



Parents, Volunteers and County Educators:

There are many reasons 4-H youth participate in and continue their project work. Everything done in the “name of project work” will not be done for a competitive grade. While working with members consider using the following to encourage project work.

- ✿ **Fun** – Done just for the fun of learning and trying something new. Enjoyment received from using knowledge and skill. Sense of creativity being expressed. The member is enjoying the process of learning; the focus is not on perfecting technique, skill or knowledge.
- ✿ **Personal Use** – Practical application of project work for day to day living or the act of doing for others. Members have practiced their skills and knowledge producing quality items that will withstand daily use, improve life or bring enjoyment.
- ✿ **Competition** – The member has practiced “like an athlete” and has producing a quality product/project demonstrating their knowledge, skills and abilities, as compared to a quick, simple project. The member fully understands both they and the project are being evaluated and provided constructive comments for continued project growth.

HOW TO USE THE SKILL MASTER SHEET WHEN WORKING WITH YOUTH

- The mastery sheet is designed as a guide or outline. It contains techniques/skills/knowledge fundamental to project development. Some youth will go beyond the basics for their level and others will have to visit a prior level to gain skills necessary for doing project work at their grade level.

OK Project Guides
and Resources for
Design and
Construction



The terms in the guide will be found in 4-H curriculum/4-H sample cards/sewing books and online resources. Volunteers/project leaders/Extension staff planning and teaching workshops/day camps/project groups/etc. are encouraged to select projects that include skills and knowledge contained in the skill mastery sheet.



National
4-H
Curriculum

- The skill mastery sheet is a tool for learning to set and record goals for project work.
 - Setting Goals* - “Things/skills I want to learn making my project.” OR “Things/skills I will learn in the workshop/day camp.”
 - Recording Goals* – “Things/skills I set out to learn.” “Other things/skills I learned in the process.”

Setting Goals - Before starting the project, youth mark things they want to learn, or they will be learning. Depending on the age group, the project leader/volunteer may have the youth go through and mark the things they will be learning based on the project being constructed by the group.

Recording Goals - Once the project is completed, have the youth reflect on what they learned by revisiting what they marked at the beginning and thinking about other things they learned in the process. This is a time to CELEBRATE by checking off everything they learned!

We encourage youth to keep a copy of the sheet in their Portfolio and/or to assist with filling out a 4-H medal form/record book.

If this sheet is used for a competitive event, a new form should be completed for each event. This allows a judge to provide feedback.

DESIGN AND CONSTRUCTION SKILL MASTERY

Through this project 4-H members will demonstrate the mastery of the design and construction process by selecting and using materials which produce a *product*. The 4-H word for product is "project." There are three primary areas a member is encouraged to learn and grow:

- 1) **Mastery of Subject Matter and Skill** – The act of "*learning to learn*" and applying the information and skill(s) to make something the member can enjoy and be proud of.
- 2) **An understanding and application of the Elements and Principles of Design** - The elements and principles of design are the rules a designer must follow to create an effective and attractive composition - apparel/accessory/home decor/textile/craft/quilt/knitting/crochet/etc. The designer/craftsman/interior designer/textile artist/stylist/retailer/sewer/marketing-communication-specialist/architect/etc. Learn how to successfully use the concept in choosing materials (fabric, patterns, wallpaper notions, paint, fonts, props, etc.) to produce a creative and visually appealing finished product.

Elements of Design

The elements of design should be included in the finished product/project.

- Line
- Shape and Form(s)
- Texture
- Color
- Space

Principles of Design

The principles of design should be included in the finished product/project.

- Harmony
- Proportion/Scale
- Balance
- Rhythm
- Emphasis

3) **Personal Creativity**

The life skills of "*critical thinking and decision making*" are being applied in the creative process. Items should show creativity and originality, along with an application of design principles and elements. Ask yourself, "*How have I shown personal creativity and applied the design principles and elements to the finished product?*" "*What makes my finished product unique to that of my peers?*"

EXHIBITS – Items for competitive use.

- ADC exhibits should be unique to *Apparel Design & Construction* and should not be included in any project/product from the Interior Design and Construction (IDC) or Hobby & Textile Design and Construction (HTDC) categories.
- IDC exhibits should be unique to *Interior Design & Constructions* and should not be included in any project/product from the Apparel Design & Construction (IDC) or Hobby & Textile Design & Construction (HTDC) categories.
- HTDC exhibits should be unique to *Hobbies, Textiles Design & Construction* and should not be included in any project/product from the Apparel & Design (IDC) or Interior Design and Construction (IDC) categories.
- The finished project/product should illustrate the mastery of skills and knowledge unique to the division:

Apparel Design & Construction (ADC)

Design and Construction (IDC)

Hobby & Textile Design & Construction (HTDC) categories

This sheet is completed by the 4-H member to reflect on what was learned making the exhibit. Mark only those things you learned. Look up terms/words if you can't remember or don't know what they mean.

