparel needed (Advanced unit)			
* Other (specify)			
The Interview (30%)			
* Explanation of project is complete			
* 4-H'er appears at ease and presents project with pride			
The Garment(s) on the 4-H'er (30%)			
* General appearance of individual (posture, poise, and grooming)			
* Fit is attractive and comfortable			
* Accessories and garments coordinate well and are appropriate			
* Color, style, and fabric are suitable for individual's size and body build			
* Purchases are a good buy in terms of actual cost, durability and upkeep			

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