Grades
3-5

Name _____ County/Club _____ Year 20 _____

Class Number _____ Class Name _____

Brief Description of Project _____

Apparel Design and Construction – Grades 3-5	
Tools and/or Techniques	Construction Knowledge and/or Skill Gained 4-H member is to place a check <input checked="" type="checkbox"/> in the boxes for each skill learned or knowledge gained in the construction of this project.
Basting	Learned why basting is necessary to accurate construction. Used the following basting techniques... <input type="checkbox"/> Pin basting and/or Machine basting
Buttons	Learned to select the correct button size and color as well as properly attach a flat button. <input type="checkbox"/> Flat button with thread shank
Care	<input type="checkbox"/> Learned how to read a fabric/interfacing bolt label and notion packaging for garment care. <input type="checkbox"/> Fiber content of my garment Care for my garment: <input type="checkbox"/> machine wash and dry <input type="checkbox"/> machine wash and line dry <input type="checkbox"/> hand wash and line dry <input type="checkbox"/> hand wash and lay flat to dry <input type="checkbox"/> dry cleaning
Casing	Learned proper casing construction. <input type="checkbox"/> Casing the right width for the elastic/cord/rod, top edge is edge stitched and insertion point closed or finished appropriately. <i>** For a waistband with an elastic or drawstring casing see Waistband.</i>
Crochet	Began learning to read and understand crochet instructions and symbols, winding and joining yarn, increasing decreasing as called for in a pattern, gauge and tension and basic stitches. <input type="checkbox"/> Crochet 101 - casting on, chain stitch, double chain stitch, turning chains attaching yarn of another color, and finishing off <input type="checkbox"/> Slip stitch, chain stitch and/or single crochet <input type="checkbox"/> Half Double stitch and/or Double stitch <input type="checkbox"/> Treble stitch and/or Double Treble stitch <input type="checkbox"/> Crocheting in rounds: increasing, decreasing as called for by pattern design. <input type="checkbox"/> Open or filet mesh, block or solid mesh, long single stitch, shell stitch and variations
Cutting Tools	Learned the difference and use of various cutting tools. <input type="checkbox"/> Sewing Shears and/or Pinking Shears <input type="checkbox"/> Scissors
Fabric	Began learning about fiber content, care, and grain line. <input type="checkbox"/> Straightening Grain - Learned to straighten the grain of fabric, aligning the warp and weft threads or loops at right angles, by pulling thread or tearing fabric along weft threads. <input type="checkbox"/> Pre-shrink fabrics and/or interfacing - Allows for initial fabric shrinkage by washing/drying in the way the garment/project will be cared for after construction. <input type="checkbox"/> Woven fabric – plain, basket and/or various twill weaves <input type="checkbox"/> Non-woven – interfacing, felt, netted, lace, fleece, interlocking knit, etc.

Facing	<p>Learned to apply along an edge - a neckline, waistline, armhole, etc.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Facing is graded, clipped, under-stitched, interfaced, tacked (hand or machine) and not visible from the right side of the garment. Exception – facing used as a decorative feature.
Gathering	<p>Learned to use gathering stitch to draw up fabric and adjust fullness to specified length.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Machine gathering stitch appropriate stitch length for the fabric and removed gathering stitch after joining two pieces of fabric and stitching is complete.
Hem	<p>Learned why hem depth affects the look and hang of a finished product and how to put in a simple hem.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Machine hem – topstitched and/or simple rolled <p>Hand hem (choose the stitch you used) – <input type="checkbox"/> simple slipstitch, <input type="checkbox"/> blind—stitch, <input type="checkbox"/> catch-stitch</p> <ul style="list-style-type: none"> <input type="checkbox"/> Serge hem
Interfacing	<p>Continued to learn how to select appropriate interfacing based on fabric type and end use, as well as how to apply interfacing to garment pieces and when to use sew-in vs fusible interfacing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sew-in interfacing – woven and non-woven <input type="checkbox"/> Fusible interfacing – knit and non-woven
Knitting – w/needles, loom and board/machine	<p>Began learning to read and interpret simple knitting instructions and symbols, understanding gauge and tension, seam methods and holding needles and yarn to make basic stitches.</p> <p><i>Knitting with hand-held needles:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> How to wind knitting yarn properly into a ball <input type="checkbox"/> Knitting 101 - Single cast on and/or Double cast on, picking up dropped stitch, making swatch to check gauge, and binding of - making flat edge, stockinette stitch edge, open edge, and/or slipstitch edge <input type="checkbox"/> Knit stitches - Garter stitch and/or stockinette stitch <input type="checkbox"/> Basic Purl stitch and/or Knit and purl stitches combination <input type="checkbox"/> Increase and decrease stitches <input type="checkbox"/> Joining knitted pieces and/or blocking garment <p><i>Knitting with loom and board:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Loom and Board Knitting 101 - Casting on, E-wrap (twisted knit stitch), gathering and/or flat removal and colored stripes <input type="checkbox"/> Colored stripes – yarn change creating stripes <input type="checkbox"/> Purl and/or Knit stitch <input type="checkbox"/> Ribbing <input type="checkbox"/> Increase and decrease stitches <input type="checkbox"/> Joining knitted pieces and/or blocking garment <p><i>Machine Knitting</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Use of knitting machine.
Marking	<p>Learned about different marking tools, when and how to use and applied one or more to my project.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Washable marker, tailor’s chalk and/or tracing wheel and paper
Needle and Pins	<p>Learned how to safely use and store needles and pins.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Learned to thread a needle and safely store needles in a pincushion <input type="checkbox"/> Select appropriate size and type of hand sewing needles based on task of hand stitching <input type="checkbox"/> Select appropriate size and type of machine needles based on type and weight of fabric

<p>Pattern and Layout</p>	<p><i>Began learning to read, understand and apply....</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Pattern directions and symbols <p><i>Commercial Pattern Selection</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Learn how to select sewing patterns that will compliment one’s personal physique and fits well <p><i>Pattern placement on fabric.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Fabric grain and pattern grain line match insuring proper appearance (hang) of garment <input type="checkbox"/> Use of tape measure and straight pins for pattern placement accuracy <input type="checkbox"/> Using notches to match patterned fabric – stripes, prints, etc. <input type="checkbox"/> Fabric with nap - all pattern pieces in one direction <p><i>Cutting out pattern pieces using:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Straight pins are placed perpendicular to pattern edge when pinning pattern, not horizontal <input type="checkbox"/> Holding shears correctly for a clean, even and accurate cut <input type="checkbox"/> Cut along the correct line, observing, and using notches and respecting appropriate seam allowance
<p>Pocket</p>	<p>Learned to apply a pocket for practical or decorative purpose</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seam pocket – placed in the side or front seam and is well hidden <input type="checkbox"/> Patch pocket – separate piece of fabric attached to the garment
<p>Pressing</p>	<p>Using an iron and ironing board. Learned....</p> <ul style="list-style-type: none"> <input type="checkbox"/> The difference in pressing and ironing <input type="checkbox"/> General pressing techniques – up and down motion with correct temperature, steam, using tip of the iron, with the grain and not pressing over pins, basting threads and buttons
<p>Recycled/Upcycled</p>	<p>Learned to repair, restore, or remodel apparel, housing equipment, etc.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Specify technique(s)
<p>Seam</p>	<p>Learned why seam width, stitches and accuracy are important to the fit of the finished garment. Choose and applied the best seam for my project:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Straight-stitch <input type="checkbox"/> Stretch-stitch <input type="checkbox"/> Overlock seam by serger <input type="checkbox"/> Cross seam matched – normally occur in under arm where sleeve is sewn to bodice or in the crotch where the inner leg seams are sewn together. <input type="checkbox"/> Top stitched seam – double or single
<p>Seam Finish</p>	<p>Learned about seam finishes and their importance. Choose and applied the best seam finish for my project.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Stitch and pink <input type="checkbox"/> Zigzag <input type="checkbox"/> Edge stitched <input type="checkbox"/> Overlocked by serger <input type="checkbox"/> Overcast – zigzag, serge or hand stitched <input type="checkbox"/> Turned edge/Clean Finish
<p>Serger</p>	<p>Learned my serger</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify parts of the serger <input type="checkbox"/> Changing a needle <input type="checkbox"/> Threading the machine - traditional and/or tie-on method <input type="checkbox"/> Cleaning serger with machine brush or canned air

Sewing Machine	<p>Learned my sewing machine</p> <ul style="list-style-type: none"> <input type="checkbox"/> Parts of a machine <input type="checkbox"/> Learned to thread a sewing machine, as well as wind and change a bobbin <input type="checkbox"/> Completing regular maintenance – cleaning lint with a brush and oiling, changing bent, barbed or broken needles and checking or adjusting tension
Thread	<p>Learned about thread</p> <ul style="list-style-type: none"> <input type="checkbox"/> Color selection – Select one shade darker as it sews in lighter <input type="checkbox"/> Choose background color of print for thread color to be less visible, etc. <input type="checkbox"/> Thread fiber content and quality – effect on fabric and machine
Yarn/thread and knitting needles/crochet hook	<p>Began learning to about yarn/thread and needles and hooks use to create item or project</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fiber content and yarn care influence selecting the right yarn/thread for a project. <input type="checkbox"/> Needle and/or hook size influence gauge and the finished product. <input type="checkbox"/> Created test swatch to check gauge <input type="checkbox"/> Experimented with different yarn weights and textures
Waistband	<p>Learned appropriate selection and use of....</p> <ul style="list-style-type: none"> <input type="checkbox"/> Elastic waistband with casing <input type="checkbox"/> Elastic waistband with decorative elastic <input type="checkbox"/> Mock waistband – flat front band with elastic back <input type="checkbox"/> Elastic Waistband finishing techniques - elastic secured so it will not roll by using either stitch in the ditch by machine or hand, elastic insert point closed and top edge is edge stitched <p>More advanced waistband -Learned to construct a waistband with interfacing/non-roll stiffener and appropriate finishing techniques - grading seam allowance, clipping, under-stitching, stitch-in-the-ditch, etc.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Faced waistband with interfacing <input type="checkbox"/> Standard waistband with interfacing or non-roll stiffener
Zipper	<p>Learned to select and apply a zipper (select one)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Center application <input type="checkbox"/> Lapped Application <input type="checkbox"/> Exposed Application

General Comments (youth/project leader/judge) – We encourage thoughts and comments, so an additional sheet can be added.

Apparel Design and Construction Grades 3 5

Design Knowledge and/or Skill Gained – The elements and principles of design are important in coordinating fabrics and patterns that are visually pleasing to eye, the body, and communicate a sense of style.

4-H member is to check the box for each principle and element learned, identified and/or applied in the construction of this project.

	Pattern Design	Fabric/Yarn Design	Notion Design
Elements of Design	<input type="checkbox"/> Line <input type="checkbox"/> Shape and Form(s) <input type="checkbox"/> Texture <input type="checkbox"/> Color <input type="checkbox"/> Space	<input type="checkbox"/> Line <input type="checkbox"/> Shape and Form(s) <input type="checkbox"/> Texture <input type="checkbox"/> Color <input type="checkbox"/> Space	<input type="checkbox"/> Line <input type="checkbox"/> Shape and Form(s) <input type="checkbox"/> Texture <input type="checkbox"/> Color <input type="checkbox"/> Space
Principles of Design	<input type="checkbox"/> Harmony <input type="checkbox"/> Proportion/Scale <input type="checkbox"/> Balance <input type="checkbox"/> Rhythm <input type="checkbox"/> Emphasis	<input type="checkbox"/> Harmony <input type="checkbox"/> Proportion/Scale <input type="checkbox"/> Balance <input type="checkbox"/> Rhythm <input type="checkbox"/> Emphasis	<input type="checkbox"/> Harmony <input type="checkbox"/> Proportion/Scale <input type="checkbox"/> Balance <input type="checkbox"/> Rhythm <input type="checkbox"/> Emphasis

Briefly share how the three design features (pattern, fabric, and notions) came together in the finished projects look.

Apparel Design and Construction Grades 3 5

Use this section to evaluate your creativity on the finished project. *What is creative expression?* Creativity starts with basic knowledge about the subject, personal motivation, flexible and original thinking, being able to take risks and ask questions and an ability to imagine different and workable solutions.

4-H member is to check the box <input checked="" type="checkbox"/> for each type of creativity learned, identified and/or applied to the construction of this project.	Creativity Excelled	Creativity Recognized	Creativity doesn't quite Click
Creative Appeal – first look makes good impression and draws you in	<input type="checkbox"/> Unique and flattering	<input type="checkbox"/> Nice but not unique	<input type="checkbox"/> Unique but a few too many risks taken
Creative Functionality – safe, fun and usable	<input type="checkbox"/> Exciting, fresh, and usable	<input type="checkbox"/> Similar to peers work	<input type="checkbox"/> Too much without purpose or not functional
Creative Understanding – illustrates an understanding of blending facts and technique	<input type="checkbox"/> Obvious quality technique learned and understood	<input type="checkbox"/> Applied a variety of techniques	<input type="checkbox"/> Technique needs more work to pull look together
Creative Organization – elements and principles of design and construction create a total look	<input type="checkbox"/> All details well performed creating a special finished project	<input type="checkbox"/> Thoughtful in an ordinary sense, little risk	<input type="checkbox"/> Details conflict, distract or overpower each other

Youth Signature

Date